

ADRI
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Multidisciplinary Conference
and Call for Paper



PROCEEDING

INTERNATIONAL MULTIDISCIPLINARY CONFERENCE AND CALL FOR PAPER REVITALIZATION OF PROFESSIONAL ASSOCIATION AND SCIENTIFIC KNOWLEDGE FOR HRD OF HIGHER EDUCATION

(Workshops as an Organization Profession, International Conference,
MoA/MoU Multy Kampus, OJS Training)

Pontianak, December 6-7, 2016

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PREFACE

Praise being said to Allah Almighty God for all the grace and guidance that has been given to us all, so the Proceedings of the ADRI 2016 International Multidisciplinary Conference and Call for Papers. Proceedings contains a number of articles and research papers from lecturers, teachers, students, researchers and / or observers of the development of science and technology.

This seminar is the series of the International Seminar organized by ADRI, the first was held in Lombok, Mataram; The second was held in Denpasar, Bali October 15 to 17, 2016; the third was held in Surabaya, East Java, on November 10, 2016 and the fourth was held in Pontianak, West Kalimantan, on 6 to 7 November 2016. The fourth International Seminar in Pontianak's speakers came from 5 countries; Indonesia, Taiwan, United Kingdom, Italy and Malaysia. Call papers Participated in an international conference in Pontianak as much as 103 paper came from 5 countries, with a number of writers were 156 persons, from Indonesia came from 15 provinces. Most writers of West Kalimantan: 67 person and East Java: 41 people.

The international conference has been made to be held as the realization of cooperation between ADRI, National University of Kaohsiung in Taiwan, Universiti Tun Hussein Onn Malaysia, STKIP Singkawang, and all the universities participating in the MoU / MoA multi campus.

On this occasion let us give awards and gratitude to:

Keynote speaker

1. Prof., dr. Ali Ghufon Mukti, M.Sc., Ph.D., Dirjen Sumber Daya Ilmu Pengetahuan, Teknologi dan Pendidikan Tinggi
2. Dr. Ir. Jumain Appe, M.Sc., Direktur Jenderal Penguatan Inovasi, Kemenristek Dikti.
3. Prof. Dr. Paulina Pannen, M.Ls., Staf Ahli Bidang Akademik, Menristek Dikti.
4. Prof. Dr. I-Hsien Ting (Associate Professor Department of Information Management, National University of Kaohsiung, Taiwan)
5. Prof. Dr. Wahid Bin Razzaly, Universiti Tun Hussein Onn Malaysia (UTHM)
6. International speakers; Tirthendu Bagchi (Nottingham University, UK) and Cristina Lanteri (Italy)

In special award and we thank to:

1. Drs. Cornelis, M.H., Gubernur Kalimantan Barat.
2. Dr. H. Achmad Fathoni Rodli, M.Pd., General Chairman DPP P-ADRI Board.
3. Dr. M. Zeet Hamdy, Sekretaris Daerah Propinsi Kalimantan Barat.
4. Board of DPP ADRI
5. The Board of Trustees and Governing ADRI DPD Kalbar
6. Rector and Leadership College participant MoU / MoA multi-campus
7. Board of Editor, executive Editors and the Executive Committee in ADRI International Multidisciplinary Conference and Call for Papers in Pontianak
8. The sending of paper and parallel scientific conference speaker

In addition to the international conference, at the same time as a multi-campus realization cooperation activities, as well as activities carried out:

1. Inauguration of ADRI DPD West Kalimantan.
2. Training Open Journal System, as we know that from 2017 Kemenristek Dikti already requires all scientific journals should be based online by implementing OJS and scientific work for the maintenance of mandatory functional academic journals published in the OJS.

Proceedings are published in book form only contains abstract, distributed to participants in the form of compact disks (full paper) and published online at:

www.p-adri.or.id/prosiding/prosiding4pontianak.

Hopefully, these proceedings may give benefit to us all, for the development of science, technology, arts, culture, and sports. In addition, it is also expected to be a reference for the nation and state-building efforts so that science and technology become a strong pillar in the face of the ASEAN Economic Community.

Lastly, we are sorry if there are things less pleasing.

Sincerely,

Pontianak, December 6, 2016.
Chief Executive,

Drs. Andi Mursidi, M.Si.
Chairman ADRI DPD Kalbar

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TABLE OF CONTENTS

INTERNATIONAL KEYNOTE SPEAKERS _____	1
KNOWLEDGE MANAGEMENT IN THE ERA OF SOCIAL MEDIA	
I-HSIEN TING _____	2
AN IDEAL CLASSROOM IN AN IDEAL SCHOOL: LEAPING ACROSS BOUNDARIES – CREATING INTERNATIONAL MINDEDNESS THROUGH HOLISTIC EDUCATION	
MEITHIANA INDRASARI & TIRTHENDU BAGCHI _____	3
GENDER EMPOWERMENT PROJECTS AND CREATIVITY: BETTER MANAGEMENT OF RESOURCES TO OPTIMIZE RESULTS	
CRISTINA LANTERI _____	5
EDUCATION SCIENCE CALL PAPER _____	8
AN INTRODUCTION: EVALUATION OF QUALITY ASSURANCE FOR HIGHER EDUCATIONAL INSTITUTIONS USING RASCH MODEL	
ANDI MURSIDI & SOEHARTO _____	9
ASSESSMENT SYSTEM IN CURRICULUM 2013 OF ELEMENTARY SCHOOL IN SUMENEP DISTRICT MADURA ISLAND	
DIAN EKA INDRIANI _____	15
CIVIL SOCIETY ORGANIZATION IN EMPOWERING SOCIETY	
DADA SUHAIDA & MOAD _____	19
COGNITIVE ERGONOMICS ASPECT BENEFIT IN THE LEARNING PROCESS	
PT. GDE ERY SUARDANA _____	26
CONSTRAINT OF PAUD TEACHER’S INNOVATIVENESS	
HENNY SUHARYATI _____	30
DEVELOPING LEARNING MEDIA BASED ON AUGMENTED REALITY (AR) TO IMPROVE LEARNING MOTIVATION	
RIDHO DEDY ARIEF BUDIMAN _____	33
DEVELOPMENT OF CHARACTER EDUCATION BASED ON LOCAL WISDOM IN INDEGENOUS PEOPLE TENGAHAN SEDANGAGUNG	
DINA ANIKA MARHAYANI _____	38
EFFECT OF MOTIVATON AND CREATIVITY ON STUDENTS’ PSYCHOMOTOR ABILITY	
MUHAMAD ARPAN, DEWI SULISTIYARINI, & DANAR SANTOSO _____	42
EFFECT OF SELF EFFICACY AND PRIOR KNOWLEDGE ON STUDENTS’ SKILLS	
RYAN PERMANA, FEBRIANTO SABIRIN, & VINDO FELADI _____	47
BLENDED LEARNING METHOD BASED ON LOCAL WISDOM AS A SPIRITUAL GUIDANCE HOLY TRINITY COMMUNITY IN DISTRICT BENGKAYANG	
PRISKA VASANTAN _____	53

ENHANCING COLLEGE STUDENTS' CRITICAL THINKING ABILITY THROUGH VARIED DISCUSSION METHOD IN CIVIC EDUCATION SUBJECTS	57
ROHANIL & ERNA OCTAVIA _____	
ENVIRONMENTAL LEARNING APPROACHES IN IMPROVING LEARNING OUTCOMES IN ACID-BASE SUBJECT	60
RACHMAT SAHPUTRA, DWI WIDIARTI, & RAHMAT RASMAWAN _____	
IMPLEMENTATION OF TEXT TRANSFORMATION IN PHYSICS EDUCATION TO REDUCE STUDENTS' MISCONCEPTION	66
SOEHARTO _____	
IMPLEMENTATION OF MODEL SAVI (SOMATIC, AUDIOTORY, VISUALIZATION, INTELLECTUAL) TO INCREASE CRITICAL THINKING ABILITY IN CLASS IV OF SOCIAL SCIENCE LEARNING ON SOCIAL ISSUES IN THE LOCAL ENVIRONMENT	70
DADANG ISKANDAR, ACEP RONI HAMDANI, & TETI SUHARTINI _____	
IMPROVING STUDENTS' READING ABILITY BY USING LOCAL FOLKLORE COMICS FRANSISKA DWI MULYANI	76
WIJAYANTI _____	
IMPROVING LECTURERS' PAEDAGOGIC COMPETENCE THROUGH THE IMPLEMENTATION OF LESSON STUDY IN FACULTY OF TEACHER TRAINING AND EDUCATION OF PAKUAN UNIVERSITY, INDONESIA	81
ERI SARIMANAH _____	
INFLUENCE BETWEEN USING THE MALAY SAMBAS LANGUAGE IN MOVIES TOWARD DEVELOPMENT AND VITALITY OF THE EDUCATIONAL CHILDHOOD LANGUAGE	86
SRI MULYANI _____	
MEDIA LITERACY COMPETENCY-ORIENTED LIFE SKILLS FOR HIGH SCHOOL TEACHER IN THE CITY OF BANDUNG IN THE FACE OF MEA	89
IRMAN AZIZ _____	
SMARTPHONE BASED LEARNING TO IMPROVE THE QUALITY OF VOCATIONAL HIGH SCHOOL GRADUATES	97
SULFKAR SALLU, OTTO FAJARIANTO, KISNO, MEGA ACHDISTY N., & KAPRAJA SANGAJI	
LOCAL LITERATURE REVITALIZATION IN ORDER TO MALAY LANGUAGE ENDURANCE	101
HARIES PRIBADY, LILI YANTI _____	
NATIONALISM APPLYING IN LEARNING CIVIC EDUCATION AS MORAL LEARNING MEDIA IN UNIVERSITY	104
RINI SETYOWATI _____	
OPTIMIZATION APPROACH FOR USE SAVI TO LEARNING OUTCOMES CREATIVITY WRITING POETRY OF LEARNING TECHNIQUEST TROUGH DIRECT OBJECT	107
ZULFAHITA _____	

PROBLEM SOLVING ABILITY IN PROBABILITY THEORY THROUGH PROBLEM SOLVING BASED LEARNING	
JAMILAH _____	110
A DESCRIPTION VOCABULARY MASTERY OF THE FIFTH GRADE STUDENTS OF SDN 3 SUNGAI PINYUH ACADEMIC YEAR 2016/2017	
IRMA MANDA NEGARA _____	113
THE STUDY OF LOCAL WISDOM VALUES IN NAIK DANGO CEREMONY AS CIVIC CULTURE IN KANAYATN DAYAKNESE SOCCIETY IN SAHAM VILLAGE	
PITALIS MAWARDI BAGING _____	117
THE APPLIANCE OF GENDER ANALYSIS MODEL SARA H. LONGWEE STUDY ON THE PROBLEM OF FEMALE LECTURERIN FUNCTIONAL POSITION IN HIGH EDUCATION	
WIDYATMIKE GEDE, ABDULLAH KARIM, & ENDANG DWI SULISTYAWATI _____	121
THE DEVELOPMENT OF BIOLOGY PRACTICUM LEARNING BASED ON VEE DIAGRAM FOR REDUCING STUDENT COGNITIVE LOAD	
ANNA FITRI HINDRIANA _____	125
THE IMPORTANCE OF SERVICE PLACEMENT AND CHANNELLINGTO PREPARE HUMAN RESOURCES FOR STUDENTS TO MEET THE CAREERS OF THE FUTURE	
EWI MARIANA _____	130
THE EFFECT OF ARIAS LEARNING MODEL AND STUDENT'S CREATIVITIES TO THE LEARNING OUTCOMES ON CONTINENTAL FOOD PROCESSING AND PRESENTING SUBJECT AT STATE VOCATIONAL SENIOR HIGH SCHOOL 3 BOGOR	
SUPARI MUSLIM, NISA RAHMANIYAH UTAMI, & RITA ISMAWATI _____	133
THE EFFECTIVENESS OF THE COLLABORATIVE LEARNING MODEL ON TRIGONOMETRY TOPIC OF SENIOR HIGH SCHOOL STUDENT GRADUATE X USING OPEN-ENDED APPROACH	
NURHAYATI _____	141
THE IMPLEMENTATION OF ICLOUD SYSTEM BASED ON KNOWLEDGE SHARING AT THE UNIVERSITY OF MAARIF HASYIM LATIH SIDOARJO	
ACHMAD FATHONI RODLI _____	146
THE INFLUENCE OF IMPLEMENTATION OF COOPERATION LEARNING MODEL TYPE NUMBER HEADS TOGETHER AND THINK-PAIR-SHARE TO THE CONCEPT COMPREHENSION OF ECONOMY	
PUPU SAEFUL RAHMAT _____	152
THE INFLUENCE OF ADVERTISING LANGUAGE TOWARD THE USE OF BAHASA INDONESIA	
FITRI _____	158
THE CORRELATION BETWEEN CARIOGENIC FOOD CONSUMPTION AND TOOTH BRUSHING HABITS WITH CARIES INCIDENCE AND DENTAL HYGIENE OF STUDENTS AT ELEMENTARY SCHOOL OF KAMPUNG OLO PADANG	
DEWI ELIANORA, ABU BAKAR, & RATIA SENGGANI _____	161
VALIDITY TEACHING MATERIALS OF INDONESIAN EDUCATION IN BEGINNING CLASS OF ELEMENTARY SCHOOL COURSE BASED INTEGRATED SCIENCE AND SOCIAL STUDIES	

WAHYU SUKARTININGSIH	166
VALUES OF CHARACTER IN TRADITIONAL CHILDREN GAMES IN WEST JAVA (STUDY OF ORAL TRADITION)	
YUSIDA GLORIANI	173
WRITTEN CORRECTIVE FEEDBACK: ENHANCING WRITING ABILITY THROUGH DIRECT CORRECTION	
DAYAT	176
DEVELOPING AN ADAPTIVE AND ENGAGING E-LEARNING MEDIA FOR E-LEARNING COURSE IN HIGHER EDUCATION	
UNUNG VERAWARDINA	183
LANGUAGE ATTITUDE AND THE SELECTION OF THE LANGUAGE OF URBAN STUDENTS IN IKIP PGRI PONTIANAK	
ELVA SULASTRIANA	188
ANALYSIS OF COMPETENCE EXAM MASTER (UKG) TEACHER IN ECONOMIC SMA IN JAKARTA	
SITI NURJANAH	193
ANALYSIS OF STUDENT'S ABILITY ON MATHEMATICAL REPRESENTATION IN JUNIOR HIGH SCHOOL	
SYARIFAH FADILLAH	201
SCIENCE AND TECHNOLOGY	209
ANALYSIS OF QUANTUM MECHANICS PARAMETERS TO HARMONIC OSCILLATOR BY USING SPREADSHEETS AS WELL AS ITS APPLICATION IN PHYSICS EDUCATION TECHNOLOGY	
ANDIKA KUSUMA WIJAYA, & ARIEF HERMANTO	210
CONCRETE TECHNOLOGY TO SUPPORT SUSTAINABLE TOURISM INFRASTRUCTURE	
SRI WIWOHO MUDJANARKO, & M. IKHSAN SETIAWAN, & KOESPIADI, & FREDY KURNIAWAN	215
DOMESTICATION OF LAIS (OMPOK HYPOPTHALMUS) IN THE FISHPOND AS A SUSTAINABLE CONSERVATION EFFORT	
INFA MINGGAWATI, & LUKAS	217
REDESIGN OF ENVIRONMENTAL WORK WITH ERGONOMIC INTERVENTION TO REDUCE FATIGUE AND INCREASE OUTPUT PRODUCTION	
SAJIYO, & M. ADHI PRASNOWO	220
SMART CITY : E-SERVICE HOSPITAL IN PONTIANAK	
SYF.PUTRI AGUSTINI ALKADRI, MENUR WAHYU PANGESTIKA , & ALDA CENDEKIA SIREGAR	223
STUDY AND ANALYSIS OF AGRICULTURE SPATIAL PLANNING IN PENAJAM PASER UTARA, EAST KALIMANTAN, INDONESIA	
TUKIMUN, WAHYU MAHENDRA, & M IKHSAN SETIAWAN	226

THE ASSESSMENT OF ECOLOGY DIMENSION SUSTAINIBIITY OF RICE PRODUCTION IN WEST KALIMANTAN	
EKAWATI, DARSONO, KUSNANDAR, & NOVIRA KUSRINI	229
GEOGRAPHIC INFORMATION SYSTEM (GIS) APPLICATION TO DETECT THE POTENTIAL FOR TOURISM GEOLOGY AND FOREST IN THE DISTRICT BERAU, EAST KALIMANTAN	
VEGA VITIANINGSIH ANIK, M. IKHSAN SETIAWAN, SRI WIWOHO MUDJANARKO, AGUS SUKOCO, TRI ADHI WIJAYA, & KHOLIDA NENGRUM	235
TIDE FORECAST USING RADIAL BASIS FUNCTION NEURAL NETWROK	
NERFITA NIKENTARI	237
SOCIAL SCIENCE CALL PAPER	240
URBAN AGRICULTURE TECHNOLOGY TO SUPPORT URBAN TOURISM	
YENI IKA PRATIWI, MAHRUS ALI, M. IKHSAN SETIAWAN, HERY BUDIYANTO, & BAMBANG SIGIT SUCAHYO	241
A STUDY OF ESSENTIAL BASIC VALUES WHICH SUPPORT SOCIAL HARMONY IN CONFLICT-PRONE AREAS (A PROFOUND STUDY AT PRIMARY SCHOOLS IN SAMBAS REGENCY, WEST KALIMANTAN)	
AUNURRAHMAN	244
ACCELERATING THE IMPROVEMENT OF INFRASTRUCTURE AND HUMAN RESOURCES TO SUPPORT NATIONAL ECONOMY GROWTH	
CHOLIL HASYIM, M. IKHSAN SETIAWAN, & VERONIKA NUGRAHANI SRI LESTARI	249
ADVERTISING JARGON FOR LOCAL PRODUCTS AS CREATIVE INDUSTRY	
ROSIDA TIURMA MANURUNG	252
THE CONTRIBUTION OF CONSCIOUSNESS THE TAXPAYER AGAINST TAX REVENUES IN THE KPP PRATAMA SURAKARTA	
ARIEF BUDHI DHARMA, ANDJARWANI PUTRI W, & ESKASARI PUTRI	257
COMPARATIVE ANALYSIS OF DETERMINATION AND MANAGEMENT HAJJ FEES IN INDONESIA AND MALAYSIA (STUDY OF COMPARATIVE ANALYSIS)	
DIAN NURMASTUTI, ARIEF BUDHI DHARMA, & YUNIATIN DKW	264
ANALYSIS OF THE FACTORS OF SERVICE, PRODUCT, PROMOTION TO THE DECISION OF THE COSTUMER DEMAND SERVICES PRODUCTS MANDIRI SHARIA BANK BATAM BRANCH	
LUKMANUL HAKIM	269
ANALYSIS OF THE USE OF APPLICATIONS ‘MOBILE BANKING’ BRI BUSINESS TRANSACTION OF TRADERS IN THE MARKET BENGKAYANG	
AGUSTINUS RAHANWARATI	275
ANALYSIS ON LEVEL OF SACCHARIN AND CYCLAMATE ADDITIVES INSIDE UP-PACKAGING-DRINK ATSD KARANG TENGAH, TANGERANG CITY	
YUSNIDAR YUSUF, M.RAMDHAN, & YUNI ROCHMAWATI	279

PERFORMANCE OF EQUITY MUTUAL FUNDS ACCORDING TO SHARPE, TREYNOR AND JENSEN METHODS PERIODE 2013-2015	
CATUR FATCHU UKHRIYAWATI	283
CHIEF ELECTION LAW OF REGIONAL AND PREVENTION OF CORRUPTION	
M. ZAMRONI, & AANG KUNAIFI	289
PETENCE DEVELOPMENT STRATEGY CORE INDUSTRIAL AREA DISTRICT OF NORTH KAYONG	
SYARIF AGUSSAID ALKADRIE	295
CREDIT UNION ROLE IN SUPPORTING CAPITAL SMALL AND MEDIUM ENTERPRISES (CASE STUDY LANTANG TIPO CREDIT UNION BRANCH OFFICE BENGKAYANG)	
SABINUS BENI, & BLASIUS MANGGU	301
DEVELOPMENT OF CREATIVE ECONOMY THROUGH THE BLUE OCEAN STRATEGY FOR A SMALL BUSINESS (STUDY ON BIDAI HANDICRAFT INDUSTRY IN THE DISTRICT OF JAGOI BABANG, BENGKAYANG)	
RISSA AYUSTIA	306
EFFECT OF EMOTIONAL INTELLIGENCE AND OCCUPATIONAL HEALTH ON EMPLOYEE PERFORMANCE	
CHAMDAN PURNAMA, DINDA FATMAH	310
EFFECT OF WORK MOTIVATION AND JOB SATISFACTION OF MARKETING RESEARCH PART PERFORMANCE OF EMPLOYEES IN PT. DECKA MARKETING	
ASMARA INDAHINGWATI	317
FINANCIAL RATIO ANALYSIS FOR EVALUATION THE HEALTH AND DEVELOPMENT OF THE BUSINESS OF PEGADAIAN SYARI'AH (PERSERO) BRANCH SEI PANAS BATAM	
AZNEDRA	322
FISCAL DEPENDENCE ANALYSIS JOMBANG DISTRICT GOVERNMENT REGIONAL AUTONOMY ERA (JOMBANG DISTRICT LOCAL REVENUE AGENCY)	
RACHYU PURBOWATI	333
IMPACT ANALYSIS SERVICE PERFORMANCE IN ESTABLISHING CUSTOMER SATISFACTION AND LOYALTY	
ISTININGSIH	341
ASYMMETRY INFORMATION: INVESTORS TRUST REFLECTION TOWARD QUALITY OF EARNINGS	
RATNA WIJAYA DANAR PARAMITA, & NOVANSYAH RIZAL	344
ENVIRONMENTAL MANAGEMENT STRATEGIES IN FISH PROCESSING BY IMPLEMENTING CLEANER PRODUCTION	
ERINA RAHMADYANTI & ANDRE DWIJANTO WITJAKSONO	349
JOINT ECONOMIC LOT SIZE IN THREE LEVEL SUPPLY CHAIN WITH PROBABILISTIC DEMAND	
MOCH. ANSHORI	354
LINEAR TREND ANALYSIS IMPACT OF INCREASING INVESTMENT IN AREA OF DEVELOPING COMMERCIAL PROPERTIES	

JOKO SUYONO, M. IKHSAN SETIAWAN, AGUS SUKOCO, SRI WIWOHO MUDJANARKO, & SANTIRIANINGRUM S	358
LOCAL WISDOM AS AN IMPORTANT ASPECT IN THE SPIRITUAL CAPITAL OF TRADITIONAL KINSHIP	
HELENA ANGGRAENI (RENI) TJONDRO SUGIANTO	363
MANAGING HUMAN RESOURCE MANAGEMENT IN BUSINESS ENVIRONMENT IN THE ERA OF THE ASEAN ECONOMIC COMMUNITY IN WEST NUSA TENGGARA REGION	
BAIQ SALKIAH, & DIDIN HADI SAPUTRA	367
OUTSOURCING MODEL IN PERSPECTIVE LEGAL PROTECTION AND LABOR RIGHTS	
YUNIATIN TRISNAWATI DWI K, ANDJARWANI PUTRI, & DIAN NURMASTUTI	370
POTENTIALS OF SUBAK TO DEVELOP AGRO-TOURISM IN BALI PROVINCE	
MADE SUMITRA CHANDRA JAYA, PUTU DYATMIKAWATI, & GEDE SEDANA	378
IMPLEMENTATION OF ARTICIAL INSEMINATION SNAPPING LUST (GBIB) IN CATTLE IN THE DISTRICT CITY WEST K. CENTRAL KALIMANTAN PROVINCE	
TRESIA KRISTIANA	381
RAISING PUBLIC AWARENESS OF RUBBISH RECYCLING; THE EXPERIENCE OF PONTIANAK CITY, WEST KALIMANTAN	
DONNA YOULLA, & SOEMARNO	387
RECONSTRUCTION OF LEGAL PROTECTION THE TENURE RIGHTS OF LAND AND BUILDING ON THE RIPARIAN ZONE BASED ON VALUES OF	
SETYO UTOMO	392
SME'S CENTER: PUBLIC-PRIVATE PARTNERSHIP FOR ACCELERATING REGIONAL ECONOMIC	
M. IKHSAN SETIAWAN, AGUS SUKOCO, SRI WIWOHO MUDJANARKO, & ISWACHYU DHANIARTI	396
STRATEGIC MARKETING AND COMPETITIVE STRATEGY OF SMES IN THE ERA OF ASEAN ECONOMIC COMMUNITY	
FAHRUDDIN SALIM	400
STRATEGY OF THE TRADERS IN PASAR RAYA PADANG AGAINST ABOUT REHABILITATION AND RECONSTRUCTION POLICY AFTER EARTHQUAKE	
RINEL FITLAYENI	403
STUDY ISLAMIC CONSUMPTION THEORY: REVIEW OF PUBLIC CONSUMPTION PATTERNS IN SURABAYA	
ROHMASARI, SLAMET RIYADI, & TRI RATNAWATI	408
SUPPORTING COOPERATIVE THROUGH IMPROVEMENT OF ORGANIZATIONAL CAPACITIES LESSON FROM FARMERS' COOPERATIVE IN BALI	
PUTU DYATMIKAWATI, MADE SUMITRA CHANDRA JAYA, & GEDE SEDANA	412
A STUDY OF FISH NURSERY AROUND PEOPLE'S HOME IN THE SUBDISTRICT OF BENGKAYANG	
SHANTI VERONICA BR SIAHAAN	416

THE IMPACT OF HUMAN RESOURCES COMPETENCE, INFORMATION TECHNOLOGY UTILIZATION, FINANCIAL SUPERVISION AND ACCOUNTING INTERNAL CONTROL TO TIMELINESS OF FINANCIAL REPORTING IN JOMBANG PUBLIC HOSPITAL	
DWI ERMAYANTIS.	420
THE NAROTAMA FUND MANAGEMENT BASED ON THE ACCREDITATION OF BAN-PT	
AGUS SUKOCO, M. IKHSAN SETIAWAN, & ISWACHYU DHANIARTI	427
THE POWER OF ARBITARIAN CLAUSE IN AN AGREEMENT AS A CHOICE OF LAW TO RESOLVE THE BUSINESS DISPUTE	
ANNURDI	430
THE SUCCESS OF HATCHING DUCK’S EGG IN PETIK MAS PROGRAM AT PADANG	
RUDY KUSUMA	433
UTILIZATION OF RUPIAHS CURRENCY IN JAGOI BABANG BORDER	
YOSUA DAMAS SADEWO, & PIETER RADIANTUS	436
WEAVING CULTURE OF THE DAYAK KENINJAL (CASE STUDY IN RIBANG SEMALAN VILLAGE, TANAH PINOH DISTRICT -MELAWI REGENCY)	
KRISTIANUS, & MAGDALENA	440
GENDER INEQUALITIES IN THE NOVEL ISINGA AND EMANCIPATION STRUGGLE	
PRIMA GUSTI YANTI, UMMUL QURA	450
UNIVERSALITY OF “ADIL KA’ TALINO, BACURAMIN KA’ SARUGA, BASENGAT KA’ JUBATA”, SYNCHRONISTIC APPROACH ON THE FAMOUS BYWORD OF DAYAKi KANAYATNü TRIBE	
FERRY HARTONO	455
MICROBIAL CONTAMINATION ON SLAUGHTERHOUSE IN KENDARI	
HARAPIN HAFID, NURAINI, ANDI MURLINA TASSE, INDERAWATI, & MUH. HASDAR	459



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KNOWLEDGE MANAGEMENT IN THE ERA OF SOCIAL MEDIA

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Abstract. In recent years, social media has becoming the most popular communication and sharing platform in our daily life, such as Facebook, Twitter, etc. Large amount of information and knowledge are gathering continuously in those social media platforms. It changes our life, communication style, media environment, information resource, business model, teaching and learning environment as well as management methodologies and knowledge management process. In this talk, the major differences in the process of knowledge management will firstly be discussed and the issues when implementing knowledge management in the era of social media will also be mentioned. In order to improve the performance of knowledge management and to overcome the shortage of traditional knowledge management. There are two systems will be introduced in this talk. The first one is a so-called “Face Your Book” system, which is a task-oriented search engine for retrieve useful information in Facebook. The second one is an app called “Tartzell”, which is a knowledge and course management system. Both of the two systems have already been applied in industry for knowledge management in organizations, and may inspire us the ways to design more suitable knowledge management model and system in the era of social media.

Keywords: Social Media, Knowledge Management, Knowledge Management Systems, Social Network Analysis.

AN IDEAL CLASSROOM IN AN IDEAL SCHOOL: *Leaping Across Boundaries – Creating International Mindedness through Holistic Education*

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I. INTRODUCTION

World Bank has reported that seven out of ten of the globe's children reside in developing countries (World Bank, 2010). This 70% of the world's population are the leaders of tomorrow, but continue to face weakening education experience in their countries. Significant policy related issues arise as a consequence to this situation and a revolutionary change is needed to remedy it. Today, we see the education patterns and school climate of developing countries confined to their own cultures and norms; students and citizens resulting as a product of such education, lack the "skills" that are needed to survive and progress in this culturally diverse and pluralistic society. There is a need to develop an education system that encompasses the essence of global-mindedness and holism.

II. THE ROOT OF THE DISEASE IN DEVELOPING COUNTRIES

To examine the root of the problem, we start by quoting some facts and statistics in terms of the educational situation in the developing countries. According to (Global Monitoring Report, 2011), in order to accommodate the children that are presently not in school, there is a need for 4 million new classrooms, where the children in school are not receiving quality education. According to (Hanushek, 1996), investigations have found that long term student achievement is linked to two major things viz. educational resources including curriculum and study material and secondly, the education level of the teacher/ instructor.

Developing countries are facing a number of challenges that have led to the current state of education and teaching. Under-qualified teachers, who are paid below average and are not involved in the regular decision making within schools, prevail in these countries (Buchmann & Hannum., 2001). Little or no interest is paid to the character building of students and international education is not paid attention to, either. This is where my ideal classroom within the perception my ideal school steps in and the concept would provide means to better the aforementioned situation.

III. INCORPORATION OF INTERNATIONAL MINDEDNESS

The world has become a global village and for the children of today to survive in this fast paced world, they need skills and education that embody the needs of the globe. Being confined to their old trodden norms results in

stagnancy, which in turn leads to regression. A global and international approach is needed within schools and classrooms to provide the necessary skills to students so that they can progress worldwide. Gellar (2002) very rightly quotes Thomas in his study that '*international education is uniquely placed to provide lasting solutions to the major problems facing world society, problems which transcend political borders.*' The incorporation of international mindedness into the education of today has become key to a better future for students. There have been defined a number of typologies regarding IM by Haywood (2007) where he argues that international mindedness can be expressed in varied ways amid different multi-cultural people

a. Distinction between 'International School' and 'International Minded ness within a school':

Here, we need to identify the difference between an 'International School' and 'International Minded ness within a school'. Conventionally, international schools were formed to enroll immigrants (émigré) from a different country, working offshore (Baker, 2005). Such schools were formed so as to provide curriculum in accordance with nationalities, however, during the last decade private schools have taken grasp of international curriculum in order to strengthen the local student strength. The ideal school that I am proposing follows the latter and aims to provide skills and teachings that would prepare students for the world of tomorrow. I substantiate (Allan, 2002) and (Waterson & Hayden, 1999) who believe that it is the curriculum that defines the international mindedness of the school and not the nationality of the faculty or students.

IV. HOLISTIC APPROACH TOWARDS EDUCATION:

In my ideal classroom within an ideal school, after having establishes an international curriculum, teaching methods would be improved. The role that a teacher plays in as complex as it is imperative; it needs flexibility and change in accordance to the changes taking place – both globally or locally, be it within a classroom setting or during an informal conversation with a student (Ben-Peretz, 2009). As mentioned earlier, the nucleus of both my ideal school and the classroom within it, is to adapt to the progressing and changing global environment. Holistic approach towards education entails this viewpoint as it believes in '*connection*'. A holistic approach would teach students to view things more critically and approach them with a wider frame of reference. This would develop skills in students to connect and interact on a global level (Hare, 2010).

V. LEANING TOWARD POSITIVE EDUCATION:

Positive education can be defined as educational brilliance realized by means of excellent teaching skills and persistent fortitude; and at the same time, penetrating into the realm of 'character virtue', helping other and 'the pursuit of happiness'. The greatest strength of positive education is the 'academics + character' approach it embodies and hence, teaches students to not only be academically good but also the attainment of bliss.

VI. POSITIVE HOLISM HELPING IN DEVELOPMENT OF INTERNATIONAL-MINDEDNESS:

In order for the children of today to be responsible citizens of tomorrow in this global village, which is immersed in various diverse social and cultural environments that are changing at an accelerating rate, holism needs to be kept in perspective within the walls of a learning institution (Huit, 2011). Holistic teaching means guiding the student through his or her own mental, physical, spiritual development in such a way that connections between self and the world – between "I" and the "other" are fostered and strengthened. Teaching methods in the developing countries are limited – restricted to a set of instructions that are being used since ages. This has led to students spending millions to flee abroad so that they can get education that will help them participate in the race towards progress globally. But why? Why do these children need to leave their home country? This needs to be sorted out. Teachers and school administration needs to bring about a review in the education scheme and connect themselves with global needs. Here, the concept of holism comes in view; "holistic teaching means reaching through the student, beyond into the community, engendering a reciprocal relationship that meets the needs of both our students and the world in which we live (Shelton-Colangelo, et al., 2007, p. 106)."

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GENDER EMPOWERMENT PROJECTS AND CREATIVITY: BETTER MANAGEMENT OF RESOURCES TO OPTIMIZE RESULTS

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Abstract. As a cultural anthropologist I strongly believe in the value of applied anthropology especially when it comes to international cooperation and development. Thanks to a methodology principally based on participant observation I found that anthropologists benefit from a deep understanding of the social dynamics within a group. In this working paper I discuss my work for AIDA, a Spanish NGO, in Dhaka. Several years ago, I was called to collaborate with this organization in order to set 'gender empowerment indicators' for their projects. The activities, approved and financed by AIDA [1], were implemented by Tarango, a local NGO. The main goal of AIDA was to improve the conditions of women in specific urban and rural areas of Bangladesh. Women are seen by the international community as one of the major driving forces in the development of a country. Gender equality and the empowerment of women have been defined by The Millennium Development Goals Report as 'preconditions for overcoming poverty, hunger and disease' [2]. What I have found extremely interesting while working at Tarango was the strict relationship between economic and gender empowerment, culture and creativity. I found that being aware of the positive externalities of this relationship can lead to a more efficiently organized production, economic independence and most importantly a stronger sense of identity.

Keywords: NGOs; Gender Empowerment; Participatory observation; Creativity

I. Introduction

This working paper reports the results of my work in Dhaka from the middle of August 2010 to the middle of October of the same year. My task during my stay in Bangladesh was to create an efficient framework to develop tailor-made qualitative gender indicators for a Spanish NGO, AIDA (Ayuda, Intercambio y Desarrollo), and its local NGO partner, TARANGO (Training, Assistance and Rural Advancement Non-Governmental Organization) [3].

All the activities implemented by TARANGO, have women as exclusive direct beneficiaries. The organization states that once women are considered a source for better living conditions for the entire household their status in the family and in the wider community grows allowing an increasingly gender-balanced society to develop (J Kohinoor, 2010, interview, 20 September).

The model of gender empowerment proposed by TARANGO, comes from a concept of empowerment as the ability of women to access the constituents of development through a dynamic process between economic independence and individual confidence.

The actions promoted to achieve entrepreneurship development cover a diversified range of training programs (Handicraft Program - New Business Creation training Courses) realized on the basis of beneficiaries' needs, context and market analysis, resources available and respect for the environment. Once the skills have been acquired, marketing facilitation and business advisory services are

provided through the Women Entrepreneurship Development Program (WEDP) together with means of acquisition of initial financial resources to invest (Village Saving and Loans Association Program - Savings & Micro-credit -IGA).

II. Methodology

The methodology applied to collect the indicators to measure TARANGO's results in terms of gender empowerment has been mainly based on direct observation and participatory methods. As an anthropologist I chose to follow the principles of participatory observation and I conducted open interviews with the main stakeholders.

Since I believe that women themselves should be agents of their own development, they should definitely feel the ownership over the implemented activities but they should also be engaged in the monitoring and evaluation processes. The women involved in the NGO's development programs, the final beneficiaries of the project, together with TARANGO's staff have actively participated in the research and contributed to the decisions about what should be measured and what indicators should be used.

Personal interviews, open-ended discussion meetings and brainstorming sessions have been the consultation methods used to promote awareness among the members and to collect responses and the information necessary to consolidate the indicators.

Gender empowerment and creativity

As Santagata states 'creativity can be considered has an economic good produced by human mind' [4] and 'creative industries are those originated by individual creativity, ability and talent' [5].

Development programs often lead to handicraft production. Many NGOs like TARANGO, have their own brand and are part of the fair trade network. The general need is to find a balance between being a non-profit organization and having to deal with all the requests characteristic of a commercial dimension.

Profit and non-profit organizations are legitimised by different reference systems that apparently could diverge in values and purposes. During my stay in Bangladesh I visited different kinds of organizations which deal with handicrafts and textiles and the reality has revealed to be more complex.

Corona Industry is a profit organization and represents the biggest Italian investment in Bangladesh. It is considered a textile model industry and the commitment of its owners in helping people it's outstanding. Corona's group counts other factories in China, Marocco and Myanmar, the Bangladeshi one is specialised on the production of textile and is quite peculiar to that region. It started with the vow of Mr Corona to thank God for the recovery of his wife 25 years ago, since than this lovely couple has lived and worked in Bangladesh.

Relying on dismissed machines coming from their other factories and on the support of the wider Corona's network, Corona Industry has been able to focus on the training of unskilled workers renouncing to an immediate profit. After many years of shared experiences and monitoring of the living conditions of the workers Mrs Corona reckons that employing almost only men is the most effective way to indirectly reach the weakest members of the society, women and children (G Corona, 2010, interview, 25 September).

Aarong is the commercial branch of the Bangladeshi Rehabilitation Assistance Committee (BRAC), one of the biggest NGOs in the world. Aarong was created in 1978, six years after BRAC, to provide support and access to market to the local artisans living in the rural areas. As declared in its official website, the company employs mostly women and all of them are involved in BRAC's development programs. This combination guarantees a multidimensional approach to development and transforms Aarong in BRAC's support entity. In fact, part of Aarong earnings are invested in the NGO's activities.

In the same website Aarong defines itself as the 'protector and promoter of traditional Bangladeshi products and designs' [6]. its brand is synonym of high quality and accurate design and it sells overseas as fair trade.

Aarong is aware of the importance and beauty of local motifs and patterns and knows how to make them appealing to international costumers, Aarong houses a design library and in 2003 launched Taaga, a collection that blends Bangladeshi motifs and Western style.

Organizations like Corona and Aarong have been successful in finding a balance between values and commercial issues. Both of them are good examples of creative industry.

TARANGO is experiencing an increasing demand for its handicraft products and is still looking for the best solution

to combine its vision with the requests of the profit sector. At the moment we can define TARANGO as a 'potentially creative industry'.

Being aware of these connections, it's important to be able to organize the production more efficiently, to achieve the NGO economic independence and in strengthening the recipients' identity.

Starting from the handicraft training activities all beneficiaries are involved in TARANGO's production. The demand for their handiworks is often higher than the offer so all women are encouraged to pay attention to the quality of their work and sell through TARANGO to a network of international and local clients.

As summarized by Santagata (Santagata 2009, pp.7-8) creativity represents one of economic development's assets for different reasons:

- a. it is an input in aesthetic, decorative and design processes and so it has an impact on the intangible component and on the intellectual property of products
- b. it is an input in innovative technological processes and so it has an impact on innovation, productivity and the technical quality of products
- c. it is able to add a symbolical component to products and so it has an impact on market demand and competition
- d. it constitutes the link between the organization's artistic, intellectual, aesthetic side and the economy

Being aware of creativity's potentials becomes fundamental when dealing with a gender empowerment project like TARANGO's.

Many NGOs around the world train women, teaching them the basics of production but they often don't seem aware of the implicit implications of a production in terms of identity. Being mostly 'design-based programs', they could enjoy of the benefits of a creative process and play an important role in the transmission of traditional material culture.

At TARANGO, the designer working on the international production covers the main position in the studio with a full time contract, while the one who draws models for the emergent local market has joined TARANGO just recently and is present just few days per week. The main items produced are bags and baskets.

Unfortunately the presence of local motifs in the handicrafts sold overseas is almost nil and also the products for the local market tend to follow the patterns of the main collection. On the other hand, all materials used are local, manly jute, traditionally weaved cotton or a mix of cotton and jute. TARANGO has introduced natural dyes and it is promoting the use of recycled materials like cement bags and bill boards.

III. Conclusions

Design and creativity are often neglected parts in development projects, basic skills are the object of numerous trainings but how to rationally organize a production and how to develop a distinctive character are usually not part of the know- how transmitted. TARANGO had different

international organizations and foreigner NGOs as partners but training on the creative aspects of the production has never been part of the programs. It is meaningful to note how this very same component of the production would be vice versa considered as a priority by a profit organization.

Developing their own design without relying on international designers or foreign patterns it is of paramount importance not only to strengthen TARANGO's and its beneficiaries' identity but also to respond to the new trends of the market. Nowadays low cost production doesn't seem the essential criteria to meet the international demand, we are witnessing a shift to a new form of competition based 'on the quality of products, their symbolic value and the quality of the experience that they allow' [5].

According to this change in the demand, TARANGO should learn how to communicate and represent through its collection the background and culture of its recipients. Promoting in the international market a distinctive 'proudly made in Bangladesh' would not only lead to consistent economic results but also improve the NGO's self confidence.

Becoming an organization able to value and promote creativity, TARANGO would add a precious symbolic value to its production, more than that this model of production would be able to promote and preserve Bangladeshi traditional knowledge through material culture.

From a gender prospective, women would feel the ownership over the production process being actively involved in the more creative aspects. It becomes immediately evident the potential of creativity is empowering women increasing their self confidence. Besides an open creative process encourages social inclusion and cohesion giving to everyone the chance to express his/her potentialities without discrimination.

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AN INTRODUCTION: EVALUATION OF QUALITY ASSURANCE FOR HIGHER EDUCATIONAL INSTITUTIONS USING RASCH MODEL

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Abstract. This is a descriptive qualitative research about quality assurance evaluation. The research aims to introduce analyzing using Rasch model to evaluate higher education institution based on quality assurance standards that have been developed to evaluate each member including instructor and staff in higher education institution. The instrument has been developed to conduct the experiment to provide raw data sample to do practical analyzing using Rasch model in this research. The first part of this research will explain definition of the quality assurance and Rasch model analysis. The second part of this research will show introduction analysis using Rasch model to analysis sample data. The third part of this research will show a brief summary of the result and important finding in evaluation of higher assurance. Analyzing data of evaluation quality assurance using Rasch model will help higher educational institutions to increase and develop their quality assurance to be better higher educational institution.

Keywords: Rasch model, quality assurance, evaluation

I. INTRODUCTION

Educational Quality assurance has an important role in quality development of all systems. Quality assurance evaluation is a specific assessment for individual institutes. It doesn't provide overall information of development, giving non-referable results in conclusion of the model for instructional quality assurance. Each area conducts different operations, added that the participants in evaluation of each area possess different attributes [1]. The evaluation has to provide the applicable result, enabling achievement of more information and development of the model for instructional quality assurance in higher educational institution.

Using quality of achieving academic excellence has always been a central value in higher education. Higher education Institutions have relied on the reputation of their faculties to attract students and scholars and to give credibility to their degree programs, their graduates, and their instructors. However, the way Quality Assurance's key components, Accreditation and Evaluation or Assessment, are defined has a great influence on its implementation and impact. Assessment is about language regarding the nature of teaching, learning, and appropriate inquiry and power regarding how higher education is organized and rewarded.

Signifying the formation of higher education Quality Assurance policies in view of the transition from elite higher education to mass higher education, was marked by influences from outside the region. There is identified five broad approaches for defining quality in higher education. These are (i) quality meaning exceptional, where quality is related to conception of excellence; (ii) quality meaning perfection, where quality has consistent and error-free

attributes; (iii) quality meaning fit for purpose, where quality fulfills the perceived requirements of stakeholders; (iv) quality meaning value for money; and (v) quality meaning transformation.

A. Definition of Quality Assurance in Education

Quality is described as the totality of features and characteristics of a service that bear on its ability to satisfy stated or implied needs. Quality of higher education is a multidimensional concept, which should include all its functions and activities: teaching and academic programmes, research and scholarship, staffing, students, buildings, faculties, equipment, services the community and the academic environment [2].

It has to take the form of internal self-evaluation and external review, held openly by independent specialists, if possible with international expertise, which are vital for enhancing quality. Independent national bodies have to be established and comparative standards of quality, recognized at international level, have to be defined. Due attention should be paid to the specific institutional, national and regional contexts in order to take into account diversity and to avoid uniformity. Quality also requires that higher education should be characterized by its international dimension: exchange of knowledge, interactive networking, mobility of teachers and students, and international research projects, while taking into account the national cultural values and circumstances [2, 3]. For any higher education institution, there are several aspects of reputation which are important [2];

- 1) It is built upon the competitive elements of quality, reliability, delivery, history and price.
- 2) Once a higher education institution acquires a poor reputation for quality, it takes a very long time to change it.
- 3) Higher education reputations can quickly become national reputations.
- 4) The management of the competitive weapons, such as quality, can be learned like any other skill, and used to turn round a poor reputation, in time.

The movement for evaluation, came under the strong influence of the Quality assurance movement. At the same time there is also the need for measures to evaluate the performance of the institution. Within these parameters the evaluating agencies tend to adopt a number of different approaches to monitoring quality in higher education. In general, they can all be described as forms of external conditioned by the prevailing institution. Some effort of governments around the world are looking for higher education to be more responsive, including making education more relevant to social and economic needs [4],

- 1) Widening access to higher education,
- 2) Expanding numbers, usually in the face of decreasing unit cost, and
- 3) Ensuring comparability of provisions between institutions.

B. Data Quality Assessment

There are three steps which depict in Figure 1: planning, implementation, and assessment. In the planning phase, a systematic planning procedure is used to define criteria for determining the number, location, and timing of samples (measurements) to be collected in order to produce a result with a desired level of certainty. This information, along with the sampling methods, analytical procedures, and appropriate quality assessment, is documented in the Project Plan. Data are then collected following the Project Plan specifications in the implementation phase. In the assessment phase, the data are verified and validated to ensure that the sampling and analysis protocols specified in the Project Plan were followed, and that the measurement systems were performed in accordance with the criteria specified in the Project Plan. Then the statistical component of data quality assessment completes the data quality assessment by providing the evaluation needed to determine if the performance and acceptance criteria developed by the planning process were achieved [5].

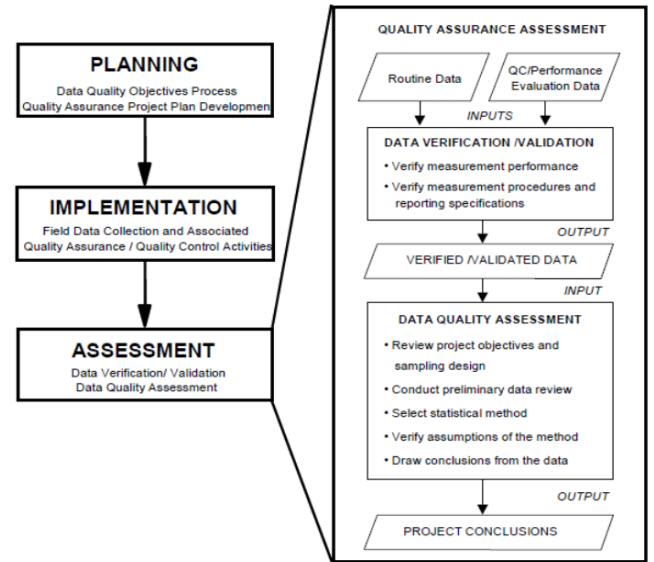


Fig. 1 Three steps in processing data quality assessment

C. Rasch Model

The Rasch model was named after the Danish mathematician Georg Rasch [6]. The model shows what should be expected in responses to items if measurement (at the metric level) is to be achieved. For the Rasch model, dichotomous [6] and polytomous [7]. The response patterns achieved are tested against what is expected, a probabilistic form of Guttman scaling [8], and a variety of fit statistics determine whether this is the case [9]. The objective is to test how well the observed data fit the expectations of the measurement model. Three overall fit statistics are considered. Two are item-person interaction statistics transformed to approximate a z score, representing a standardized normal distribution [12].

The model assumes that the probability of a given respondent affirming an item is a logistic function of the relative distance between the item location and the respondent location on a linear scale. In other words, the probability that a person will affirm an item is a logistic function of the difference between the person's level of, for example, anxiety (u) and the level of anxiety expressed by the item (b), and only a function of that difference.

$$P_{ni} = \frac{e^{(\theta_n - b_i)}}{1 + e^{(\theta_n - b_i)}} \quad (1)$$

where P_{ni} is the probability that person n will affirm the item, u is the person's level of anxiety, and b is the level of anxiety expressed by a positive response to the item. The formulae can be expressed as a logit model:

$$\ln\left(\frac{P_{ni}}{1 - P_{ni}}\right) = \theta_n - b_i \quad (2)$$

where \ln is the normal log, P is the probability of person n affirming item i ; u is the person's level of anxiety, and b is the level of anxiety expressed by the item. Fitting data to the Rasch model thus places both item and person parameter

estimates (note that they are independent parameters) on the same log-odds units (logit) scale, and it is this that gives the linear transformation of the raw score.

The model can be extended to the polytomous case and is known as the rating scale model [7]:

$$\ln\left(\frac{P_{nij}}{1 - P_{nij}}\right) = \theta_n - b_i - \tau_i \quad (3)$$

where, in addition to the parameters shown in (2) above, the t represents the threshold (0.5 probability point) between adjacent categories. A further variant of this is known as the partial credit model [10], and it makes no assumptions about the An introduction to the Rasch measurement model 3 equidistance between thresholds across items, which is the case of the rating scale model:

$$\ln\left(\frac{P_{nij}}{1 - P_{nij-1}}\right) = \theta_n - b_{ij} \quad (4)$$

Statistics indicating fit to the model test how far the observed data match that expected by the model. Note the orientation; because the model defines measurement, data are fitted to the model to see if they meet the model's expectations. This is opposite to the practice in statistical modelling where models are developed to best represent the data. Within the framework of Rasch measurement, the scale should also work in the same way, irrespective of which group (e.g. gender) is being assessed [11]. For example, in the case of measuring anxiety, males and females should have the same probability of affirming an item (in the dichotomous case), at the same level of anxiety. Thus, the probability is conditioned on the trait. If for some reason one gender did not display the same probability of affirming the item (in the dichotomous case), then this item would be deemed to display DIF, and would violate the requirement of unidimensionality [9].

A further test for unidimensionality is undertaken by looking at patterns in the residuals. These are the standardized person-item differences between the observed data and what is expected by the model for every person's response to every item. This is one way of testing the model's assumption of local independence of items; after extracting the 'Rasch factor' there should be no further pattern in the data [12].

D. Analyzing Rasch Model Using Winsteps

Figures and tables must be centered in the column. Large figures and tables may span across both columns. Any table or figure that takes up more than 1 column width must be positioned either at the top or at the bottom of the page.

Winsteps is a statistic software which develop based on Rasch model analysis. Figure 2 shows icon of winsteps with software version 3.73.



Fig 2. Winsteps icon

If we have raw data which wants to analyze using winsteps, we can drag the raw data to winstep icon. Figure 3 shows window of data setting to analyze using Rasch Model.

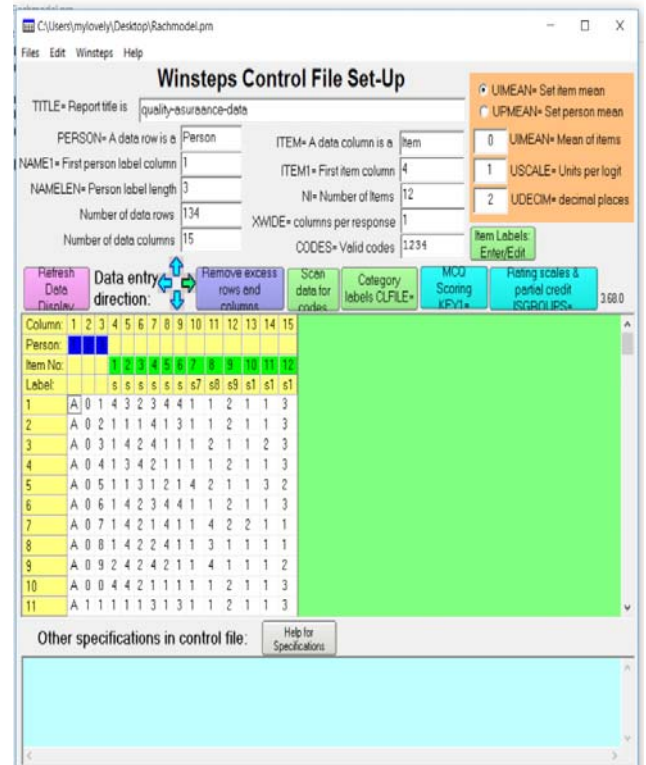


Fig 3. Winsteps window of Rasch model analyzing

After input data setting using winsteps. We can determine what is analysis which we want to present data of quality assurance evaluation. Fig. 4 shows a window of analyzing Rash model using winsteps.

t		
Output Tables	Output Files	Batch Help Specification Plots Excel/RSSST Graphs Data Setup
Request Subtables	1. Variable maps	20. Score table
3.2 Rating (partial credit) scale	2.2 General Keyform	21. Probability curves
2. Measure forms (all)	2.5 Category Averages	29. Empirical curves
	3.1 Summary statistics	22. Scalograms
10. Item (column): fit order	6. Person (row): fit order	7.2.1 Person Keyforms: unexpected
13. Item: measure	17. Person: measure	17.3 Person Keyforms: measure
14. Item: entry	18. Person: entry	18.3 Person Keyforms: entry
15. Item: alphabetical	19. Person: alphabetical	19.3 Person Keyforms: alphabetical
25. Item: displacement		7.2 Person Keyforms: fit order
11. Item: responses	7.1 Person: responses	
9. Item: outfit plot	5. Person: outfit plot	32. Control variable list
8. Item: infit plot	4. Person: infit plot	33. Person-Item: DGF: DIF & DPF
12. Item: map	16. Person: map	34. Comparison of two statistics
23. Item: dimensionality	24. Person: dimensionality	35. Person Paired Agreement
27. Item: subtotals	28. Person: subtotals	36. Person diagnostic PKMAPs
30. Item: DIF, between/within	31. Person: DPF, between/within	

Fig 4. Winsteps output tables

II. METHOD

This research is made using review some journal, article some literatures and analyzing data of quality assurance in higher educational institutions. Description of quality assurance of higher educational institutions have collected from some literature to defining quality assurance of higher educational institutions. Practical analyzing of Rasch model using raw sample data from 26 students to introduce analyzing evaluation of quality assurance and to introduce how to analyze data quality assurance from experiment using Rasch model.

III. DISCUSSION

According to our review evaluation of quality assurance was very important to improve quality assurance of higher educational institution. Quality assurance will determine reputation of higher educational institution. Some aspects which we found about reputation related quality assurance which are (1) It is built upon the competitive elements of quality, reliability, delivery, history and price. (2) Once a higher education institution acquires a poor reputation for quality, it takes a very long time to change it. (3) Higher education reputations can quickly become national reputations. And (4) the management of the competitive weapons, such as quality, can be learned like any other skill, and used to turn round a poor reputation, in time.

This research have tried to make an instrumen to measure qualit assurance using that relation with satifaction service of student because satifaction have important relation with satifaction service. The important one is this research trying to introduce how to evaluate data of quality assurance correctly using Rasch model analysis. Rasch model analysis have many descriptions to represent data. We use fake raw data to anayze data of quality assurance using Rasch model merely to introduce the reader how to using winsteps to use Rasch model analysis. Figure 5 and Figure 6 shows us the two of some representation data using Rasch model analysis.

Fig 5. Wright Map with Rasch model according to category of the instrument

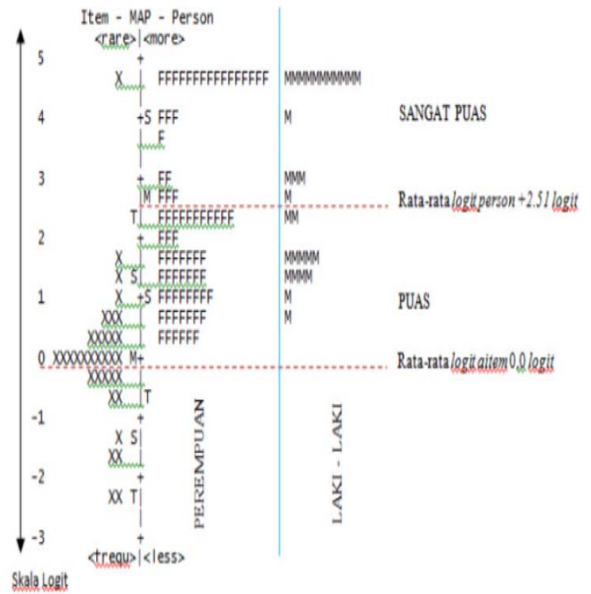
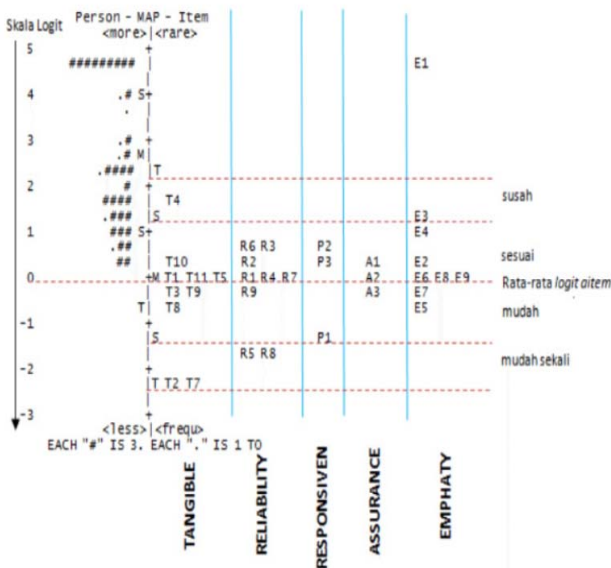


Fig 6. Wright Map with Rasch model according to satifaction service of female and male



Developed Instrument in this research to measure the variable quality of service. Respondent data used in mock raw sample data. On the data generated by the instrument will rank Likert scale with five options statement. quitionary the instruments are made using the approach of five dimensions in the model SERVQUAL (Service Quality), namely Tangible, Reliability, Responsiveness, Assurance, Empathy developed by Parasuraman A, et al [13].

Analysis of testing the validity of the instrument in this study using Rasch modeling, thing seen is the validity of the response to the item based on the value outft Mean Square (MNSQ) received $0.5 < \text{MNSQ} < 1.5$, outft Z-Standard (ZSTD) suitability test value z received $-2.0 < \text{ZSTD} < +2.0$, and the Point Correlation Measure (Pt Mean corr) $0.4 < \text{Pt Mean Corr} < 0.85$. When a grain item instrument service quality meets at least one of the above criteria then the item worthy instrument is used, so that the instrument can be used for research.

The mock raw sample data from the measurement results in the form of data collection forms ordinal scale then transformed into an interval scale using Rasch modeling Winsteps with software version 3.73. Rasch modeling keintervalan troubleshooting data in a way to accommodate the logit transformation, by applying the logarithm of the odds ratios of raw data obtained from the respondents. The univariate analysis in this study showed levels respondents to the satisfaction of service quality dimensions seen from the distribution map of Wright item and person (characteristic) resulting from Rasch modeling.

Quality of Service Based on the analysis mock sample data on the distribution map of Wright person map in Figure 5 it can be concluded that all respondents are above the

average value of the item logit (logit +0.00) as much as 100% respondents, meaning that respondents rate the quality of service given in the category good. Based on Wright map in Figure 5 shows the left-hand column is the column of person, and the right column is kolomitem. Items that are above the average value of the item logit (logit +0.00) implies that the item is relatively difficult to be approved by the respondent and the items that were below the average logit item means the item is approved by the respondent.

Tangible column; In the column direct evidence of scattered items that easily conform until the hard-appropriate, these items have a good discrimination power than items that are in other dimensions. There is one item that is above the average value of the item logit, logit value (+1.77 logit) that the item code to the content item T4 statement "The provision of laboratories relevant to the needs of science", the item has been approved level of agreement is relatively difficult compared other items. This means the majority of respondents have inadequate laboratory facilities.

Column Reliability; On the reliability column, there are three items that are above the average value logit item with code R1 (+0.12 logit), R4 (+0.8 logit) and R7 (+0.16 logit), these items is a group of measuring the same construct, implies that these items have the same relative levels of discrimination, because the measurement results show the value logit or less the same. The third item contains statements related to the reliability of lecturers in conducting lectures.

Column Responsiveness; In the column responsiveness, there is one item under the average value logit code P1 (-1.24 logit) with the contents of the statement item "Provision lecturer Counseling for students", meaning that the item had relative approval rate almost foolproof approved significant compared to other items services have the responsiveness of the respondents.

Column Assurance; In the column guarantees there are three items to be among the average logit value item codes A1 (+0.19 logit), A2 (+0.12 logit), A3 (-0.31 logit), meaning that these items have a relatively difficult level of agreement approved by respondents. These items contains statements related to the service capability of academic staff and lecturers, meaning the quality of service is relatively more difficult to accept than the items that are in other dimensions.

Column Emphaty; In the field of attention, there is one item that is above the average value logit item (+4.71 logit) ie E1 with item code the contents of the statement item "STKIP Singkawang always tried to understand the importance and difficulties of students' level of agreement items had relatively very difficult to be approved than other items. It implies only a minority of respondents were found STKIP Singkawang always tried to understand the importance and difficulties of students.

Figure 6 shows the Quality of Service by Sex; based on the map Wright about the characteristics of the respondents indicated the left column is kolomitem, and the right column is a column of respondents. Respondents who are above the average value logit person (+2.51 logit) implies that respondents are more satisfied with the quality of services provided, compared to respondents who were below the average logit person. Characteristics by Sex; Based on the distribution map of Wright Figure 3 shows that the

percentage of highly satisfied with the quality of service based group sex in order are the male sex by 55.2% while female gender was 33.8%. The result of analysis of variance between the level of assessment is very satisfied and satisfied with the quality of service based on the characteristics of gender signifikan there is a difference, the value of $F = 3.603$, $p = 0.061$ ($p > 0.05$).

Quality of service can be interpreted simply how good the level of service given to meet the expectations and needs of students are being targeted. Good service quality greatly affects the quality assurance of higher education institution. Service quality is strongly influenced by its ability to consistently meet the expectations of students.

IV. CONCLUSIONS

Quality is described as the totality of features and characteristics of a service that bear on its ability to satisfy stated or implied needs. Quality assurance has good relation with satisfaction or quality service. Simply, to know about quality assurance we have to assest student satisfaction toward quality service of higher educational institution. This study aimed to make good instrumen to assest quality assurance of higher educational institution and introduce how to evaluate it using Rash model analysis. We have developed instrument which result ordinal data that can analyze using Rash model. The evaluation instrument of higher educational institution consist of five aspect, tangibles, reliability, responsiveness, assurance, emphaty. Rasch model analysis was used for analyzing student satisfaction toward service of higher educational institution to evaluate quality assurance. In this paper we found that Rasch model is easy to use and have many interpretation to present and give meaning of data. Using rasch model we can now where is the point of the instrument which needs improving to increase quality assurance of higher educational institution. But finally, this study just to beginning to introduce how to evaluate quality assurance of higher educational institution, how to make instrument of quality assurance of higher educational institution, and how to analyze it using Rasch model analysis.

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ASSESSMENT SYSTEM IN CURRICULUM 2013 OF ELEMENTARY SCHOOL IN SUMENEP DISTRICT MADURA ISLAND

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Abstract. New curriculum has been implemented by Indonesia government in an effort to improve quality of education in 2013. Curriculum 2013 is implemented only in grade I, IV, VII and Class X against 6,325 target schools. In 2014/2015 academic year Curriculum 2013 is applied to the class I, II, IV, IV, VII, VIII, IX and X in all schools in Indonesia. This study conducted in Sumenep district Madura Island as supported study to monitoring and evaluation of Curriculum in 2013 on assessment system in East Java province. The research method used is descriptive qualitative by using observation, interviews and questionnaires techniques. The results showed optimism and expectations from respondents consist of teachers, headmasters and students in curriculum 2013's assessment system. The findings are expected to support decision-making by stakeholders and improve the implementation of Curriculum 2013.

Keywords: Curriculum 2013, Elementary School, Assessment System, Sumenep

I. INTRODUCTION

Education system in Indonesia has taken several changes as a result of education quality improvement (Indriani, 2015). Curriculum 2013 is a New Curriculum that is focused on student-centered teaching and learning. Curricula 2013 has been implemented on grade I, IV, VII and class X upon 6.325 school (Kemendikbud, 2013) in 2013/2014 academic year. In 2014/2015 academic year all schools in Indonesia run Curriculum 2013 for class I, II, IV, V, VII, VIII, IX and X within appropriate student text books and teacher handbooks. Instructors training and Teacher Training are being held, headmaster and School supervisor training, in and on the job training class teaching and learning process (Kemendikbud, 2014).

Big issue in Curriculum 2013 is that Curriculum 2013 focus not only in cognitive domain but also spiritual, social and skill domains. One of The crucial thing in Curricula 2013 is the assessment system is new and still not familiar in teaching and learning conducted by teacher. This research is focused on Assessment system in Elementary School, as a part of Monitoring and evaluation program that is based on the Law conducted by Government and run by institution namely Education and Culture Ministry, Province and District Education Department (Kemendikbud, 2014).

Monitoring and Evaluation Program purpose is to ensure implementation process of Curricula 2013 goes according to plan. In particular, this research aims are (a) To describe the implementation of

assessment system using Curriculum 2013 in Elementary School in Sumenep, Madura Island, Indonesia and (b) To find out obstacles in assessment system using Curriculum 2013 that need immediate action.

II. Metodology

This research is a descriptive qualitative research using observation, interviews and questionnaire technics to collect data (Fraenkel, 2008) in implementation process of Curriculum 2013 namely Training of Curriculum 2013 and the process of teaching and learning.

A. Respondent Selection Method

The selection of respondents was conducted in phases, starting from the determination of the district / city, targeted school until teachers as sample. Using purposive sampling technique, by choosing location affordability with the time available considerations.

B. Place and Execution

In General, after district/city was set, then random sampling for the determination of respondent schools and teachers, principals/Trustees and students was conducted. Sumenep is one of the districts selected to be presented in details as it is located in different island from where Surabaya as Capital of East Java is. Execution venue data retrieval by observation technique implemented in the school SDN Pandian 1 and SDN Pandian 2 Sumenep, and filling questionnaire

were conducted in the town hall, in two days, 21-22 November 2014.

C. Sample quantity

The number of respondents in Monev of Assessment System for elementary education units are presented in table 2.1, table 2.2 and table 2.3

Table 2.1 The number of respondents in Monev on Assessment System in training Curricula 2013 for elementary education units in Sumenep (questionnaire).

Respondent	Number
Targeted Teacher	39
Principal/Supervisor	14
Total	43

Table 2.2 The number of respondents in Monev on Assessment System in Teaching and Learning using Curricula 2013 for elementary education units in Sumenep.

Respondent	Number
Targeted Teacher	17
Principal/Supervisor	16
Students	36
Total	69

Table 2.3 The number of respondents in Monev on Assessment System in Curricula 2013 for elementary education units in Sumenep (observation).

Respondent	Number
Targeted Teacher	4

III. RESULT AND DISCUSSION

The analysis of the data collected in the study supporting Monev starts from a general nature aspect, followed by exposure to a specific nature. In supporting research Monev assessment system, quite a lot of questions that dig recognition of teachers whether they understand curriculum of 2013 especially the assessment system as this study focused.

The proportion of teachers and school principals with regard to the purpose of understanding the assessment system in the training of Curricula 2013, can be seen in the following figure.

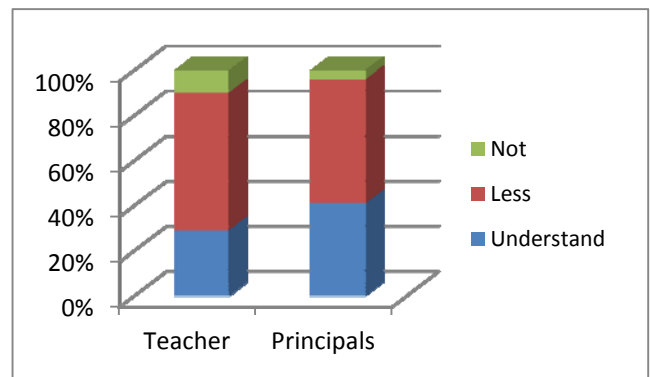


Figure 3.1 Proportion Of Teacher And Principal Understanding Assessment System In Training Of Curricula 2013 Materials.

As figured showed that proportion of teacher and principal who less understand is bigger than the proportion of teacher and headmaster who understand (more than 50 per cent). It could be pointed out that both recognition from teacher and principal tell that they still do not understand clearly about the assessment system in the training of Curricula 2013 materials held by the Government namely Kemendikbud. It is very reasonable as the training itself just conducted once or twice at each district at that particular time.

As regards to the comprehension of assessment system in learning process, according to Figure 3.2 shows that the proportion of the principal is more than teacher. Similarly, the proportion of teachers who claims do not understand is larger than the principals.

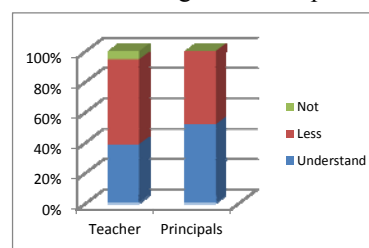


Figure 3.2 Diagram Proportion Of Teacher And Principal Understanding Assessment System In Teaching and Learning Using Curricula 2013.

It is a positive thing because principals are supposed to understand better than teachers, though still on the level of recognition. As a leader in school, they should be able to control the direction of development policy including curriculum. In the Table 3.1 and table 3.2 has shown the assessment system used by the teacher from the questionnaire. It is important to be reviewed since curricula 2013 integrate spiritual, social, skill and cognitive from taxonomy of attitude, Taxonomy Skill

from Dyers and New Taxonomy Knowledge from Bloom (Anderson and Krathwoll, 2012).

Table 3.1 Assessments system should be used by teacher (questionnaire)

Type of Assessment	number of person answered (%)
Authentic assessment	98
Midterm/Final Exam	3
Daily test	95
Porto folio	2.2

Concession Statement from teachers must be proven with confession from students by filling questionnaires randomly that can be seen in table 3.2.

Table 3.2 Assessment system conducted by teacher (Student's questionnaire)

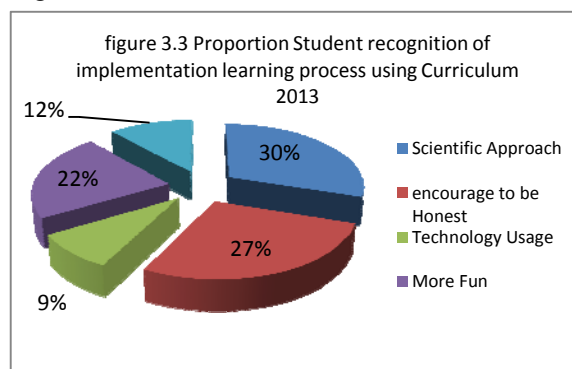
Assessment Type	Number of students (%)
Observation by teacher	60
Self-assessment	51
Daily test	99
Portofolio (product/project task)	87

The Interesting point is that teacher chose midterm and final exam is not necessary conducted, since they point to conduct authentic assessment and daily test. In particular, Porto folio is one of the authentic assessments (Muslimin, 2014), took 87 per cent share on assessment system conducted by teacher from student recognition. Should there be reinforcement to make teacher understand Authentic assessment is, considering that almost 100 per cent teacher chose authentic assessment is necessary but Porto folio is not chosen by teacher's questionnaire (only 2.2 in proportion).

Observation was conducted randomly on two Elementary Schools in Sumenep in randomly. The result of direct observations in elementary school chosen randomly showed there were assessment instruments in teaching and learning material namely in syllabus and lesson plan such as teacher's journal, cognitive and observation instruments. The problem was not every instrument could be applied at once in the time of observation. According to the respondent that there were insufficient time to conduct all assessment system in Curricula 2013, it showed that it is in line with the recognition of respondents in the questionnaires that they do not understand the assessment system in Curriculum 2013.

The data was taken from data survey in one of district that is Sumenep as the farthest city in Madura apart from Java Island. The purpose is to get more specific information. One thing that could not be

ignored that student is the one who would feel the main impact of any policy changes in education, in this case the changes in the curriculum. Particularly, it is very important to find out the effect of changes in curriculum to the student. Subsequently, It is fair enough if we discuss about assessment system, then we should know the assessment of the curriculum from the students themselves, especially in the learning process in the classroom using curriculum in 2013 as showed at diagram 3.3.



Recognition of student questionnaire data about the learning process in the classroom according to Figure 3.3 showed the need for increased use of ICT by teachers (Joseph D.A., 2016). Scientific Approach in 2013 curriculum has also been implemented in the learning process, which encourages students to do right (Anderson, 2001).

IV. CONCLUSION

Based on the description in the previous chapter, conclusions and recommendations could be obtained as follows (a) The Assessment system in Curriculum 2013 is the most dominant aspects complained by the teachers concerned with its complexity, and (b) The process of learning with the Curriculum 2013 respondents had good responses from the students, though there still minimal use of ICT in the classroom on some areas. It showed that there is optimism from respondent in Curriculum 2013.

Based on the analysis of data and experience in this study, it could be submitted the following recommendations (a) Due to the high optimism of respondents to develop and implement the Curriculum 2013, the necessary training for teachers should be done intensively, (b) Assessment system requires special training intensively, and (c) Should conduct continuous research on implementation curriculum 2013 Furthermore, both as part of Monitoring and Evaluation from Government or independently.

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CIVIL SOCIETY ORGANIZATION IN EMPOWERING SOCIETY

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Abstract. This study focuses on how the nature of existence of civil society in the community empowerment". While the specific objectives namely, ?1) to determine the role of civil society in public life, ?2) to assess the benefits of civil society for the people. The research methodology uses descriptive method with qualitative approaches, data collection is a study of document, where the document review focuses on aspects of the materials or substances related to the topics covered. To analyze the data, the process and the preparation of a systematic literature review of various are carried out to enhance the understanding of the data and to present what has been discovered to others. Analysis of the data used is inductive; ?1) data reduction, ?2) data display, ?3) conclusions and verification. The results of this study figures out the general portrait of the nature of the existence of civil society is as a tool to achieve political or ideological in a certain way to achieve the ideals and common goals. The special results show that: ?1) The role of civil society is used as part of a branch of social science that has a major role, particularly in the development of competence Educational citizenship, the role of civil society can also serve as a gesture of individuals as citizens in building a nation, it also has a close relationship with Civics because technically it may establish an individual as a citizen who has insight and knowledge, ?2) benefits of civil society for the community may achieve national development, as a place of the activities regarding to the need of the members, as a forum for the promotion and development of business, as the voice of its members and as means of social communication, it can change the lifestyle of the people for the better life.

Keywords: Civil Society, Community, Organization

I. INTRODUCTION

In building a nation can be achieved through a process that begins with the awareness of its people, either individually or with groups of people who walk to foundation and the same purpose. Aspiration in carrying out the objectives of the activity, and common interests are built awareness and groups that are believed to be able to solve a common interest in a container that is popular with the name of civil society organizations (CSOs). This organizational form is used as opposed to the term political party. CSOs can be formed by groups of people based on some similarities of activity, profession and purpose functionality, such as religion, education, culture, economics, law and so on.

CSOs is the role of the community in implementing development to improve the lives of justice and prosperity. The existence of CSOs in Indonesia has been formed since the beginning of this century and has a most strategic position for the Indonesian nationality. Even some of the community organizations eventually become a political party that spearheaded the national movement. In colonial times Budi Utomo parallel program which was established May 20, 1908, among others developing middle class society capitalization, fostering crafts (household) of the earth's son and developing markets to outside Java and maintenance poor people. Taman Siswa in the field of education and Islamic States in the field of trade for the natives. CSOs at

the time the movement was initiated by intellectuals from below and is based on self-help. The initiative paint the entire the development of post-independence CSOs.

The definition of civil society organizations specified in Article 1 of basis of law No. 8 of 1985 on Civil Society Organization:

Civil society organizations is an organization formed by members of the public citizen of the Republic of Indonesia voluntarily on the basis of similarity of activity, profession, function, religion, and belief in God, to participate in the development in order to achieve national objectives within the Unitary State of the Republic of Indonesia based on Pancasila.

Then the CSOs foundation assigned back in Article 2: a social organization based on Pancasila as the sole foundation (foundation in the life of society, nation and state). Then in the explanations of this Law assigning that the determination of Pancasila as the sole foundation of social organization will replace Pancasila does not mean religion, and religion may not be Pancasila; There is no contradiction between the two values.

According Billah and Nusantara (1998) stated "Indonesian CSOs generally reflects the awakening of the middle class to poverty, social injustice and human rights". Today, organizations in Indonesia can be said as a reflection of awareness about the impact of the development program of the government as well as the measures taken in implementing the program. Community participation in

development can be done in various ways according to their respective capabilities, for example by express an opinion on something that is concerned with the interests of society in general. Participation by releasing thoughts and opinions as to the legitimacy of judicial independence to issue opinions.

Society participation is regulated in the the Constitution of the Republic of Indonesia, article 28 of the 1945 Constitution after the amendment which is the spirit of the People's sovereignty as citizens. In essence not only provides freedom of expression both oral and written, but much of the meaning of freedom of expression responsibly both in intention, ethics, substance, legal, and responsible and ready to accept socially and legally sanctioned if it is found opinion put forward in public is considered has violated laws and regulations. It means freedom embodied in it can not harm the values of morality, decency, and integrity of the nation, as well as religious. The commitment is stated in Law No.39 in 1999 on Human Rights article on the right to develop themselves and fight for their rights collectively for the community of nations and freedom of belief and trust, stating thoughts and act according to conscience, and the right of assembly and association.

Society participation in national development should be grown in an effort to foster and strengthen awareness of the life of society, nation and state by respect the human rights orientation of another person or group that lead to the creation of harmonization purpose of life in a society with hope, peace, and conducive. Implementation of freedom of expression in the context of Human Rights is geared for peaceful purposes, it must maintain harmony, harmony, balance in the society, so that the actions and deeds will uphold the norms, morality, religious values in order to achieve that purpose. Rahardjo (1980: 95) explains:

The interests of the community members are not always the same. But the same interests encourages grouping among them it is ideals shared interests built on the awareness for the group, considered and believed to be able to solve the commons which from day to day concretely experience the challenges of increasingly large and complex both in terms of diversity of problems and expenses which must be endured in solving the problems faced.

The presence of Civil society organizations are expected to realize the aspirations and interests of community members as a means to carry out work activities that benefit the common good, with based on Pancasila. In the development Civil society organizations have weaknesses and strengths of each, but it is a dynamic part of the nation who is learning democracy. Most of the CSOs have positive activities by including society as conserve the environment and help the people in the field of law by doing role kemasyarakatan activities conducted peacefully organize the public, on the other hand there is also a community organization that acts less commendable.

The existence of the organization for some people is an exciting, because in addition to the rides and activities, is also a means of channeling the will and good ideas at the level of internal organization, as well as within the framework of channeling your thoughts and opinions in the sphere of life of the state. Channeling aspirations through the organization, is believed to gain attention in addition will be more orderly and focused, because the voices is the voice of

the organization is not in a personal capacity and bring the benefit of its members. In the context of national and state the the aspects of democracy at the level of implementation, is something that natural then that many new organizations popping up, because the opening of the tap freedom of expression, association, and assembly so that the more open the possibility of differences of opinion.

Respect for differences of opinion, has consequences for the development of new organizational containers. Community groups in the awareness of the importance of the struggle through the institution will be more selective in choosing a suitable container with ethnicity, ideology and so forth. The selectivity, coupled with self-awareness to actively participate directly in the organization followed the pursuit. Selectivity nature intended, it is not uncommon encourages exclusive characters the tend to evoke group egoism which often leads to acts of anarchy in action in the midst of society. The anarchic action, in the understanding of people is a form of concrete answers to the ineffectiveness of legal mechanisms that exist today. So rather than not running, better take action on their own way. Such behavior, without realizing it is an illegal act. However, on the other hand, it seems to gain legitimacy or at least a lack of firmness, if not arguably the connivance of law enforcement officials on the various forms of anarchy that occurred during this time.

Civil society organizations significantly gained a place and an opportunity to grow along with functioning democracy at all levels and sectors of national life, namely where human rights have a place fairly and respected by the system developed at this time. However, it turns out that freedom sometimes tend to be without control and without limits. All elements speak and act for and on behalf of Human Rights, so sometimes ignore the essence of Human Rights itself, namely that the freedom of space and respect for human rights must also respect their freedom for Human Rights else should be equally respected and gain a good room to grow.

The phenomenon of anarchic acts, committed by a group of people, both on behalf of organizations and individuals, it is a daily news consumption reported by the mass media, both electronic and printed. Psychologically, this phenomenon is not good and is not profitable. It means that the government should immediately respond and act quickly so that the phenomenon of anarchy is not a new culture that develops in the midst of society, because on the one hand, by the nature of anarchism action contrary to the essence of human rights itself. While on the other side of anarchism and reporting acts of omission that continually direct a form legitimated phenomenon of violence to grow in the midst of our society. If this trend continues uncontrollably, is not impossible that would encourage the development of ideologies primordialism narrowly, that will lead to disrupted and faltering unity and integrity of the nation. To avoid shaky unity and integrity of the nation, then it should be encouraged the birth of the provisions of the legislation to regulate proportionally on the expression of freedom of speech, association, and assembly in the present context. One of the efforts that the phenomenon of violence did not continue is to promote and popularize the essence of diversity through national identities.

Responding to this, the Law No. 8/1985 on Civil Society Organisations only regulates when the social organization perform actions that disturb public order, security and comfort, receive and give assistance to a foreign party without the consent of the government and harm the interests of the nation sanctioned only freezing and dissolution with the procedures stipulated in Government Regulation then according to Government Regulation No. 18 of 1986 as the implementation of the laws regulate the same thing, namely sanctions for Civil society organizations perform actions that disturb the order, safety and comfort, receive and give assistance to a foreign party without the consent of the government and harm the interests of the nation are given sanctions, the freezing and dismissal, the setting is just more detail starting with written warning, admit mistakes and promised not to repeat within 3 months if eligible it may engage back. This means punishment weighs just suspension or dissolution that preceded by a written warning that should fix any errors.

Therefore, the focus of this study, which is to find out about the "Community Empowerment of Civil society organizations in particular about the existence of the social organization in empowering the public about the role and its benefits in the community.

II. METHOD

This study evaluated the of Civil society organizations in empowering communities a descriptive study on Civil Society Organisations, using qualitative methods qualitative approach by reason that with this method may help researchers imaged rationally and theoretically about the fact data and material objects in the form of language expression or discourse through interpretation precise and systematic. Kutha (2010: 53) (Gindarsyah, 2010: 30) explains, descriptive method of analysis is done by describing the facts which are then followed by analysis, not merely outlines, but also provides an understanding and enough explanation. Based from that opinion this study tries to describe and portray on Civil Society Organisations in Society Empowerment, with a qualitative approach is expected results of this study can be reported in the form of words in a situation that is natural, as Creswell (1988: 15) defines, qualitative research is the process of research on understanding based on the traditions of a particular research methodology by investigating the social or human problem. Researchers create complex holistic overview, analyzing the words, reported the views of informants in detail, and conduct research in natural situations. So the main characteristics of concern in this qualitative research is, concern for the "meaning".

The technique used in this research to collect data including the techniques of data collection study of literature (bibliography), literature study is a data collection techniques with collecting and analyze the documents, both written documents and electronic images. Data collector is a study document, a document review focused on the aspects of matter or substance which has to do with topic to be discussed. According to Lincoln and Guba (1985: 276-277) "records and documents can be used as a witness of particular events or as a form of accountability". For the

purposes of this study, researchers collected records and documents considered necessary to aid analysis by utilizing resources such as documents namely bibliography; papers, journals, and research results.

Data analysis was done by reducing the data obtained through observation, interviews, documentation, and review of the literature. Furthermore, the results of data reduction formulated in a table display making it easier for researchers in verify the data and determine the conclusion of the research results. Analysis of the data used refers to the Miles and Humberman (2007), ie, data reduction, data display, verification, and conclusion.

III. FINDING AND DISCUSSION

A. *The Roles of Civil Society Organization in Social Life*

Based on the results of the study contents of some documents stated that the role of social organizations in social life is important in every aspect of life, wheter in corporate, government, social organizations and society. Basically the organization is constantly evolving according to the needs of time and civilization, which existed since the beginning of human organization.

But the organization as a sub-section of the social sciences have a significant role in people's lives, especially in developing competence Civic Education in formal and non-formal, can be interpreted that the role of the organization is needed in all aspects of human life. The organization as a form of human needs as a social being after the development of social institutions as a form of culture. Organizations exist because human beings were born and human remains for building an organizational system. So that the organization viewed from the aspect of behavior, whereas the theory of organization can be seen from the aspect of a group of individuals working together to achieve the goal, it can also mean that the organization as a place where people work together in a rational and systematic way to achieve a common goal. And in fact the organization prepared in accordance with the needs of the era in which the needs and development of information and communication man quite rapidly. The organization also develops through the dialectical form of social construction of the appropriate needs of the time, the organization is also the construction of oral and written communication, because human beings in their work is not a machine that can work away without a sense of mind and social life.

Related to this, Winataputra (2001: 146) states that Civic Education is a body or a system of knowledge that has: (a) ontology civic behavior and civic culture which are multidimensional (philosophical, scientific, curricular, social and cultural); (b) epistemology research, development, and diffusion in the form of scientific studies and the development of curricular programs, socio-cultural context and behavior of citizens, as well as academic communication, curricular, and socially in order to implement the results of scientific studies and the development of curricular and instructional in educational praxis of democracy to citizens in schools and communities; (c) facilitating the development axiology body of knowledge system or discipline knowledge of Civic Education; underlying and facilitate the development and implementation of democracy education in

school and out of school; and framing the corridor as well as facilitate the development of socio-cultural processes of democratization in society.

Basically, each individual will bring their personal needs into the organization in which they work. These needs in the form of material and economic, partly in the form of social and psychological needs. Individuals in this case, humans are the most complex thing, because humans have a sense of love and hate, joy and sorrow, fear and courageous and so forth.

Therefore the role of Civil Social Organizations in human life is very important, because in building the nation can be achieved through a process that begins with the awareness of its people, either individually or with groups of people who have to walk with foundation and the same purpose. This is in line with the opinion of Baddudu-Zain (1994: 967), which states that the organization is the order, rule or associations of certain groups of people with a basic background ideology (goals) are the same. According to Mooney said that: "The organization is the human form of every union to achieve a common goal".

This is in accordance with one of the content of Mursitama literature review (2011) which states that, in building a nation can be achieved through a process that begins with kesadaran people either individually or with groups of people who walk by a foundation on the same goals. Ideals in carrying out the objectives of the activity, and shared interests that built awareness and groups that are believed to be able to solve a common interest in a container that popular with the name of civil society organizations (CSOs). Mursitama (2011) explained that the community organizations is the role of society in carrying out development to improve the lives of justice and prosperity. The existence of CSOs in Indonesia has been formed since the beginning of this century and has a strategic position for process palaing Indonesian nationality. Even some of the the social organization eventually become a political party that spearheaded the national movement.

Mursitama (2011) explains that the colonial era parallel program Budi Utomo Budi Utomo founded May 20, 1980, among others developing middle class capital, fostering crafts (household) of the earth's son and developing markets to outside Java and maintenance of the poor. More about the program is directed primarily at the education and culture of Java. Taman Siswa in the field of education and Islamic States in the field of trades for natives. CSOs at the time the movement was initiated by intellectuals of that and based on self-help, and the Initiative runs through the development of post-independence social organizations.

Since the Reformation initiated by civil society organizations grow and flourish like mushrooms rainy season, which is set in the Constitution of the Republic of Indonesia, namely the Law of 1945 of the fourth amendment. That the chapter on Human Rights animates the provisions of Article 28 C of the right to advance themselves and fight for their rights collectively for the community of nations and his country. Article 28 E (2) on freedom of asserting trust, to express thoughts and behave according to your heart, (2) the right of association, assembly and expression. Article 28 F on the right to communicate for personal development and the environment. Before the '45 Constitution was amended,

the rules on the organization that founded the community or that today is known as NGO (Non Government Organization), namely R.I Law No. 8 of 1985 on Civil Society Organisations. The definition of community organizations specified in Article 1 of the Act R.I No. 8 of 1985 on the Organization.

According to M. Billah and Abdul Hakim G. Nusantara (Mursitama 2011) Indonesian CSOs generally reflects the middle-class awakening to issues of poverty, social injustice and human rights issues. However, now the CSOs in Indonesia can be said as a reflection of awareness about the impact of development programs launched by the government as well as the measures taken to implement the program. Community participation in development can be done in various ways according to their respective capabilities, for example by expressing an opinion on something with regard to the interests of society in general. Community participation by issuing their thoughts and opinions as a juridical legitimacy of independence to issue its opinion. Community participation is regulated in the Constitution of the Republic of Indonesia, article 28 of the Constitution of 1945 after the amendment which is the spirit of popular sovereignty as citizens. In view of the terms of its essence not only provides freedom of expression both oral and written, but far from it, implies freedom of expression responsibly both in intention, ethics, substance, legal and ready to accept socially and legally sanctioned if it has violated provision legislation.

It can be interpreted that the freedom contained in it must not violate the values of decency, orderliness and integrity of the nation, as well as religious. The commitments contained in the chapter on Human Rights on the right to advance themselves and fight for their rights collectively for the peoples of the State and freedom of asserting trust, to express thoughts and behave in accordance with your conscience and case assembly and association (Law No.39 of 1999 Human Rights).

Besides that, the mass organizations are not only engaged in the level of religious, but has served on several plots and issues about the community in general, such as: (1) educational activities to establish educational institutions ranging from preschool (kindergarden) up to university level high; (2) The health service, with the emergence of various hospitals were established on the initiative of the mass organizations, (3) other social service activities, such as coaching abandoned children and street children in the form of the establishment of shelters.

The existence of civil society organizations (CSOs) in Indonesia can not be separated from historical factors, reform, democracy and decentralization. Each has its own characteristics. Different characteristics of CSOs can be seen from the nature or characteristics, religious relations, ethnicity into relationships with local governments. Dr. Laurens Baker and Dr. Lee Wilson pointed out several community organizations in the area, such as the Forum Betawi Rempug (FBR) in Jakarta, Komando Adat Dayak (KAD) in Kalimantan, Pecalangan in Bali and Brigade Manguni in Minahasa. Of some CSOs that had they studied, there are indeed legally obtain a mandate from the government and society as Pecalangan. "Organizations that have a clear Pecalangan mandate of local governments and

communities, while others do not. In addition, the focus of their activities are different, there is to the economy as KAD. However, there are more complex such as the FBR with the motto 3S (salat, sekolah dan silat), "Baker said in front of the seminar participants comprising students and general public.

Related decentralization, Baker recognized, the position of a number of CSOs in various regions is still relatively strong as central. The level of public confidence in them is still high compared to the state institutions. It is very possible for CSOs attention to the reality faced by the people are often better than the attention of the country. "At the lower level, for example about marriage until death, it often helps CSOs in real terms so that's what makes public confidence in the CSOs are still high.

Therefore, based on principle of norms applicable, that civil society organizations as a private institution because that is characterized by independence, which is founded on the initiative and awareness of the founders and members and managers, so that is structurally more independent because it is largely outside the official government structure. History about the existence and the pursuit civil society organizations were formed long before the independence of Indonesia, the CSOs have an important and central role in carrying build and develop awareness of national and state members of the CSOs in particular and society in general.

It was clear that the role of a civil society organizations highly functioning as Civics education that ever obtained a person's from formal and no-formal, as based on the insight and knowledge acquired in formal education is applied in public life, particularly when individuals as active citizens involved in civil society organizations. As contained in Civic Education in foreign literature that has two technical terms which, Civic Education and Civic Education, as Cogan (1994) confirms the difference in meaning Civic Education and Civic Education, that Civic education is defined as "... the foundational course work in school designed to prepare young citizens for an active role in their communities in their adult lives "or a basic subjects in schools designed to prepare young citizens, so that later as adults can play an active role in society. While the "civic education" or "education for civic" is seen as "... the more inclusive term and encompasses both Reviews These in-school experiences as well as out-of-school or 'non-formal / informal' learning the which takes place in the family , the religious organization, community organization, the media etc, the which help to shape the totality of the citizen ". It means "civic education" or "education for civic" is a generic term that includes learning experiences in school and outside of school, as happened in the family, religious organizations, community organizations, and the media who helped him to become a wholly citizen.

Furthermore, civic education has two technical term that Civic Educatian and Civic Education, according to that mentioned by Cogan (1994) (Budimansyah, 2012: 44). Civic Education can be interpreted as a basic subjects designed to prepare young citizens, so that later become adults can play an active role in society. While Civic Education includes learning experiences outside of school, both in the family environment, experience in religious organizations, experience in community organizations and experiences through the media that helped to become wholly citizens.

It can be assumed that technically Civic education has roles and strategic objectives in shaping the learners as citizens who have good insight and knowledge about Educational Sciences, one of them insight and knowledge of experience in the Religious Organizations and experience in community organizations.

B. *The Benefits of Civil Society Organizations for Social Life*

CSOs has important role in everyday society lives, and society can not be separated from the organization, because in essence it is the life that is a concrete manifestation of any kind of organization that involves every living creature in it. Every human being who has the same interests and goals, will created a platform or a legal entity in which they are trying to achieve that goal. This is the reason and goal of an organization.

In some documents mentioned that CSOs have an important role to people's lives, it turns CSOs also have enormous benefits for society. Considering organization is absolutely necessary because humans are social creatures who need social relation which always mingle and blend each other. One of the benefits CSOs in society is as a forum for distributing the aspirations of people, groups, or communities. In the presence of CSOs in society, people will be familiar with what is done in an organization, one of the examples; Civil society organizations that has little scope are BEM (Student Executive Board), Youth, and PKK. It is the example of the organizations that plunged and directly involved in the community.

Besides that the benefits of the presence of CSOs can also succeed in national As a container to facilitate activities in the interests of its members,

1. As a container and distributor of activities in the interests of its members,
2. As the container for guiding and promoting its members in an effort to realize the objectives of the organization,
3. As a means of participation in the success of national development efforts.
4. As a means of channeling the members aspirations and as a means of social communication and reciprocity between members or between civil society organizations with the organization of political power, consultative and representative body and the government.
5. The existence of structured community organizations will facilitate the achievement of goals and member objectives will be achieved.
6. Can change lifestyle of the people, for example the Organization of Youth, PKK or the BEM, the community will have a lifestyle that showed his love of the environment, the nation and the the country.
7. Last but not least the existence of CSOs would indirectly create jobs for the community.

Civil society organizations has some of the benefits that can contribute positively to the community life as citizens who participate actively involved in several CSOs, this proves that basically Civic Education provides competency

in creating learners as young people who have the knowledge and skills.

As stated by Becker (1986) and Gordon (1988: 43) (Budimansyah, 2012: 94) they mentioned that competence includes knowledge, understanding, skills, values, attitudes, and interests. Conceptually Asham (1981: 34) (Candra, 2012: 72) formulated the definition of competence as "competency is knowledge, skills, and abilities that a person can learn and develop, roomates Become parts of his or her being it the extent he or she can satisfactorily perform particular cognitive, affective, and psychomotor behavior".

Based on these opinions, it can be interpreted that the competence is knowledge, values and attitudes, and skills of learners that are useful for life in society. The competence obtained from the learning process in educational institutions. Civic Education learning (Civic Education) produces the competence of civic (Civic competences) that give provisions "to be a good citizens" (created of good citizens). Therefore, civic competence can be defined as the knowledge, values and attitudes, and skills that support learners become participatory and responsible citizens in the life of society and the country.

Based on the description that has been discussed, it can be concluded that the organization is needed in the community. The existence of the organizations in community can be proceed the activity smoothly, because of the structured planning. The organization can facilitate for the society to pour his creativity, as concrete evidence to be citizens who play an active role in building the nation through the use of civil society organizations.

IV. CONCLUSIONS

Seeing at the role and benefits Civil society organizations for people's lives, it can be concluded that the essence of existence of Civil Society Organizations in Society as a tool to achieve ideology with politics or a particular way to achieve the goals and objectives with specific ways because to achieve the ideals and common goal it must be done together. Because human instincts will always live in groups, although in essence we are born alone. It is because the human nature is always eager to be a part of other human and blend with the surrounding human groups. Civil society organizations that expected is an organization as defined in the constitution, which is CSOs that built with having a role as means to facilitate the member thought on a reciprocal basis. Considering CSOs in Indonesia still occur or walk does not match with the proper function of CSOs where it should be in line with the constitution applicable. This is reflected in a special conclusions namely:

A. *The Role of Civil Society Organizations in Social Life*

- 1) The Role of Civil Society Organizations as a subsection of the branches of social science has a quite large role in people's lives, especially in developing competence Civic Education in formal and non-formal, that the role of CSOs is needed in all aspects of human life man, moreover CSOs also serves as one form of human needs as a social creature after the development of social institutions as a form of culture.

- 2) The Role of Civil Society Organization for human life in society can also function as an act of individuals as citizens in building a nation can be achieved through a process that begins with the awareness of the people, both individuals and community groups who have to walk on the grounds and the same purpose.
- 3) Civil Society Organization are also closely related to Civic Education which technically has a strategic role and purpose in shaping the individuals as citizens who have good insight and knowledge about educational science, in the form of insight and knowledge about the experience in the religious organization, as well as experience in Civil society organizations.

B. *The Benefits of Civil Society Organizations for Social Life*

- 1) The Benefits of CSOs existence can also help the success of national development.
- 2) As a means to create activities in the interests of its members,
- 3) As an organization guidance and development its members in an effort to achieve the objectives of the organization,
- 4) As the means to create the success of national development efforts.
- 5) As a means of channeling the aspirations of members and as a means of social communication and reciprocity between members or between civil society organizations with the organization of political power, consultative and representative agency and the government.
- 6) The existence of a structured civil society organization will facilitate the achievement of goals and objectives that had been become ideals will be achieved.
- 7) Can change lifestyle of the people, for example the Organization of Youth, PKK or the BEM, the community will have a lifestyle that showed his love of the environment, the nation and the the country.
- 8) Equally important, the existence of CSOs would indirectly create jobs for the community.

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COGNITIVE ERGONOMICS ASPECT BENEFIT IN THE LEARNING PROCESS

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Abstract. Cognitive ergonomics is an application which presses on cognitive factors mainly related to the process of thinking. While education is a learning process that can produce changes in behavior that is expected. For it is necessary to study the benefits of cognitive ergonomics in the learning process, especially in designing the learning model. In this research method used was a literature study that seeks to be studied in depth and presented in a narrative based on the facts disclosed by cognitive ergonomics experts and experts in education. The purpose of this study was to determine the benefits of cognitive aspects in the learning process. From the results of the study carried out can be presented as follows: (1) aspects of cognitive ergonomics is very dominant in designing the learning model which is oriented to the principles of ergonomics that emphasizes the aspects of user friendly, (2) how to implement aspects of ergonomics in the design of the model learning is part of cognitive ergonomics because it involves thinking and mental processes in designing the model, and (3) the constraints faced in the implementation of aspects of cognitive ergonomics in designing learning model would seem to be a serious problem if not addressed as soon as possible on an ongoing basis and through a participatory approach and examined holistically. Suggestions can be submitted are: (1) in designing a model of learning should be tapped / pay attention to aspects of cognitive ergonomics early, so it can produce forms of learning model ergonomic, (2) the results of this study can be used as a reference in tracing rules of ergonomics in designing the learning model.

Keywords: cognitive ergonomics, design, learning model

I. INTRODUCTION

Cognitive ergonomics is an application of ergonomics that put more emphasis on cognitive factors mainly related to the process of thinking. Education is a learning process that can produce changes in behavior that is expected. Application of cognitive ergonomics will work to improve our understanding of human relations, communications systems and complex machines [1]. According to Bloom's taxonomy of educational outcomes can be divided into three domains, namely: (1) cognitive, (2) affective and (3) psychomotor. Especially with regard to cognitive abilities can be divided into six capabilities: (1) determine the ability to remember what they have learned, (2) understand that the ability to grasp the meaning of what is learned, (3) applying the ability to use what you've learned into new situation concrete, (4) analyze is the capability to specify the things they've learned into its elements in order of receipt organization is understandable, (5) to synthesize the ability to collect the parts to form a new unity and (6) evaluate the ability to determine the value of something that is studied for a particular purpose [2]

The ability of someone typically as something that is effective, efficient and able to satisfy the user and can achieve the results identified in the special environment [3]. This expression is used as a cue to determine the limits of cognitive ergonomics and the factors that influence and have an impact on student learning. Utilization of cognitive ergonomics said as a way of actual or up to date and very attractive interest students in using learning resources [3]. If examined some of the statements above seem indeed need to

explore the benefits of cognitive ergonomics in the learning process. In addition, the implementation of aspects of cognitive ergonomics will certainly make learners feel more comfortable in accepting what you want delivered in the learning process in the form of learning methods as well as various media broadcast via audiovisual (eg, a computer). In the method of learning, cognitive ergonomics can be studied is the thought process in determining learning tips that should be set out in a model of learning. Everything was of course closely related to the mental processes of the designers should start from the planning already think about aspects of any proper ergonomics incorporated in the model lesson. While in the media, for example in the use of computers as one of the media which is heavily influenced by the program contained therein. Program is exactly what needs to be assessed based on the study of cognitive ergonomics so that learners can use it optimally without causing negative effects on health or in other words the media is safe, convenient, effective and efficient.

Based on the background, it can be delivered formulation of the problem that is why aspects -aspek cognitive ergonomics is very helpful in designing the learning model and how the application of cognitive aspects of ergonomics in the design of learning models.

The aim of this study is to investigate the cognitive aspects of ergonomics that can be utilized in designing the learning model, and to examine ways of implementing aspects -aspek cognitive ergonomics in designing the learning model. While the benefits expected from the results of this study is that it can be used as a reference in reviewing aspects of cognitive ergonomics, especially related to the design of a model of learning, and can be used as input for

the designer models and instructional media should early on have applied aspects of ergonomics.

II. METHOD

The material in this study is in the form of the opinions of experts who revealed, reported the results of research and study the cognitive aspects of ergonomics mainly be attributed to the learning process.

The method used was a review of literature or studies literature which seeks to studied in depth and presented in a narrative based on the facts disclosed by cognitive ergonomics experts and experts in education.

III. DISCUSSION

A. *The use of PDAs (PersonalDigitalAssistant) in the learning process.*

Reports that research centers on graduate students were using the learning model in the form of a course application of information technology to the class model by far and the process is: (1) submit online,(2) using web resources and (3) Conference in the first class. Here, students can choose to read on a PDA (Personal Digital Assistant),or only on molds or both [3].

Students in the course of learning by sharing a special time and involved in other professional activities. They are generally in their 40s and come from different cultural backgrounds so that the courses delivered globally. The course seeks intensified the students to criticize and evaluate their own experiences in using information technology. 65 students enrolled in the course are given Palm M150 PDAs in July 2001. Most states PDAs as a novelty, although some students are already using palmtop computers and several students individually using a PDA or a similar tool.

It was also reported that the PDA has advantages and constraints [3]. In addition, the device is said to be able to influence student reading strategies. In the context of learning, readers often make a note in the text itself such as: words underlined, written in the margins and others or around a sheet of paper, with the statement and note that there is included in the investigation.

Palm M150 been selected for cheap and affordable and popular models. Also has a touch-sensitive screen and stylus pen are used to interact with the application. Text can be entered via the keyboard is on the screen or introduce a system of handwriting Graffiti. Word Smith ,a document editor or viewer used to present course material in the PDA. Mode in the document viewer enables users to read and look at the text in the entire place. Judging from the aspect of cognitive ergonomics found in the model that raises the question of "whether the notes in a different mold from those in the screen?". It was said to be a challenge. In addition, the PDA can be checked back in the desired information and also can be known other components such as: bateray living, memory on a PC, laptop or other interventions [3].

Especially on the ergonomic aspects in the PDA as a medium of learning, needs to be observed regarding: (1) the text is available on the PDA, (2) the tendency to use a color display with a good quality, (3) the appearance of the

backlight, and (4) the possibility to be combined with other tools such as a phone that can be transferred move. The advantage of this medium are: (1) the learners naturally be looking for fun (eg: games, fun accessories), (2) no sign or signs of danger of overwriting and (3) no personal contact information to the mistake by the user.

Some ergonomic problems are successfully evaluated, namely: (1) difficult to read because the text is too small and narrow screen, (2) if the font widened messiertext,scan(3) eye pain and vision problems when viewing the screen and choose the instruction manual for printed are designed to be read on the screen, (4) tends to exist rays of the information on the PDA, and (5) the noise when clicking or when selecting a function. That means the aspects of cognitive ergonomics is needed in designing a program to be both users friendly or oriented to the user [3].

Looking at the various benefits and problems that exist in the media PDA seems to be studied in further on aspects of cognitive ergonomics implied in the program, so that later can be used as a medium of learning ergonomics. This is an answer to the question about the need for cognitive aspects of ergonomics in the design of learning models for the view and assess the advantages and problems that exist in learning media will be able to take an action by entering the principles of ergonomics into the program or the design with the expectation that the results will be able to meet the user desires related to safety, comfort, health, efficiency and effectiveness of its work.

B. *Cognitive ergonomics in designing the learning model*

Designing learning model requires reflection and careful thought. Design model of learning effective and efficient course will make learners feel motivated to learn something. The thought process in determining the tips that will be used in a model of cognitive ergonomics is an aspect that needs serious attention. Opinion was supported by [4] which states that a designer should be able to anticipate problems in an activity that is done in a system where efforts to prevent the negative impacts have been considered early on in stages. Insights a designer will determine the results of its work, where for solving various problems in the design of their expected: (1) can determine ways of solving the partially based on his understanding of the results and the specifications of the design and (2) can evaluate these solutions with different criteria and constraints thereof. Observing that opinion must be understood that the thinking process in making a design study model will be strongly influenced by their experiences and insights. Here indispensable holistic way of thinking and how to assess the careful so that the learning model that made already considered interdisciplinary and scrutiny from various different viewpoints. If it could be done then learning model, which refers to the principles of ergonomics must be manifested.

An example of the role of cognitive ergonomics in the recording of an object using a video [5]. Here is explained about the benefits of the rules of ergonomics in the design of the way the recording. Stated that the use of video in an observation is very necessary but not easy to do if you want optimal results. There are several problems that must be solved before recording. Here the required cameras are

effective and in the process of recording no information is lost. For the combined camera designed to be selected in the corner where the camera should be placed so that the recorded object can be controlled as desired. Illumination screens also need to be considered and, if using a camera clearly inadequate illumination on the screen as well as on the other side there will be a lot of loss of information. This example will remind us of the ways of designing a model of learning which results in information that is communicative, effective and efficient and does not pose a constraint on the user.

C. Aspects of Cognitive Ergonomics in Design Model Learning

Cognitive aspects of ergonomics need to be observed and traced through various research and findings of the experts, because of these references can be utilized in designing the learning model. Explained [6] that the application of cognitive ergonomics simply through some examples: (1) control interface on the VCR remote control (placement, orientation, size, model, and color), (2) design navigation computer (number, arrangements, how to access, and his appearance on the screen), (3) the design and layout of knobs and dial from the car radio, (4) the design and interface of medical devices and (5) the design and warning labels on consumer products (eg. color, configuration, size and placement). More complex example is: (1) the design and layout (configuration of equipment, furniture, etc.) from a hospital operating room in order to maximize the team's performance and minimize errors in perception, attention and judgment, (2) the design of aircraft cockpit commercial jet for correspondence with the crew in perception, memory and decision-making, (3) design an office to minimize distractions (confusion) and maximize productivity and performance, (4) the design of the classroom to maximize the transfer of information, knowledge, and creativity, and (5) the design of web interactive page.

Based on the above example means that there are some rules of ergonomics required in designing a model. Here the learning model that is packaged in a medium of learning should refer to aspects of ergonomics and the designer should include elements of ergonomics since the media began to be made. Referring to the aspect of cognitive psychology, expressed as a science that emphasizes the human sense perception, reasoning, communication, action or actions and others [7]. Also stated that in physiology, information is synthesized in the form of perception (seeing, hearing, etc.), attention, memory and reasoning. Cognitive psychology uses a process model in an information based on what is seen, felt and touched [8] and [9]. Some examples of media design of a learning model that requires the application of ergonomic aspects are as follows.

1. Design letters in plastic transparency
2. Color letters and background are shown on the screen.
3. How to display various information on the media that is programmed in the audiovisual.
4. Design the placement of the screen (height, distance to the learners, colors and others)
5. Design lighting of the room (brightness, contrast, glare, how placements and selecting the type of illumination).
6. design scheme of a concept map or mind map.

7. how to make a summary of an effective and efficient.
8. way to show pictures on teaching materials, LCD and Charta.

The above example can be used as an illustration in designing classroom or lecture hall associated with learning models to be applied as well as the media to be used. All this requires a process to think and reflect and review process which mature as a process of cognitive ergonomics in the design of media from a model of learning in the hope that the learning process can take place effectively and efficiently so that the learning can be improved.

D. Obstacles encountered in the implementation of those

From the results of the study some literature that discusses the findings of the experts around the cognitive ergonomics associated with the design study model, encountered several problems that need solving holistically. These constraints are as follows.

1. The designers of learning models do not realize how the importance of incorporating aspects of ergonomics in the program or design is created.
2. If the designers already know and understand the aspects of ergonomics, but because of the cost factor, the willingness of users, willingness of funders and dominance artistic frequently mess up the design of the program will be made.
3. the negative impact caused by the program design is not ergonomic frequent occurrence after prolonged use, so that the awareness of the designer will be errors or mistakes done often too late.
4. the economic considerations sometimes more dominant than consideration of ergonomics.
5. Determination of the design study model is sometimes only be assessed based on one aspect only and should not be assessed in a holistic and interdisciplinary.
6. the design is made often only refers to the willingness of teachers, so that the design will depend on the knowledge, insight, and personal of the teachers are sometimes very contrary to the rules that should be applied in a design.
7. Attitudes do not change and do not want to know the teachers often impede the realization of the implementation of aspects of ergonomics to create a design study model.

IV. CONCLUSIONS AND SUGGESTION

A. Conclusions

Based on the above discussion can be made conclusions as follows.

1. Cognitive aspects of ergonomics are very dominant in designing the learning model which is oriented to the principles of ergonomics that emphasizes the aspects of user friendly.
2. How the implementation of aspects of ergonomics in designing the learning model is part of cognitive ergonomics because it involves thinking and mental processes in designing the model.
3. Obstacles encountered in the implementation of aspects of cognitive ergonomics in designing learning model would seem to be a serious problem if not addressed as

soon as possible on an ongoing basis and through participatory approaches and studied holistically.

B. Suggestion

That seems important to convey on this occasion is as follows.

1. it is recommended that in designing a model of learning should be considering the aspects of cognitive ergonomics so that the application of the rules of ergonomics can be included early on and realized in the form of a model ergonomics.
2. the results of this study should be used as a reference in searching the rules of ergonomics in the design study model is a process of cognitive ergonomics.

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Constraint of Paud Teacher's Innovativeness

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Abstract : The purpose of this research is to study the constraint of Paud teacher's innovativeness by examining the three variables which will become the strongest aspect to increase Paud teacher's innovativeness such as organization culture, transformational leadership and job motivation. The survey is conducted by taking sample of 144 teachers who had been graduated from The Teachers Training College by proportional random sampling technique at Paud teachers in Bogor, west Java, Indonesia. The research used a Sequential Explanatory Design Mixed Method. The quantitative research is firstly conducted then followed by the qualitative research to support the research more comprehensively understood. The quantitative research portrays that there is a very significant positive correlation between those three variables strengthening the Paud teacher's innovativeness. This relationship is also supported by the qualitative research which organizational culture, transformational leadership and job motivation give higher scores to support Paud teacher's innovativeness

Keywords : organization culture, transformational leadership, job motivation.

I. INTRODUCTION

Paud (as the early childhood education) becomes a basis for further children's education. The quality of graduate education is increasingly urgent in line with the development of society and the demand of work as well as changes in global competition that could not be avoided. A synergistic collaboration is needed between schools, communities, and the world of work as the output of education to reveal the quality graduate education. Teachers, as the school's resources, provide qualified human resources to work efficiently and effectively. Teachers have an important role in producing quality graduates. They become educators, facilitator and they must have charismatic, ideally smart in designing learning programs, have the ability in organizing and managing classroom. Otherwise they are constrained to be professional which requires special expertise. They should be creative and innovative. Their innovativeness will be influenced by the three aspects such as transformational leadership, organizational culture and job motivation.

In fact, the innovativeness of Paud teachers is still slow and has not been optimal. Teachers are still difficult to develop appropriate learning models used for early childhood. They do not mastered the updated curriculum. They are still used traditional learning media and former learning models activities.

From above background and identification of problem, the formulation of the problems are :

1. Does organizational culture positively affect Paud teacher's innovativeness ?
2. Does transformational leadership affect Paud teacher's innovativeness ?
3. Does working motivation positively affect Paud teacher's

innovativeness ?

4. Do organizational culture, transformational leadership and working motivation altogether affect Paud teacher's innovativeness ?

II. LITERATURE REVIEW

The word innovation is taken from the Latin "innovare", meaning "create something new". Innovativeness is a behavior or action that shows the level of innovation that has been done. In this case innovativeness show changes in the behavior and actions of a person and not just his mind alone. Everyone is assumed to have potential to be innovative although not all can develop or use their potential fully.

Some experts provide the following theories of innovation. John R. Schermerhorn, James G. Hunt, Richard N. Osborn, Mary Uhl-Bien (2010) stated: innovation is the process of creating new ideas and then practice it. Innovation is a means of formation of creative ideas that apply in everyday life, practices that contribute to the improvement of consumer services and productivity of organization.

There are several ways of looking at innovation. Here innovation is considered as a process consisting of product and process innovation recorded from the start until the beginning of the development of ideas and implementation. The concept of innovations also stated by Wood, Wallace, Zeppane, Schermerhorn, and Hunt (2001) as follows: explain that innovation is a process of creating new ideas and practice. Innovation is the way in which creative ideas can be found every day in the form of goods or services that are new to the satisfaction of consumers or of new systems and services that help organizations better make it.

In educational organizations, innovativeness of teacher is the behavior or actions of teachers in creating an idea or renew an existing idea in learning activities such as creating the Teaching and Learning Implementation Plan or Rencana Pelaksanaan Pembelajaran (RPP), a model of learning, media and tools used in teaching, assessment systems and classroom management requiring the implementation of the results of the learning product and spreading it all learners.

Organizational Culture stated by Jason A. Colquit, Jeffery A, Lepine and Michel J. Wesson (2009) that defines: "Organizational culture as the shared social knowledge within an organization regarding the rules, norms, and values that shape the attitudes and behaviors of its employees".

Based on the theories mentioned above, it can be synthesized that in school organization, organizational culture is a pattern of basic assumptions or basic philosophy agreed upon and developed at the school to be implemented and achieved.

Bernard M. Bass and Ronald E. Riggio (2006) defines transformational leadership as behavior which can stimulate and inspire followers to achieve results in the process of developing leadership skills, vision and goals given organization, to challenge itself to innovate, solve problems, and develop the ability of the leadership to subordinates through guiding, mentoring, challenging and supporting. "Transformational leaders, on the other hand, are then those who stimulate and inspire followers both in achieving extraordinary outcomes and developing their own leadership capacity".

Gary Yukl (2006) stated that transformational leadership is the behavior of a leader who is able to call on his followers moral values in their efforts to raise awareness of ethical issues and mobilize energy and resources to reform institutions. Factors associated with the above definition are: 1) communicating the vision, 2) expressive, 3) a risk taker and sacrificed himself, 4) communicating high expectations, 5) consistent behavior vision, 6) managing the respect of subordinates against leadership, 7) establishing the existence of a group or organization, 8) empowering subordinates.

Based on the theories mentioned above, it can be synthesized that transformational leadership is the behavior of a leader who can inspire subordinates (teachers) to commit to the vision of the school, communicating, motivating, directing, empowering subordinates, to be a model, developing the potential of subordinates as well as a new perspective in solving the problem. The dimensions and indicators are : 1) the influence of the ideal toward subordinates, 2) the inspiration that motivates, 3) intellectual stimulation, 4) treatment of subordinates, 5) communication skills, 6) the giver of challenge and support.

Lambert Deckers (2010) states that motivation is "a description of motivation as the process by the which a person is moved into action. Motivation can originate from internal sources, described as biological and psychological variables, and from external sources, such as incentives and goals.

Paul E. Spector (2008) defines motivation as an internal state of a person which is associated with certain behaviors. One perspective to mention the relationship between motivation with the direction, intensity, persistence behavior at the same time. Directions refers to the selection of the specific behavior of a large number of existing behavior. Intensity refers to the amount of effort for someone to do their job. Persistence refers to the ongoing relationship. Based on some theories above, it can be synthesized that motivation of teachers are energetic impulse from within themselves as well as influences from outside that encourage activity and give the power to determine the intensity and resistance to achieve the purpose. The dimensions and indicators of teachers' work motivation is:

- a. Intrinsic dimension which consists of indicators: 1) the encouragement of hard work in doing the job, 2) the drive to achieve the work, 3) the spirit of achieving success, b. Extrinsic dimension which consists of indicators: 1) collaboration with the personnel in the work environment, 2) the award of the environment, 3) support for leadership. Based on above description, the following hypothesis is formulated:
1. Organisational culture is positively related to Paud teacher's innovativeness.
 2. Transformational Leadership is positively related to Paud teacher's innovativeness.
 3. Working motivation is positively related to Paud teacher's innovativeness.
 4. Organisational culture, transformational leadership and working motivation altogether are positively related to Paud teacher's innovativeness.

III. METHODOLOGY

This study applies *Sequential Explanatory Design Mixed Method* where quantitative study is ahead of qualitative study to examine the relationship between variables tested in the study using three independent variables through data obtained from questionnaires. The independent variable is Organizational Culture (X1), Transformational Leadership (X2), and Working Motivation (X3), while the dependent variable is the Teacher's Innovativeness (Y). Teacher's Innovativeness is the result of evaluation to teachers conducted by school principals while variables of Organizational Culture, Transformational Leadership and Working Motivation are derived from teachers' self-rating toward those dimensions.

The population of this study is all 144 Paud teachers in the city of Bogor, Indonesia. Hypothesis testing is conducted by using regression analysis to determine the influence of one or more independent variables on the dependent variable. The linearity assumption are prerequisites to proceed to further test. Hypothesis testing is performed at a significance level of 0.05.

Qualitative study for the purpose of confirmation was performed at three preschools representing upper, middle and lower class through observation and interview to key informant as well as conducting focus group discussion with school principal and teachers.

IV. RESULT AND DISCUSSION

The teachers of listed organisations were asked to participate in the survey by responding their opinions for four different measures in organizational culture, leadership, work satisfaction and performance. The linearity test is performed with *F-test*. Data is linear as the value of each variable is above the critical value for F-test.

A. Organizational Culture and Preschool Teachers' Innovativeness

In order to test whether data from organizational culture and teachers' innovativeness are linear, F-test has been conducted. Since the F value as shown in table 1 is higher than the critical value of F table, we can proceed to test the alternate hypothesis if organizational culture is positively related to teacher innovativeness within preschool organisations in Bogor, Indonesia. The strength of association of organizational culture (X1) to teacher's innovativeness (Y) is observable from coefficient correlation (r_{x1}) = 0.34. Coefficient of correlation (r_{x1}) = 0.34 indicates a medium positive relationship between organizational culture and teachers' innovativeness. Coefficient of determination (r^2_{x1}) = 0.11 indicates that contribution of organizational culture to teachers' innovativeness is 11 %. This implies that when implementing organizational culture on the innovativeness of teachers is that all school members must strengthen the shared values that can improve the success of teachers' innovativeness.

B. Transformational Leadership and Teachers' Innovativeness

To test whether data from transformational leadership and teachers' innovativeness are linear, F-test has been conducted. The higher F value as shown in table 2 compared to the critical value of F table indicates the appropriateness of the model to test the alternate hypothesis if transformational leadership is positively related to teachers' innovativeness within preschool organisations in Bogor, Indonesia. The strength of association of transformational leadership (X2) to teachers' innovativeness (Y) is observable from coefficient correlation (r_{x2}) = 0.462. Coefficient of correlation (r_{x2}) = 0.46 indicates a moderate positive relationship between transformational leadership and teachers' innovativeness.

Coefficient of determination (r^2_{x2}) = 0.21 indicates that contribution of transformational leadership to teachers' innovativeness is 21 % while the rest 79.6% is determined by other factors not included in the model. This small figure may due to the fact that the leader does not apply the appropriate leadership style yet within the preschool organization.

C. Working Motivation and Teachers' Innovativeness

Similar to previous model, to identify if data from working motivation and teachers' innovativeness are linear, F-test has been conducted. The higher F value as shown in table 3 compared to the critical value of F table indicates the appropriateness of the model to test the alternate hypothesis if working motivation is positively related to teachers' innovativeness within preschool organisations in Bogor, Indonesia. The strength of association of working motivation (X3) to teachers' innovativeness (Y) is observable from

coefficient correlation (r_{x3}) = 0.436. Coefficient of correlation (r_{x2}) = 0.44 indicates a moderate positive relationship between working motivation and teachers' innovativeness.

Coefficient of determination (r^2_{x3}) = 0.19 indicates that contribution of working motivation to teachers' innovativeness is 19 % while the rest 81 % is determined by other factors not included in the model.

V. CONCLUSION

The findings prove that there is a positive and significant relationship between the organizational culture on teachers' innovativeness, transformational leadership on teachers' innovativeness and working motivation on teachers' innovativeness among teachers working in preschools located in Bogor, Indonesia. With particular reference to initial design of the interaction among variables, the results showed that the contribution of organizational culture variable on teachers' innovativeness is 80 %, transformational leadership is 51 %, and working motivation is 40 % indicating the highest individual contribution to the innovativeness of teachers is organizational culture. When combined together, contribution of the three variables of organizational culture, transformational leadership and working motivation achieve 72% indicating the contribution of other variables not included in the model to predict preschool teachers' innovativeness are only 28 % confirming this model is of high goodness of fit.

Based on interviews in qualitative study it is revealed other factors than organizational culture, transformational leadership, and motivation of teachers associated with teachers' innovativeness. Those factors are the school facilities and infrastructure, job satisfaction of teachers, the working environment of teachers, teachers' working discipline, intellectual and emotional intelligence of teachers, teacher work commitment, achievement motivation and teachers' work culture.

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DEVELOPING LEARNING MEDIA BASED ON AUGMENTED REALITY (AR) TO IMPROVE LEARNING MOTIVATION

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Abstract. This research aims to reveal the development of Augmented Reality-based learning media to increase motivation to learn computer assembly materials. This research is an research and development type. The population was ninth students of SMP Harapan Ananda Kubu Raya totaling 112 students. The sample was 68 students with proportional random sampling technique. Data Collection using a questionnaire. To test the hypothesis, one-tailed t-test was used. Data analysis was performed descriptively. The results showed that one-tailed t-test data is posttest questionnaire motivation experimental class and control sig $0.000 < \alpha 0.05$, so it can be concluded that the motivation to learn the experimental group was higher than the control group.

Keywords: Augmented Reality, Learning Motivation

I. INTRODUCTION

Education is basically the process of the development of the potential learners. In the implementation of education in schools that involve teachers as educators and students as learners, realized with the teaching and learning interaction or learning process.

Education aims to help people in developing himself and able to deal with all the changes and problems with an open attitude and creative approach without losing identity. Therefore, every moment from the teaching process is designed and organized to be able to contribute concretely to the achievement of the purpose of education. In the present the sophistication and progress of technology can be used in the field of education, therefore there is a need for new innovations to create a quality learning media, this further encourages the efforts of reforms in the utilization of the results of technology in the learning process.

In the digital world especially computer technology the development rapidly forcing the wearer to always adjust with the existing development. The computer that is identical with the virtual world can now be presented side by side in the real world. This technology called *Augmented Reality* (AR). This technology will continue to be developed and integrated into the real world to visualization displayed more interesting so that it can be used as a teaching tool to support the learning process.

By implementing creative and innovative lessons by the teachers will be able to help increase the motivation of students to more vigorously and with easy to understand what is learned. According to the Nazarite, Rizvi & Pujeri (2012) "The Use of learning media in the learning process can motivate students to learn and more easily get information".

The results of the survey in the SMP Harapan Ananda Kubu Raya, on the skills subjects used by the teachers to give the material the assembly of the computer to the students especially the grade IX, after doing interviews on the teachers and the students of grade IX especially in the subject skills obtained the describing that the learning

process that happens is still using the method of lectures so that the teacher is very dominate the learning and interaction between the teachers and the students less dynamic. Teaching aids used is also not in accordance with the number of students available so that the teachers are also occasionally take advantage of the printed media such as books packages that are available in the library. The condition makes the students less motivated, this visible less existence and enthusiastic response of students in learning especially in the assembly of the computer material, because on this material students need the simulation. It is also known that learning media based on *augmented reality* as teaching materials in the SMP Harapan Ananda has never been used.

Based on the explanation above, the researchers develop learning media based on *augmented reality* that will help the students learn actively to improve motivation to learn on materials the assembly of the computer. Learning Media consists of your module and an application extension. *an apk* that can *install* on your Android. So that students not only get the material in the school but can repeat the material outside the school using only the *smart phone* which possesses, remember today *smart phone* not more expensive goods and difficult to be found. To develop the assembly of the computer module as supporters is expected to increase the motivation of students in learning, especially on materials the assembly of the computer.

II. LITERATURE REVIEW

A. Learning Media based on Augmented Reality (AR)

Learning Media is part of the learning tools that have an important role in the process of the subjects. Smaldino, Lowther, Russell (2002, p.362) states that: "*medium, a means of communication. Derived from the latin medium ("between"), the term refers to anything that carries information between a source and receiver*". A similar opinion was also expressed by Sudjana and Rivai (2013) stating that the teaching of the media is a teaching tool that is

in the components of the teaching methodologies, as one of the learning environment that is regulated by the teacher.

Augmented Reality (AR) is a technology that combines objects maya two dimension or three-dimensional into a real environment three dimensional and then projecting the virtual objects in real time (Valino, 1998). According to the explanation of the Haller, Billinghamurst, and Thomas (2007), *Research Augmented Reality* aims to develop technology that allows the merger in *real-time* against digital conten made by the computer with the real world. *Augmented Reality* allows users to see maya objects two or three-dimensional which is projected to the real world. (Emerging Technologies of Augmented Reality: Interfaces and Design).

Maad. (2010, p.3) stated that "*Augmented Reality is a system that supplements the real world with computer-generated virtual objects, is seem to coexist in the same space and present the services as following properties (Bimber, 2005)(Azuma, 2001): (a) It combines real and virtual objects in real environment; (b) It executes interactively in real time; (c) It lines up real and virtual objects; (d) It is applied to all has been of the user*".

So it can be interpreted that *Augmented Reality* is a system that is complete the real world with the virtual object that produced the computer, which seems to live side by side in a same space and presents the following properties (Bimber, 2005) (Azuma, 2001): (1) This combining tangible objects and maya in real environment; (2) Is executing interactively in real time; (3) This line tangible objects and virtual; (4) This is applied to all the senses of the user.

From the explanation above can be deduced learning media based on *augmented reality* is a teaching tool that uses technology to combine objects maya two dimension or three-dimensional into a real environment to convey an information to support the learning process.

B. The Working Principles of Augmented Reality

According to Fernando (2013, p.3) Augmented Reality work using the technique of *computer vision* and technique of *pattern recognition*. The technique of *computer vision* is a technique in which the system to search for the card (marker). While the technique of *pattern recognition* is a technique to identify the pattern. It means the system will identify the marker from the application of the first. If the system has been identifying marker then the system will display the object that is in accordance with the marker that has been known previously.

According to Prihantono (2013, p.1) the working from the application of the Augmented Reality i.e. when markers which is already known from the application is detected by the camera then the result will display the object 2D and 3D is displayed in the screen monitor. The results of the conjunction real situations and maya displayed in interactive and realtime services.

Based on explanation can be concluded that the working principles of *Augmented Reality* is the system will read the marker that has previously created. When the system has been successfully read marker is then the system will display the object in accordance with the marker that has made before. The object is shown in the picture 2D and 3D and video.

C. Lessons Subject for the Assembly of the Computer

SMP Harapan Ananda Kubu Raya mentioned in the skills subject used to give the skills deemed useful for the students especially the students of grade IX namely assemble and install the operating system on the basis of personal computer.

The material the assembly of the computer has two main subjects that will be studied, namely: (a) types of equipment/component on the PC and each specification. (b) The steps the assembly of the computer and the procedures and safety at assemble the computer.

D. Learning Motivation

Schunk, Pintrich & Meece (2010, p.4) define "*Motivation is the process whereby goal-directed activity is instigated and sustained*". The motivation is a process than a product. As a process, motivation inferred from action. The motivation involves the purpose of that give encouragement and direction for action. According to Woolfolk (2007, p.372) motivation is a state of in themselves that can raise, directs, and observe the behavior of the individual. The motivation can be created through the self-consciousness or that comes from within themselves (intrinsic motivation) and through encouragement from other people and the environment (extrinsic motivation components).

The motivation has an important role in the learning process. The motivation determines all things that can be used as an intensifier in learning. The motivation can clarify learning goals that you want to reach a man. Motivation to determine the various control of learning stimuli. The motivation can also determine learning endurance.

III. RESEARCH METHOD

A. Research Model

This research model is *research and development* (R&D). The development of this product is expected to increase the motivation of student learning. While the results or products in research and development of this is to get a new product in the form of *software* namely android application (*.an apk*) learning.

B. The Time and Place of Research

This research conducted on May 2016 in SMP Harapan Ananda Kubu Raya. SMP Harapan Ananda address in Supadio arterial roads, Komp. Pondok Indah Lestari, Kubu Raya, West Kalimantan.

C. The Population and Research Sample

The research population is students SMP Harapan Ananda Kubu Raya Grade IX of second semester fulfilled 2015/2016 school year. The Grade IX is divided into three classes, namely Grade IX A, IX B and IX C. The Grade IX A numbered 34 students, Grade IX B amounted to 34 students and Grade IX C amounted to 34 students, so that the total is 112 students.

Based on the research design, needed two classes of samples is one class groups of experiments and one class control group. One other class is used as the class test.

Before defining the class as a sample of the test done homogenitas first semester values in order to know whether the variants of a sample of the Grade IX. If the members of the population is homogeneous, then the samples in this research in take with the *random sampling* technique, namely with shake selected class list so that members of the population have a probability or the same opportunity to in select a sample. Then assign the new class that will be used in this research are the students of Grade IX SMP Harapan Ananda teachings years 2015/2016 that consists of 2 class which is Grade IX A as control classes and Grade IX B as class experiment.

D. Research Design

Research experiment using *Pretest-Posttest design Control Group Design* as Table 1 :

TABLE 1
RESEARCH DESIGN PRETEST-POSTTEST CONTROL GROUP DESIGN

Samples	The Beginning Condition	The treatment	The End condition
The Experiment Class	O ₁	X	O ₂
The Control Class	O ₃	Y	O ₄

In this design there are two groups who selected by random, then given pretest to'll see original condition are there any differences between the group of the experiment and control groups. Good pretest results when the value of the group of the experiment did not difference significantly.

E. The Data Collection Technique

The observation is used to collect data during the process of needs analysis. Researchers conducting pre survey on the students of Grade IX on the skills subject matter the assembly of the computer in the SMP Harapan Ananda Kubu Raya. Researchers doing interviews on students and teachers then provide questionnaires needs of teachers.

F. Data Collection Instrument

This research uses the research instrument in the form of questionnaires in the data collection. There are six the use of the structure of the questionnaires used researchers, namely: (a) questionnaires to measure the feasibility according to the experts of matter, (b) questionnaires to measure the feasibility according to media expert, (c) questionnaires to measure the feasibility of media according to teachers (d) questionnaires to measure the feasibility according to user (students), (e) the *pretest* questionnaires measuring student motivation to learn, (f) the *posttest* questionnaires measuring student motivation with media ar, (g) the *posttest* questionnaires measuring student motivation with books media.

G. Data Analysis Techniques

Data analysis techniques used to know the level of student learning motivation of learning media materials the assembly of the computer is descriptive statistics with a percentage. Descriptive statistics is part of the statistics function to collect data, determine the statistics values and the making of the diagram or graph on a matter so easy to read and understood.

Hypothesis test using the SPSS 23 program Paired Sample t test on the value of the pre test - post test class experiment and pre test - post test control classes with equal to the significance of 5%. This test is used to know the difference between the average value before given treatment (pre-test) with the average value after given treatment (post-test) with the use of learning media based on Augmented Reality.

IV. RESEARCH RESULT

The The result of the validation of learning media by media experts can be seen the assessment of the media aspects including category is very good overall score from the aspect of effectiveness, attractiveness, efficiency utility and logic some 76 and score an average of 3.8 including in the category of "very good".

The result of the validation of learning media by experts in the matter can be seen the assessment of aspects of the material including category is very good, overall score from the contents aspects of a number of 74 and score an average of 3.7 including in the category of "very good".

The result of the validation of learning media by teachers can be seen the results of the assessment of media aspects including category is very good overall score from the contents aspects, the learning aspects, the effectiveness aspects, the attractiveness aspects, the efficiency aspects, the benefit aspects and the logic aspects of some 148 and score an average of 3.7 including in the category of "very good".

Product test done to know the product quality, is that worthy to be used more broadly. At this stage done trial through questionnaires covered that consists of 21 statement to 32 respondents Grade IX C.

The percentage of score trend on data the results of the test the use of media products can be presented in the form of a circle diagram, which can be seen in fig 1.

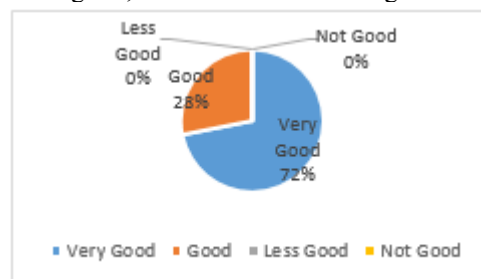


Fig 1. Circle Diagram Percentage the Results of Data Testing the use of Media Products

Based on the results of the calculation of the category the tendency of the score test results data the use of media products, in general can be said that the trial use of media products including in the category of "very good" with large percentage is 72%.

A. Data Analysis

1. The Prerequisites Test of Experiment and Control Class

a. Normalitas Test

The Data stated normal distribution when the significance value greater from 0.05 ($P > 0.05$). The results of normality test data results research can be seen in table 2.

TABLE 2
THE NORMALITY TEST RESULTS

The variables	Sig.	Explan.
Pre-test Motivation Grade IX A	0,200	Normal
Pre-test the Motivation Grade IX B	0,188	Normal
Post-test Motivation and control classes	0,155	Normal
Post-test Motivation to the learning Class Experiment	0,173	Normal

b. Homogeneity Test

Homogeneity test is intended to show that two or more groups of sample data is derived from the population that have the same variansi. The calculation of the homogenitas test using the software SPSS 23 with Levene statistics test with the results can be seen as follows:

TABLE 3
THE HOMOGENITY TEST RESULTS

The variables	Sig.	Explan.
Pre-test Motivation experiment and Control Class	0,352	Homogeneous

c. Similarity Tests the Two Average

Similarity tests the two average data *pretest* aims to know the common early ability students in each group. The similarity test the of two average *pretest* data on experiments class and control classes using *independent samples test* that mingled with the help of the program SPSS 23, can be seen as follows:

TABLE 4
THE RESULTS OF THE SIMILARITY OF TWO AVERAGE

The variables	Sig.	Explan.
Pre-test Motivation experiment and Control classes	0,105	The same average

2. The Final Phase of the Data Analysis Results

a. Analysis of Questionnaires the Motivation of Student Learning

1) Pretest Data Descriptive

The percentage of the tendency of the score on the pretest data motivation students learning can be presented in the form of a circle diagram, which can be seen in the picture below:

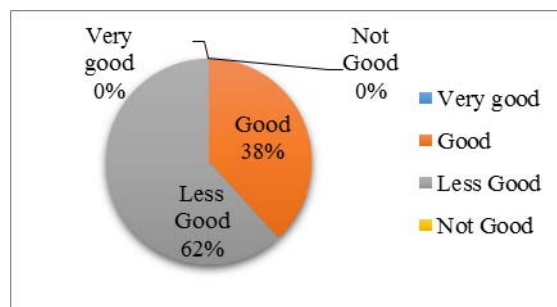


fig 2. The Circle Diagram Percentage of Pretest Student Learning Motivation Grade IXA

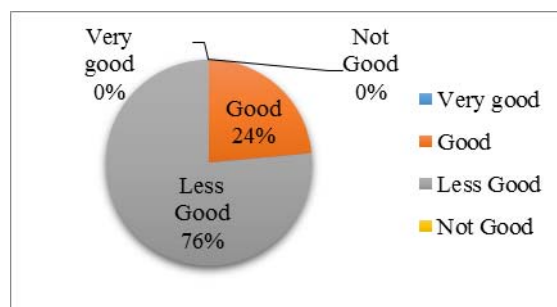


fig 3. The Circle Diagram Percentage of Pretest Student Learning Motivation Grade IXB

Based on the results of the calculation of the category of the tendency in the *pretest score* motivation to the students learning of class IXA in general it can be said that the learning motivation including in the category of less well with large percentage is 62%. While the results of the calculation of the category of the tendency in the *pretest score* motivation to the students learning of class IXB in general it can be said that the learning motivation including in the category of less well with large percentage is 76%.

2) The Descriptive of Posttest Data

The percentage of the tendency of the score on *posttest* data the students learning motivation can be presented in the form of a circle diagram, which can be seen in the picture below:

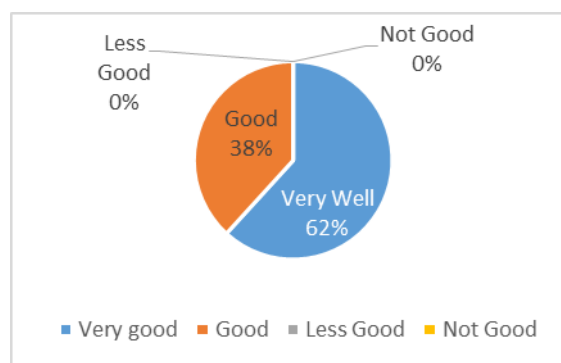


Fig 4. The Circle Diagram the Percentage Posttest Learning Motivation of Experiment Class

V. THE CONCLUSIONS AND RECOMENDATIONS THE HOMOGENITY TEST RESULTS

A. Conclusions

The conclusions from this research is: (1) Developed through three phases include planning phase, development and evaluation. The results of this development research is a product of learning media the assembly of the computer based on the Augmented Reality that is installed on the system android (.apk) and the module as supporters; (2) Test results in one party (one tail test) reachable t values count is greater than the value of the t table namely $6,322 > 1,670$ so that the H_0 was rejected and H_a accepted. Thus it can be concluded that the student learning motivation that utilizing of learning media based on Augmented Reality higher than on the learning motivation that utilizing of the book media on materials the assembly of the computer the students of Grade IX SMP Harapan Ananda Kubu Raya.

B. Suggestions

A few suggestions that can be served from this research is: (1) The products of learning media the assembly of the computer based on the Augmented Reality this could be applied to schools that allow students bring cellphones to school; (2) Media can be developed more on the other subjects in order to increase the motivation of student learning can occur in the classroom, the students and the other subjects; (3) This research is still limited to one school in SMP Harapan Ananda Kubu Raya, so that further research needs to be done on a large scale and expanded on some good schools in one district and in some provinces to provide ratings on the quality of learning media products based on Augmented Reality.

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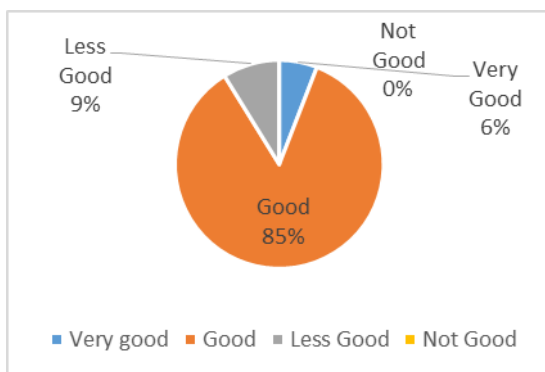


Fig 5. The Circle Diagram Percentage Posttest Learning Motivation of Control Class

Based on the results of the calculation of the category of the tendency in the posttest score motivation to the learning students of class experiment in general it can be said that the learning motivation including in the very good category with large percentage is 62%. While the results of the calculation of the category of the tendency score in the posttest student learning motivation the control class in general it can be said that the motivation to learn including in the good category with large percentage is 85%.

B. The Hypothesis Test

The Hypothesis that will be tested:

H_0 : The Student learning motivation that utilizing learning media based on Augmented Reality is lower or the same with the students learning motivation that utilizing of the book media on materials the assembly of the computer the students of Grade IX SMP Harapan Ananda.

H_a : The Student learning motivation that utilizing learning media based on Augmented Reality higher than the Student learning motivation who take utilizing of the book media on materials the assembly of the computer the students of Grade IX SMP Harapan Ananda.

TABLE 5
THE RESULTS OF THE INDEPENDENT TEST SAMPLE TEST (T TEST)
MOTIVATION OF EXPERIMENT AND CONTROL GROUP

The Group	α	Sig.	Description
The Experiment class	0.05	0,000	Ho rejected
The Control Class			

According to the data on the table above and the results of the data analysis it is known that the significance value that obtained is 0,000. The significance value is smaller than the value of α namely $0,000 < 0.05$ so that the H_0 was rejected and H_a accepted. Thus it can be concluded that the student learning motivation that utilised learning media based on Augmented Reality higher than on the student learning motivation that utilised the book media on materials the assembly of the computer the students of Grade IX SMP Harapan Ananda Kubu Raya.

DEVELOPMENT OF CHARACTER EDUCATION BASED ON LOCAL WISDOM IN INDEGENOUS PEOPLE TENGAHAN SEDANGAGUNG

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Abstract. The character education is built from the values of local wisdom that diverse. The value of local wisdom contains noble values of the ancestor of nation that can be used as capital to establish a nation with good and strong character. The role of local wisdom can be used to develop a character education. This study have reviewed same jurnal literature and article about development of character education based on local wisdom. The first part in the study will introduce the meaning of charater, character education, and local wisdom. The second part will discuss relation of character education and local wisdom, social culture on indigenous peoples Tengahan Sendangagung, the values of the local wisdom on indigenous peoples Tengahan Sendangagung, and the wisdom of the local indigenous people to develop a character education. Finally, the last part of this paper will explain some values of the local wisdom to develop character education.

Keywords: character education, local wisdom, indigenous peoples tengahan

I. INTRODUCTION

The era of globalization worldwide and easy access to the information obtained, resulting in a cultural exchange that seems indistinguishable the limits of space and time. That is what the Indonesian people perceived at the present time. Cultural exchange absorbed by most Indonesian people without filtering the good and bad according norms and values in the prevailing culture in Indonesia, so the condition of Indonesian national character becomes very worrying. The values of character, especially for the younger generation are very far from the values of the Indonesian culture, particularly on personality. No doubt if the cultural values that are considered noble among the older generation is no longer equal with the younger generation.

The declines of the nation's character values in the governance of life due slacken understanding and implementation of the noble values of wisdom. Human rights become a reason for not obeying to the norms in the Society. This resulted in the Indonesian people seem inclined to leave the nation's culture. However, the incoming foreign culture in Indonesia is not all necessarily bad. There are times when common sense can be accepted, for example: the inclusion of knowledge, education, technology, and so forth, this would broaden the Indonesian nation.

The crisis of character that is increasingly endemic among the younger generation, even the previous generation of the birth concerns. Every day, the ass media is constantly inundated with news stories of crime, murder, increased promiscuity, rampant numbers of violence, adolescent girls, and so on. The case reported in the mass mediated is one of the evidence why national character increasingly worrying. Human beings morality still seems to be a discourse that continues to unfold. Cruelty and savagery become trimmer daily in various media, humanity as the balance of social relations decline and underappreciated, so that people

become individuals. One effort that can be done to build the character of the nation through local wisdom.

Viewed from the perspective of anthropology that Indonesia consists of hundreds of tribes that have cultural values and has the advantage of local knowledge (local wisdom) itself, whereas from the perspective of education that education as an effort to preserve culture from one generation to another. Education and culture are complementary and supportive of each other. Education can not be separated by cultural values. How to maintain and preserve their own culture, as well as the most effective transfer by education, for the purpose of education is to preserve and improve the culture. Education is always changing with the development of culture. This then gave birth to the term practice based charater education local wisdom.

Character behavior that appears in everyday life both in attitude and in action [1]. How to develop a character for the younger generation can get through characters education. Character education is behavior that appears in everyday life both in attitude and in action [1]. Talking about characters is very important. Characters distinguish humans from the other beings. People with strong character and both individually and socially are those who have character, morals, and good manners, to develop a strong character for the younger generation through character education.

Character education is a system of value investment of human behavior associated with the God Almighty, ourselves, our fellow human beings, the environment, and nationality embodied in thoughts, attitudes, feelings, words, and actions based on religious norms, laws, manners, culture, and customs. Character education in the society one of which is in Tengahan indigenous peoples, who walked in stages and be part of the process and stages of life of its people. So that the values of character that becomes faith society and that must be continually passed on to generations

of their children. This is evidenced by the persistence of the values of these characters in the present generation as the generation successor society.

According to Jenkins (2004), the role of local wisdom that critically changing and shaping global culture becomes meaningful and appropriate to the social and cultural life. Local wisdom has a close relationship with the traditional culture of a particular place. Local wisdom contains a view or rule so that more people have a foothold in determining an action such as the behavior of everyday people. Youth who know and adopt the values of local wisdom early, will use it as an analysis in dissecting and separating the value of the element technology. He will be able to determine where things need to be adopted and which need to be leaved. He will always be critical in responding to every phenomenon that it faces. With a clear identity, the youth of this kind will not be easy to follow and join in adopting other cultural values. Thus, he will remain a characteristic local Indonesian human character [2].

II. METHOD

Literature review is one of the methods that exist in the research. The theory underlying the problem to be investigated can be found doing a literature study related to the problem studied. Researchers can obtain information about the research in connection with the problem studied. Review of the literature on the take from the study literature review. The study of literature is the study of how data collection with the study riview of literature books, records and reports reated to the problem studied [3]. Pohan in Prastowo (2012), activities preparation of the literature riview has the objective to collect information about scientific studies, in the from of theory-theory, method, or approach that is ever growing and has been documented in the from of boks, journals, manuscripts, notes, recording history, the documents contained in the library. Literature review in this study using the literature related to character, local wisdom, and the literature related with the traditional ceremony of *Tunggul Wulung*. Review of this role is to reveal the values of local wisdom can be used to develop a character education [4].

III. DISCUSSION

A. *Character Education and Local Wisdom*

Character education is something that can not from life. Therefore, character education encompasses all aspects of life including in formal institutions and informal. Character education that developed instituted formal, i.e.school. Character education developed at school through cultural values (local wisdom). The material taught in character education not be separated from local wisdom is used as a grip by the service. Local wisdom in he society is one of the material should be contained in character education. Cultural values of other society can be taken as far as not in conflict and can develop the cultural values of their own. This understaning is actually not separated from educaton as a process of inheritance of cultural values of one society to the next generation.

Character education within the indigenous peoples *Tengahan*, which runs follow the stages and become part of

the process of the life of the society. The values of the the character that become the confidence of the society and to be continuously passed on to generaions. As for the value of the character according to the empirical study a curriculum which the value of religious, honest, tolerance, discipline, hard work, creative, independent, democratic, curiosity, the spirit of nationality, the love of the homeland, appreciate the achievements, friendly and communication, love peace, fond of reading, care of the environment, care of social, and have a sense of responsibility.

When viewed from the aspect of education in relation with local wisdom that the value of cultural values into material study of the formation of character. Local wisdom as the cultural values that have become the hallmark of the area can be used as a source in developing the character. Character education comes from local knowledge as the cultural heritage of the sublime will make the children of the nation became the source of the power of civilized man. Local cultute the start of the current must always be maintained to strengthen the nation.

B. *Socio-Culture Indigenous Tengahan Sendangagung*

Indigenous peoples showed a close relationship in the personal relationship and the social interaction that occurred between humans, raised certain pattern called a uniform or customary way of behaving within a social group [5]. One of the indigenous peoples who have typical in the culture of indigenous peoples *Tengahan*. *Tengahan* indigenous peoples are communities in the villages *Sendangagung*. *Sendangagung* is entrance area of the districts in *Sleman*, *Yogyakarta* Special Regio. *Sendagagung* is located 21 km to the west of the city of *Yogyakarta*. The state of the soil conditions in the region *Sendangagung* in the from of paddy fileds that are created with a sysem of terracing. Soil conditions *Sendangagung* very fertile, so it is used for agricultural land, especially rice, wih such conditions people quite fulfilled his need to obtain a good harvest and abundant.

Tengahan public administration system recognizes two systems of government, the customs administration system and village administration system. The second system of government is very different division of labor. The supreme leader of traditional governance structure is held by an indigenous stakeholder. The function of indigenous stakeholders more focused on the policy of the customary law, as well as supervise the implementation of customary law on indigenous peoples *Tengahan*, including monitoring violations of customary law, both by society. The management structure of village government, led by the village head.

Tengahan society is a society that has a distinctive indigenous. The traditional ceremony *Tengahan* people always focus on "cult" of the figure *Ki Ageng Tunggul Wulung* is believed as the ancestors. People *Tengahan* assume that *Ki Ageng Tunggul Wulung* as ancestors of the *Majapahit* kingdom. For that, ceremonies are well known in the society *Tengahan* the ceremony *Tunggul Wulung* taken from the figure of *Ki Ageng Tunggul Wulung*. The traditional ceremony which is famous in the ceremony *Tengahan* society *Wulung* stumps. *Wulung Tunggul* ceremony performed on Friday Pon is believed to be a sacred day by *Ki Ageng Tunggul Wulung*. In addition, the

harvest *rendhengan* (rainy season) will determine the timing of the ceremony. Tayub traditional dances and drinking alcohol is series of ceremonies.

Nayub comes from the word *tayub*, consists of two words that *Mataya* which means dance and *guyub* which means in harmony together. It is estimated that there is a change of two words into one word, *ma-ta-ya* and *gu-yub* be *tayub* [6], while in-*tayub* mean invited to dance [7]. *Tayub Dance* is an art of rituals as a form of gratitude for the fertility of the natural results. Society lives are still dominated by an agrarian culture. This reflects *ledhek* dancers have an important role in rituals for fertility and safety. Fertility associated with the harvest often associated with *Dewi Sri* or Goddess of Fertility. According to local belief is compulsory dance *Tayub* ceremony staged in order *Ibadan*, when dance *Tayub* is not staged the ceremony will be invalid and is believed will bring disaster *pageblug* (heavy rain) [8].

Pengrawit also acquired an important role in the implementation of the ceremony of *Ki Ageng Tunggul Wulung*. Without the presence of *gamelan* musicians, the ceremony can not run properly. *Gamelan* musicians in the ceremony of *Ki Ageng Tunggul* is a society. The Majority of *gamelan* musicians aged old and over are tasked with beating the *gamelan* and the sound *gending gending* sounded in the implementation of the ceremony [8]. Dance *Tayub* and *Pengrawit* is a art should be there at the ceremony *Tunggul Wulung* in the *Tunggul Wulung* society.

In general, many mystical Javanese art, one of which is dancing *Tayub*. It is said that the dancers *Tayub* use mystical ways, such as the use of the *implant* as a lure to attract viewers. Shades of Mystical of dance *Tayub* make me a perception of society as folk art. Magical and mystical symbols that exist in this art are characteristic of culture *Abangan*, the fringes of society religious culture *Kejawen*. This art is develop in java society [8]. This means that this art can only grow and develop in a limited location i.e. java.

C. The values of Indigenous Peoples Adat Tengahan

In Inonesia, each tribe has a unique local wisdom. Local wisdom is along process that contains the values of the good for the life of society. The values of kindness make the local knowledge become a culture that has been strongly attached to the life of the society. The society always keeping the existence of local wisdom. These are the things that happen on the local wisdom of indigenous people *Tengahan*. Local wisdom of indigenous peoples seves as a reinforcement of tribal identity, as a filter the value that comes from the outside, as a oothold in developing the noble values to internalized in character education. The values in local wisdom *Tengahan* that can applied to the learners in order to develop character, among other things:

1) Religius

The value of religion can be defined as attitudes and behaviors that are obedient in carrying out the teachings of the religion, tolerant implementation of worship of other religions, and live in harmony with adherents of other religions. The majority society *Tengahan* are farmers who are still obedient to the beliefs espoused, namely trust in the existence of

ancestral spritis and trust the supernatural powers of *Dewi Sri*.

2) Environment Care

Environment care is an attitude in developing concern for the environment. The manjority society *Tengahan* are farmers who still believe in the existance of ancestral spirits who maintain nature and well being for society. The citizens of the community regularly holds ceremonial *Tunggul Wulung* as an expression of gratitude. Ritual *Tayub Tunggul Wulung* has a meaning consists of two dimensions, both vertically and horizontally. Ritual *Tayub Tunggul Wulung* has a meaning consists of two dimensions, both vertically and horizontally. The vertical dimension is the worship to the ancestors as an act of gratitude has been given natural resources as the harmony of nature, man, and God. The horizontal dimension is an attempt to preserve the environment and to astablish ineractions between individuals in society in order to stay awake.

3) Social Care

Social care is the attitude of a person t do good deeds toward others which help others. Social activities are always done with a spirit of mutual assistance and helping each other. Indigenous *Tengahan* who is always promoting the spirit of mutual cooperation, for example in the indigenous peoples in mutual cooperation to prepare all the needs in the implementation of the ceremony of the *Tunggul Wulung*. Society and traditional leaders to cooperate with each other regardless of social status. All the society participated together.

4) Tolerance

Tolerance is an attitude of human respect every activity that other people do. The attitude of tolerance should be developed in order to create harmony. Indigenous people *Tengahan* have a high tolerance in respect of inter-religious. Indigenous *Tengahan* muslim majority and another society still adheres to the belief of ancestral spirits. The muslim society participated in the activities of *Tunggul Wulung* as a form of tolerance to people who still have a belief in the spirits of ancestors.

5) Responsible

The responsibility which a man's attitude to feel responsible for all the deeds done. Responsibility is one characteristic of a civilized human. The behavior of the indigenous *Tengahan* are responsible for the implementation of the ceremony of *Tunggul Wulung*, such as the participation of the society in the following series of activities, among other: the preparation of the ceremony, the preparation of making offerings, and the ceremony.

All citizens help to prepare ceremony and all the needs as mutual. All the activities and the active role of the Society *Tengahan Sendangagung* an response from the public reception to maintain and preserve the stumps ceremony *Tunggul Wulung Ki Ageng Tunggul Wulung* interpreted as a heritage that brings a positive influence in people's lives. The values contained on the local wisdom is still instilled in their children and grandchildren. The values of those internalized

in their behaviour everyday in order to from the characters that have the characteristic of in accordance with loka wisdom of the indigenous peoples Tengahan.

D. The Wisdom of The Local Indigenous Peoples Tengahan to Develop a Character Education

Local wisdom of the indigenous peoples Tengahan can build character. The values of local wisdom into attitudes and beliefs internalized citizens and preserved continuously both in informal educations such as family and community, as well as formal education at school. In the family and community is done through various forms including; local values are taught so they will know familiarized local values in everyday life in order to become behavior, exemplified so that there is an exemplary figure, as well as customary rules are firmly upheld so that people have a strong character.

Character education in school is not limited to knowledge. Character education is important to make sure that these values remain embedded and integrated in thought and action. The values contained in the local wisdom of indigenous peoples Tengahan such as religious, environmental care, social care, tolerance, and responsibility of preserving the tradition can be implemented in learning. Lessons taken from the values of local wisdom that suit the environment and experienced by students. Thus, students will be more motivated to learn, so that learning becomes more meaningful. The development of character education can be through the activities of students in school, for example by organizing extracurricular dance art, such as dance tayub. Extracurricular activities of students in schools is beneficial to increase the love and preserve the local culture. The development of character education need a method of habituation and exemplary in the school. The value of religious, environmental care, social care, tolerance, and responsibility contained in the local wisdom should be socialized in school. It is necessary the cooperation of all society schools, in particular teachers and principals who serve as an example for students.

At school the values of local wisdom can be developed in a matter of learning. The values local wisdom of indigenous peoples that is the mutual cooperation values, a sense of sincerity, a sense of togetherness, mutual help, and the attitude of preserving tradition, constantly internalized both the formal and informal education to make them have the strong character in their daily lives. The process of character formation which conducted continuously at home, at school and in the community will produce a characteristic behavior. Character education comes from local wisdom as the cultural heritage of the ancestors will make the children of this nation to succeed in the academic and economic fields that can prepare them to be human resources civilized and prosperous future.

IV. CONCLUSIONS

National character can not be separated from the people who support preserving the cultural wisdom region. Because the character of the nation is a nation that explore the values of local wisdom to serve as a guide so that a nation is not lost in this modern world. A good education is also becoming one of the factors supporting the creation of a national character within the individual communities. Character education based on local wisdom is expected to improve at least a little by little crisis experienced by the character of this nation now. With the character education based on local wisdom is expected to create generations that is rich in character and wisdom of local culture can develop properly.

Indigenous peoples Tengahan are a society that has a characteristic that is different from other indigenous peoples. Local Wisdom of Indigenous Peoples Tengahan as mutual cooperation, a sense of sincerity, a sense of togetherness, mutual help, and the attitude of preserving tradition. Reflections on the behavior they show a form of seriousness attitude which was planted continuously to our ancestry through a long educational process and have proven efficacy even though the times keep changing and external challenges continue to attack. The values contained in the local wisdom of indigenous peoples Tengahan implemented the learning and familiarized in school. This paper reviews the outline of the values of local wisdom Tengahan, such as mutual cooperation, a sense of sincerity, a sense of togetherness, mutual help, and attitude preserve the tradition can be used as educational development of good character.

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Effect of Motivaton and Creativity on Students' Psychomotor Ability

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Abstract. This research aims to determine: (1) the effect of motivation on students' psychomotor ability; (2) the effect of creativity on students' psychomotor ability; (3) the effect of motivation and creativity as in aggregate on students' psychomotor ability; and (4) the contribution of motivation and creativity on students' psychomotor ability in the subject of Web Programming. This research is an ex-post facto type. The population was sixth semester students of TIK Education Research Program of PGRI Pontianak totaling 217 students. The sample was 135 students with proportional random sampling techniques that determined by the Issac and Michael table. Data collection using a questionnaire. The data was analyzed using regression analysis to test the hypotheses. The results showed that: (1) motivation has a positive and significant effect on students' psychomotor Ability; (2) creativity has a positive and significant effect on students' psychomotor Ability; (3) motivation and creativity as in aggregate had a positive and significant effect on students' psychomotor Ability with 68.88%; and (4) the contribution of motivation is 12.5% and creativity is 32.5% on students' psychomotor Ability in the subject of Web Programming.

Keywords: Motivation; creativity; psychomotor ability.

I. INTRODUCTION

Information and Communication Technology (ICT) in education has been growing rapidly. It can be seen the use of technology in education as a learning resource, assist in the dissemination of information and knowledge without limits of time and space. Improvement of the quality in education can be seen from various aspects such as through the assessment process of learning which is divided into three areas: cognitive, affective, and psychomotor. The success of students in the learning process can be influenced by factors of intern and extern. The factors of intern includes physical and psychological.

One of the example of psychological factors is motivation. If students' learning motivation is high, it can support the success of learning outcomes. But if students' learning motivation is low, it will become an obstacle in learning outcomes. Lecturers must be able to choose the right variety in order to create an attractive learning situations. If lecturers can do that, the students' motivation will be increase and students' learning outcomes will be achieved.

Web Programming is a subject that requires the students to think creatively and able to develop a web-based program. In this subject, students learn about the basic concepts and design the web with a basic structure of Web Programming. In the learning process of understanding the Web Programming, the student obtained not only in terms of the cognitive domain, but the main goal in this research is to develop psychomotor ability of students.

A. Motivation

Motivation can be defined as everything that drives behavior that requires or encourages a person to make ends. Motivation is the driving force that caused the habbit to the spesimal purposes[1].

Motivation is essential to learning [2]. Motivation is an essential component required in the learning process. For students learning motivation can foster the spirit of learning so that students are encouraged to conduct learning activities. Students who have high motivation is able to achieve higher performance. For professors find the motivation to learn from the students was very necessary to maintain and enhance the spirit of learning greater the motivation that created the achievement of learning goals will be even greater.

B. Creativity

Creativity is an experience in express and actualize individual identity in the form of an integrated relationship with oneself, with nature and with others [3]. Processing the power of creativity to do with some of the activities associated with the environment society or family society, time, facilities and infrastructure, and more. Such activities can be a source of learning is effective in enhancing creativity.

Creativity consists of common traits and processes are different in each person, but there are some common features that define creativity, which includes fluency, flexibility, originality and elaboration. Although the general features of creativity and the process differ from person to person there

are some common features that define creativity. They are fluency, flexibility, originality and elaboration as follows [4]. Confidence, dare to take risks, enterprising, ambitious, active adventure, curiosity, consideration, different, tolerance, flexibility are some of the traits of creative people [5].

C. Psychomotor Ability

Psychomotor ability is also known as process skills, the skills that lead to the development of mental ability, physical, and social fundamental as a driver of higher capability within the individual students [6].

Psychomotor components, the dimensions of physical action, in the form of the skills to do, can be trained with the following activities: through select, prepare, assemble and use a set of instruments appropriately and correctly. Limitations of time and facilities in the lab is often a constraint psychomotor development. To resolve these matters, students should take advantage of spare time outside the regular time schedule to train yourself to use the equipment, of course, with the guidance of instructors [7].

Psychomotor learning outcomes can be seen directly in some form of skills. Forms of psychomotor skills, namely: (1) Movement reflex (movement skills at the unconscious); (2) Skills in the unconscious movements; (3) The ability to provide perceptual including visual, auditory distinguish motor, and others; (4) The ability of the physical field, for example, strength, harmony and precision; (5) Movements skills, ranging from simple skills to the complex skills; and (6) capability with respect to non sursive communications such akspersif movement, interpretative [8].

Based on the background that has been described, this research aims to determine: (1) the effect of motivation on students' psychomotor ability; (2) the effect of creativity on students' psychomotor ability; (3) the effect of motivation and creativity as in aggregate on students' psychomotor ability; and (4) the contribution of motivation and creativity on students' psychomotor ability in the subject of Web Programming on ICT Education of IKIP PGRI Pontianak.

II. METHOD

A. Types of Research

This research uses a quantitative approach with ex-post facto type.

B. Time and Place of Research

The research was conducted in ICT Education of IKIP PGRI Pontianak with the address at Jalan Ampera No. 88 Pontianak, Kalimantan Barat, Indonesia. Data collection and processing of research conducted on March until July 2016.

C. Population and Sample of Research

Population of the research is the sixth semester of the students of ICT Education on Web Programming subject. Population numbers are 217 students. The research sample is 138 students. The sampling technique is using proportional random sampling with Isaac and Michael table with level error is 5%.

D. Data Collection Techniques and Research Instruments

The data that collected is related to students' motivation, creativity, and psychomotor ability in Web Programming. Data collection techniques using questionnaires and documentation.

Questionnaires were completed by giving to the students to get the value of motivation and creativity. Documentation used to get the value of students' psychomotor ability in Web Programming.

E. Data Analysis Techniques

Data analysis is used to process the data of research variables. The analysis of this research is using descriptive and inferential statistics.

Descriptive statistics are used to describe the data without making a decision. Descriptive analysis include the mean, median, mode, standard deviation, variance, and skewness.

Inferential statistics are used to perform data calculations and then the results are targeted at populations. The inferential statistics in this research is simple and multiple linear regression.

Before doing the data analysis, the data should tested with the requirements analysis. Requirements analysis is used to see the condition of the data is feasible or not, including normality, linearity and multicollinearity test. Here are the results of the test requirements analysis.

Table 1. Results of Testing Requirements Analysis

Variable	Data Normality	Data Linearity	Data Multicollinearity
Motivation	0,327	0,000	1,929
Creativity	0,089	0,000	1,929

Based on Table 1, the data of motivation and creativity are normal, linear, and not correlated. Thus, the data can continue to perform descriptive and inferential statistical analysis.

III. RESULTS AND DISCUSSION

A. Results

The data of the research have been obtained and tested its requirements, then the next step is make calculations and analysis to answer the research hypothesis. Here are the results of data analysis of the research.

1) Descriptive Statistics Analysis

Descriptive statistics analysis describes the variables in generally that consists of variable motivation, creativity, and psychomotor ability. Based on questionnaires that given to 138 students on Web Programming subject, the results are are described as follows:

The results of data analysis of motivation that is obtained by the mean is 76.95, median is 77, mode is 78, the standard deviation is 8.745, variant is 76.482, and skewness is -0.265.

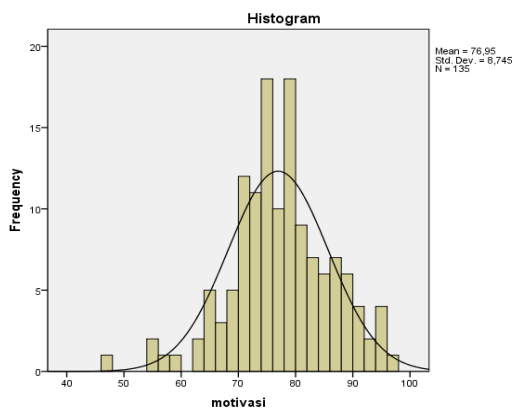


Fig. 1 Histogram of Motivation

The results of data analysis of creativity that is obtained by the mean is 68.50, median is 67, mode is 62, standard deviation is 11.484, variant is 131.879, and skewness is 0.422.

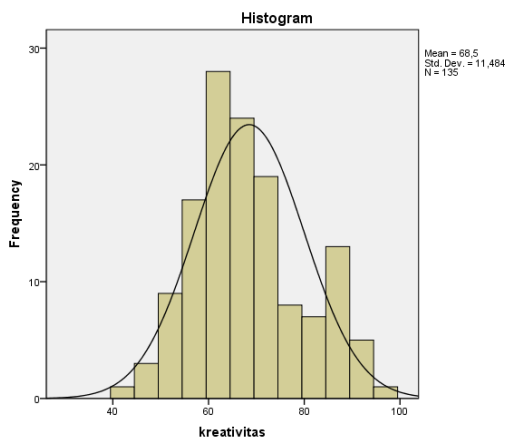


Fig. 2 Histogram of Creativity

The results of data analysis of psychomotor ability is obtained by the mean is 75.44, median is 76, mode is 70, standard deviation is 4.786, variant is 22.905, and skewness is -0.090.

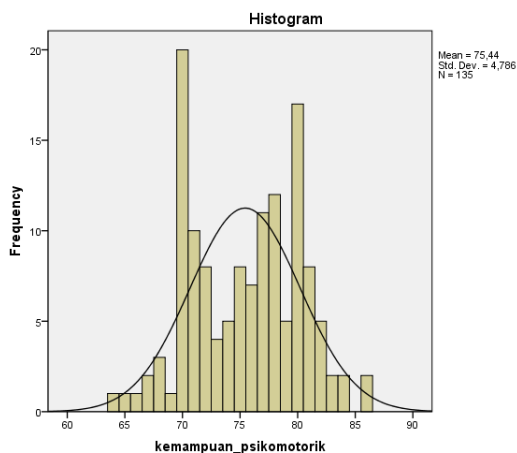


Fig. 3 Histogram of Psychomotor Ability

2) Inferential Statistics Analysis

Inferential statistics analysis is use to see whether or not the correlation between the variables and determine the correlation of the variables. Based on the analysis, the result showed that the correlation value (r) of motivation (X1) and

psychomotor ability (Y) is 0.801 with the coefficient of determination (r²) is 0.642.

The correlation value (r) of creativity (X2) and psychomotor ability (Y) is 0.711 with the coefficient of determination (r²) is 0.506. The correlation value (r) of motivation (X1), creativity (X2), and psychomotor ability (Y) as aggregate is 0.830 with the coefficient of determination (r²) is 0.688. The details of the values can be seen in Table 2.

Table 2. Result of Model Summary

Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate
X ₁ - Y	0,801	0,642	0,639	2,875
X ₂ - Y	0,711	0,506	0,502	3,378
X ₁ ,X ₂ - Y	0,830	0,688	0,568	2,693

To see whether or not the effect can be seen from the sig. of Anova table. The value of Sig. variable < 0.05 can be used to see if the multiple regression model can be used to predict the students' psychomotor ability.

Here is the Anova summary of variable motivation (X1), Creativity (X2), psychomotor ability (Y).

Table 3. Result of Anova

Variable	F	Sig
X ₁ - Y	238,287	0,000
X ₂ - Y	136,016	0,000
X ₁ ,X ₂ - Y	145,650	0,000

Based on Table 3, significance value to the psychomotor ability (Y) of motivation (X1), creativity (X2), and motivation and creativity (X1, X2) as in aggregate is 0,000. It means that the variables of motivation and creativity can be used to predict the psychomotor ability (Y).

Furthermore, the next step is looking for the value of simple and multiple linear regression. The correlation value of motivation on psychomotor ability and creativity on psychomotor Ability can be seen in Table 4.

Table 4. Summary of Simple Linear Regression Coefficient

Variable	Unstandardized Coefficients		T		Sig	
	Constant	X	Constant	X	Constant	X
X ₁ - Y	41,703	0,438	18,961	15,437	0,000	0,000
X ₂ - Y	55,139	0,296	31,249	11,663	0,000	0,000

Based on Table 4, the simple linear regression equation obtained for motivation and psychomotor ability is:

$$\hat{Y} = 41,703 + 0,438X_1$$

Meanwhile the simple linear regression equation for creativity and psychomotor ability is:

$$\hat{Y} = 55,139 + 0,296X_2$$

The correlation value of motivation and creativity as in aggregate on psychomotor ability can be seen in Table 5

Table 5. Multiple Regression Coefficient

Model	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	41,906	2,060	20,340	0,000
Motivation	0,125	0,028	4,431	0,000
Creativity	0,325	0,037	8,791	0,000

Based on Table 5, the multiple linear regression equation obtained for motivation and creativity as in aggregate on psychomotor ability is:

$$\hat{Y} = 41,906 + 0,125X_1 + 0,325X_2$$

B. Discussion

1) Effect of Motivation (X1) on Psychomotor Ability (Y)

Motivation plays an important role in the learning process for both lecturers and students. Knowing the students' learning motivation is necessary for lecturers to maintain and enhance the learning spirit of students. For students' side, learning motivation can increase the spirit of learning on Web Programming.

Based on the analysis of the data, the motivation had a positive and significant effect on students' psychomotor ability of Web Programming at 0.801 and coefficient determination of 0.642 or 64.2%, that classified as good and high. This is confirm the previous result that motivation had a positive effect on students' learning achievement of Economic at 39.3% [9].

The regression equation of motivation (X1) on psychomotor ability (Y) of Web Programming is $\hat{Y} = 41.703 + 0,438X_1$. It means that any increase in scores of student learning motivation, it will be followed by a rise in scores of students' psychomotor ability of Web Programming.

2) Effect of Creativity (X2) on Psychomotor Ability (Y)

Creativity is an activity that raises high imaginative in doing something so that it can get the good results. Creativity in Web Programming is helping students to improve psychomotor ability.

Based on the analysis of data, the creativity had positive and significant effect on students' psychomotor ability of Web Programming at 0,711 and coefficient determination at 0.506 or 50.6%, that classified as good and high. This is confirm the previous result that creativity had a effect on students' learning achievement of Accounting at 21.9% [10].

The regression equation of creativity (X2) on psychomotor ability (Y) on the subject of Web Programming is $\hat{Y} = 55.139 + 0,296X_2$. It means that any increase in scores on the creativity of the students, it will be followed by a rise in scores of psychomotor students' ability of Web Programming.

3) Effect of Motivation (X1) and Creativity (X2) as in Aggregate on Psychomotor Ability (Y)

Psychomotor ability is a skill possessed by the students. Psychomotor ability can improve the ability of the students in critical thinking, synthesis and act that will be more effective and efficient for the students in achieving a good learning outcome of Web Programming.

Based on the results, the coefficient determination is 0.6888. It means that the motivation and creativity as in aggregate give the effect of 68.88% on psychomotor ability, while 31.12% effected by other variables outside of motivation and creativity.

Multiple linear regression equation the effect of motivation (X1) and creativity (X2) on psychomotor ability (Y) on the subject of Web Programming is $\hat{Y} = 41,906 + 0,125X_1 + 0,325X_2$. It means that any increase in score of motivation and creativity of students learning as in aggregate,

it will be followed by a rise in scores of students' psychomotor ability of Web Programming.

4) The Value of Contribution of Motivation (X1) and Creativity (X2) on Psychomotor Ability (Y)

Students' psychomotor ability of Web Programming effected by motivation and creativity. Based on the multiple linear regression equation, it can be seen the contribution of each variable of motivation and creativity are 12.5% and 32.5%. The greatest contribution of students' psychomotor ability based on the results of the research is the students' creativity. This shows that creativity is an important factor in improving the students' psychomotor ability on Web Programming.

IV. CONCLUSIONS

Motivation had positive and significant effect on students' psychomotor ability of Web Programming with regression equation $\hat{Y} = 41.703 + 0,438X_1$. The correlation coefficient (r) is 0.801 and coefficient determination (r²) is 0.642. It means that the motivation variable has the effect of 64.2% of students' psychomotor ability on Web Programming while 35.8% is explained by factors other than motivation.

Creativity had positive and significant effect on students' psychomotor ability of Web Programming with regression equation $\hat{Y} = 55,139 + 0,296X_2$. The correlation coefficient (r) is 0.711 and the coefficient determination (r²) is 0.506. It means that the variable creativity has the effect of 50.6% of the students' psychomotor ability while 49.3% is explained by factors other than creativity.

Motivation and creativity as in aggregate had positive and significant effect on students' psychomotor of Web Programming with regression equation $\hat{Y} = 41,906 + 0,125X_1 + 0,325X_2$. The correlation coefficient (R) is 0.830 and the coefficient determination (R²) is 0.6888. It means that the variable of motivation and creativity as in aggregate had the effect of 68.88% of the students' psychomotor ability of Web while 31.12% is explained by other factors other than motivation and creativity.

The contribution value of students' creativity on students' psychomotor ability is 0.325 and the students' motivation on students' psychomotor ability is 0.125. It means, based on the variables examined, the biggest contribution that affect students' psychomotor ability of Web Programming is creativity.

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Effect of Self Efficacy and Prior Knowledge on Students' Skills

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Abstract. This research aims to determine: (1) Information about the information of self-efficacy, prior knowledge, and skills of students in the subject of Advanced Computer Network course in Information and computer technology education IKIP PGRI Pontianak, (2) The effect of self efficacy on the skills of students in the subject of Advanced Computer Network course in Information and computer technology education IKIP PGRI Pontianak, (3) Effect prior knowledge of the skills of students in the subject of Advanced Computer Network course in Information and computer technology education IKIP PGRI Pontianak, and (4) The effect of self-efficacy and prior knowledge of the skills of students in the subject of Advanced Computer Network course in Information and computer technology education IKIP PGRI Pontianak. This research is an ex-post facto research with correlation design. The independent variable in this research were self efficacy (X_1) and prior knowledge (X_2). While the dependent variable in this research is the students' skills (Y). The sample in this research were 108 students of Information and computer technology education IKIP PGRI Pontianak. The analysis technique used is simple regression analysis, and multiple regression analysis. Results of the research: (1) The level of prior knowledge of students of 79.146 at intervals of 50.70 - 99.99, the level of self-efficacy of students at 56.45 with intervals of 48-65, and the skill level of students at 72.38 with intervals of 51.50 - 81.50. (2) there are significant positive and significant correlation between self efficacy against students' skills by 9.2%. (3) there is a positive and significant influence between the prior knowledge the students' skills of 10.7%. (4) there are significant positive and significant correlation between self-efficacy and prior knowledge the students' skills of 17.4%.

Keyword: Self Efficacy, Prior Knowledge, Students' Skills.

I. INTRODUCTION

Education was a natural process that takes place naturally in the human life in the learning environment. In the process, human life increasingly complex and advanced that family education that promotes the formation of a natural person is no longer adequate to deal with the development and progress of science and technology. Education is an important factor for the survival of the nation in all sectors of life. This can be realized by providing an understanding of the scientific material. The academic materials can be obtained through several educational paths.

Formal channels for higher education in West Kalimantan to experience rapid growth. Institute of Teacher Training and Education Indonesian Teachers Association (PGRI Teachers' Training College) Pontianak is one of the institutions that provide education formal higher education level. Formal channels is closely associated with prior knowledge possessed by every human being.

Prior knowledge is a skill that involves knowledge and the development of intellectual skills of students. Prior knowledge is so that students are able to explore the world around through the five senses so that the

acquired knowledge students will be able to continue living and becoming a better human being. Prior knowledge of students into one of the important factors that affect the success of the learning process, it can be concluded that the initial knowledge is very important and crucial for the achievement of learning outcomes. Prior knowledge is a part that must be have by every student in order to obtain maximum learning results in line with expectations. Besides the prior knowledge that must be have, the student must also have a good psychomotor skills in order to have the ability to be ready to compete.

Psychomotor skills, especially in the subject of the Advanced Computer Network is the ability to perform the procedures and practices have a professional attitude. Procedure practice (analyzing goals, equipment and materials, setting the pace of work, carry out the practice, test circuits, and test circuits) require hard skills were adequate and carried out through a process that requires thinking carefully, skilled, honest, working together, open minded. The work attitude is soft skills that in its application can be extended not only apply in education but could also apply to the more general purposes such as in situations where work and in society.

Self efficacy is a person's judgment against himself or level of confidence regarding its ability in a certain task to achieve specific results. More *self efficacy* expressed reliably predict the scope of career choice, occupational interests, tenacity in difficult areas and personal effectiveness. Students with low *self-efficacy* may avoid subjects that many duties, especially for challenging tasks, while students with higher *self-efficacy* that has a great desire to do his duties. Confidence is how much confidence about themselves that a person is able to do something or act successfully.

Based on the explanation of the *self-efficacy* and assignment of initial knowledge, and its relation with the skills that students will do a study to see the effect of *self-efficacy* and the assignment of initial knowledge of the students' skills. Research will be carried out on students of Education Studies Program Information and Computer Technology course on Advanced Computer Network.

This study aims to: (1) Information about the information of self efficacy, prior knowledge, and skills of students in the subject of Advanced Computer Network course in Information and computer technology education IKIP PGRI Pontianak, (2) The effect of self efficacy on the skills of students in the subject of Advanced Computer Network course in Information and computer technology education IKIP PGRI Pontianak, (3) Effect prior knowledge of the skills of students in the subject of Advanced Computer Network course in Information and computer technology education IKIP PGRI Pontianak, and (4) The effect of self efficacy and prior knowledge of the skills of students in the subject of Advanced Computer Network course in Information and computer technology education IKIP PGRI Pontianak.

Self Efficacy

According to Bandura Schunk, Pintrich, & Meece [1] explains that, "*self efficacy is defined as, people judgments of Reviews their capabilities to organize and execute courses of action required to ATTAIN designates the type of performance*". Based on these opinions can be interpreted *self efficacy* assessment of a person of the ability to organize themselves and do the work reflected in the actions undertaken in order to achieve objectives.

Broadly speaking, *self efficacy* can be categorized into two forms, namely *self efficacy* and *self efficacy* is low. Santrock [2] explains, students with low *self efficacy* in learning can avoid learning task, particularly challenging while students with higher *self efficacy* will face a challenging task of learning with a great desire. Students with high *self efficacy* will be more diligent in learning task than students with low *self efficacy*.

Woolfolk [3] cites the opinion of Bandura about the sources of *self efficacy*, namely: *enactive mastery experiences, physiological and emotional arousal, vicarious experiences, and verbal persuasion*.

Prior Knowledge

Hailikari [4] defines prior knowledge as a combination of knowledge and skills. According to Gerlach and Ely (Harjanto [5]) prior knowledge can be determined by performing initial tests. Information on

previous knowledge of students will assist faculty in determining the appropriate methods for implementing the learning process.

Prior knowledge is a part that must be mastered by every student in order to obtain maximum learning results in line with expectations. This is in line with the statement Yamin [6] that the knowledge and skills needed in the profession, therefore the theoretical knowledge has been provided since the beginning of professional education and skills training programs to support the applicative knowledge.

Sudarma Statement [7] also supported as suggested that prior knowledge students has become one of the important factors that influence the success of learning. By looking at the researchers found, it can be concluded that the initial knowledge is very important and crucial for the achievement of learning outcomes, including the attainment of expertise. Preliminary knowledge will be a provision for students who will develop their potential. Adequate prior knowledge will give a positive implication on achieving better learning outcomes.

Skills

Nadler [8] is a skill that requires practice or activity can be interpreted as an implication of skills. Sukardi [9] Psychomotor a more knowledge based on the development of mental processes through aspects of muscle and shaping students' skills.

Psychomotor learning outcomes according to Butler [10] into three, namely *specific responding, motors chaining* and *rule using*. In *responding specific* level, students are able to respond to the things that are physical (which can be seen, heard, or touched), or perform a skill that single character, for example holding a racket, holding bed for table tennis. In *the motor chaining*, students are able to combine more than two basic skills into one combined skills, such as hitting the ball, sawing with calipers. At the level of *the rule using* the students were able to use his experience to perform complex skills, for example, how to hit the ball accurately to the same energy better results.

II. METHODS

Design

Research on "Effect of Self Efficacy and Prior Knowledge on Students' Skills" using quantitative research, in the form of *ex-post facto research*. The research design used in the study is correlational research. Correlational study used to determine the correlation and look for the value of the influence of self efficacy and prior knowledge of the students' skills in the subject of Advanced Computer Network course in the second semester of Studies Program Information and computer technology education IKIP PGRI Pontianak.

Location Research

Research on "Effect of Self Efficacy and Prior Knowledge on Students' Skills" conducted in Studies Program Information and computer technology

education IKIP PGRI Pontianak in Ampera street No. 88.

Research Subject

Subjects used as a data source. Total sample was determined by using the table *Issac*. Based on the number 165 students population, the number of samples used in this study as many as 108 samples of students. Samples of students were selected using purposive sampling.

Data Analysis Technique

The obtained data concerns some matters of self efficacy, prior knowledge, and students skill. To obtain data, this study used questioner for self efficacy, documentation from learning outcomes in Basic Computer Network for prior knowledge, and portofolio assessment for students skill in Advance Computer Network.

The data analysis technique used to test the hypothesis aims to prove the hypothesis that there is in research. Hypothesis testing using linear regression analysis and multiple linear SIMPLE. Simple linear regression analysis is used to determine the effect of one independent variable and one dependent variable without the influence of other variables. The analysis carried out is to look for a regression between the self efficacy of the students' skills, prior knowledge of the students' skills.

Multiple linear regression analysis is a linear relationship between two or more independent variables with the dependent variable. This analysis aims to predict the value of the dependent variable when the independent variable values increase or decrease. The result of data analysis for the requierment test is presented in Table 1, 2, and 3.

Table 1. Normality Test

Variable	Data Normality	Significance	Conclusion
Self Efficacy	0.379	0.05	Normal distribution
Prior Knowledge	0.526	0.05	Normal distribution
Students skills	0.291	0.05	Normal Distribution

Table 4. Descriptive analysis

Variable	Mean	Median	Modus	Std. Dev	Min	Max	Range
Self efficacy	56.45	56	59	3.408	48	65	17
Prior knowledge	79.146	80.20	99.99	10.626	50.70	99.99	49.29
Students skills	72.38	73.25	76	5.681	51.50	81.50	30

Table 4 reveals the statistical analysis results of self efficacy, prior knowledge, and students skills. Statistical analysis of self efficacy shows the score of mean, median, mode, standard deviation, minimum, maximum,

Table 2. Linearity Test

Variable	Deviation from Linearity	Significance	Conclusion
Self Efficacy-Students Skills	0.611	0.05	Linear
Prior Knowledge-Students Skills	0.158	0.05	Linear

Table 3. Multicollinearity Test

Variable	Collinearity Statistic	Conclusion
Self Efficacy	0.978	Not correlated
Prior Knowledge	0.978	Not correlated

Table 1 reveals that the variables, namely self efficacy, prior knowledge, and students skills, both in normal distribution. Table 2 reveals that the variables self efficacy with students skill and prior knowledge and students skills have linear correlation. Table 3 reveals that the variables self efficacy and prior knowledge not have correlation. Based on thus finding, they are applicable in inferential analysis.

III. RESULT AND DISCUSSION

Descriptive Analysis

The data on prior knowledge taken based learning outcome from the basic computer network course, the data on self efficacy taken based questioner, and the data on students skills taken based protfolio assessment. Based on the data, then performed descriptive analysis which presented in Table 4.

and range were 56.45, 56, 59, 3.408, 48, 65, and 17 respectively. Lowest ideal score for self efficacy was 20 and highest ideal scores was 80. With an mean of self efficacy was 56.45, the self efficacy fit in good category. Statistical analysis of prior knowledge shows

the score of mean, median, mode, standard deviation, minimum, maximum, and range were 79.146, 80.20, 99.99, 10.626, 50.70, 99.99, and 49.29 respectively. Lowest ideal score for prior knowledge was 0 and highest ideal score was 100. With mean of prior knowledge was 79.146, prior knowledge fit in good category. Statistical analysis of students skills show the score of mean, median, mode, standard deviation, minimum, maximum, and range were 72.38, 73.25, 76, 5.681, 51.50, 81.50, and 30 respectively. Lowest ideal score for students skills was 0 and highest ideal score was 100. With mean of students skills was 72.38, students skill fit in good category. Based on that, self efficacy, prior knowledge, and students skills in advance computer network courses was in good categories.

Effect Self Efficacy on Students' skills

Effect self efficacy on students' skills in the subject of Advanced Computer Network course in Information and computer technology education IKIP PGRI Pontianak using simple linear regression. The result of correlation data of self efficacy and student skills used to see magnitude of self efficacy on student skills is presented in table 5.

Table 5. Correlation of Self Efficacy for Student Skills.

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	0.304	0.092	0.84	5.438

Based on table 5, the magnitude of the correlation value of self efficacy on student skills is accountable by looking at the value of R in the table. Furthermore, to determine the magnitude of the coefficient of determination refer to R Square. The magnitude of the correlation coefficient (R) and determination coefficient (R Square) are 0.304 and 0.092. It means 9.2% of students skills is determined by self efficacy, while 90.8% of student skills is determined by other factors. This result can be interpreted that the self efficacy provide a positive and significant to increase students skill in advanced computer network courses although still in the low category. The low category of correlation between self efficacy and students skills showed that the role of self efficacy to gain skill in advance computer network course is not maximized.

Simple linear regression of self efficacy on students skills is a regression calculation of self efficacy towards students skills. Simple linear regression model has effect, it can be seen from significance value contained in Anova table. The value of variable sig. < 0.05, simple regression models can be used to predict the students skill. The following table anova can be seen in table 6.

Table 6. ANOVA Self Efficacy on Student Skills.

Model	Sum of Square	df	Mean Square	F	Sig.
Regression	318.758	1	318.758	10.78	0.001
Residual	3134.677	106	29.572		
Total	3453.435	107			

Based on table 6, it is obtained a significance value for student skills at 0.001. It means self efficacy can be utilized to predict the students skills. The next step is analyze the regression equation can be seen in table 7.

Table 7. Coefficients Self Efficacy on Student Skills.

Model	Unstandardized Coefficients B	Std. Error	t	Sig.
Constant	43.789	8.724	5.019	0.000
Self Efficacy	0.506	0.154	3.283	0.001

Table 7 reveals the regression equation, namely the constant value (a) amounted to 43.789 and regression coefficient self efficacy of 0.506. Based on coefficient table, the value of statistical significance (Sig.) on constant and self efficacy shows ≤ 0.05 , and the regression model can be used to determine the value of students skills. The regression equation obtained:

$$Y = 43.789 + 0.506 X_1$$

The constant value of 43.789 indicates if there is no self efficacy (X_1) then students skills (Y) score is 43.789. Regression coefficient of 0.506 indicates each additional self efficacy (X_1) score will improve students skills (Y) of 0.506.

Effect Prior Knowledge on Students' skills

Effect prior knowledge on students' skills in the subject of Advanced Computer Network course in Information and computer technology education program, IKIP PGRI Pontianak using simple linear regression. The result of correlation data of prior knowledge and student skills used to see magnitude of prior knowledge on student skills is presented in table 8.

Table 8. Correlation of Prior Knowledge for Student Skills.

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	0.328	0.107	0.99	5.392

Based on table 8, the magnitude of the correlation value of prior knowledge on student skills is accountable by looking at the value of R in the table. Furthermore, to determine the magnitude of the coefficient of determination refer to R Square. The magnitude of the correlation coefficient (R) and determination coefficient (R Square) are 0.328 and 0.107. It means 10.7% of students skills is determined by prior knowledge, while 89.3% of student skills is determined by other factors. This result can be interpreted that the prior knowledge provide a positive and significant to increase students skill in advanced computer network courses although still in the low category. The low category of correlation between prior knowledge and students skills showed that the role of self efficacy to gain skill in advance computer network course is not maximized.

Simple linear regression of prior knowledge on students skills is a regression calculation of prior knowledge towards students skills. Simple linear regression model has effect, it can be seen from significance value contained in Anova table. The value of variable sig. < 0.05, simple regression models can be used to predict the students skill. The following table anova can be seen in table 9.

Table 9. ANOVA Prior Knowledge on Student Skills.

Model	Sum of Square	df	Mean Square	F	Sig.
Regression	371.121	1	371.121	12.76	0.001
Residual	3082.314	106	29.078		
Total	3453.435	107			

Based on table 9, it is obtained a significance value for student skills at 0.001. It means prior knowledge can be utilized to predict the students skills. The next step is analyze the regression equation can be seen in table 10.

Table 10. Coefficients Prior Knowledge on Student Skills.

Model	Unstandardized Coefficients		Std. Coef. Beta	t	Sig.
	B	Std. Error			
Constant	58.508	3.917		14.49	0.000
Prior Knowledge	0.175	0.049	0.328	3.57	0.001

Table 10 reveals the regression equation, namely the constant value (a) amounted to 58.508 and regression coefficient self efficacy of 0.175. Based on coefficient table, the value of statistical significance (Sig.) on constant and prior knowledge shows ≤ 0.05 , and the regression model can be used to determine the value of students skills. The regression equation obtained:

$$Y = 58.508 + 0.175 X_2$$

The constant value of 58.508 indicates if there is no prior knowledge (X_2) then students skills (Y) score is 58.508. Regression coefficient of 0.175 indicates each additional prior knowledge (X_2) score will improve students skills (Y) of 0.175.

Effect Self Efficacy and Prior Knowledge on Students' skills

Effect self efficacy (X_1) and prior knowledge (X_2) on students' skills (Y) in the subject of Advanced Computer Network course in Information and computer technology education program, IKIP PGRI Pontianak using multiple linear regression. The result of correlation data of self efficacy, prior knowledge and student skills used to see magnitude of self efficacy and prior knowledge on student skills is presented in table 11.

Table 11. Correlation of Self Efficacy and Prior Knowledge for Student Skills.

Model	R	R	Adjusted	Std. Error of
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	Square	R Square	The Estimate
1	0.417	0.174	0.158

Based on table 11, the magnitude of the correlation value of self efficacy and prior knowledge on student skills is accountable by looking at the value of R in the table. Furthermore, to determine the magnitude of the coefficient of determination refer to R Square. The magnitude of the correlation coefficient (R) and determination coefficient (R Square) are 0.417 and 0.174. It means 17.4% of students skills is determined by self efficacy and prior knowledge, while 82.6% of student skills is determined by other factors.

Multiple linear regression of self efficacy and prior knowledge on students skills is a regression calculation of self efficacy and prior knowledge towards students skills. Multiple linear regression model has effect, it can be seen from significance value contained in Anova table. The value of variable sig. < 0.05, multiple regression models can be used to predict the students skill. The following table anova can be seen in table 12.

Table 12. ANOVA Self Efficacy and Prior Knowledge on Student Skills.

Model	Sum of Square	df	Mean Square	F	Sig.
Regression	601.49	2	300.747	11.07	0.000
Residual	2851.941	105	27.161		
Total	3453.435	107			

Based on table 12, it is obtained a significance value for student skills at 0.000. It means self efficacy and prior knowledge can be utilized to predict the students skills. The next step is analyze the regression equation can be seen in table 13.

Table 13. Coefficients Self Efficacy and Prior Knowledge on Student Skills.

Model	Unstandardized Coefficients		Std. Coef. Beta	t	Sig.
	B	Std. Error			
Constant	35.564	8.74		4.07	0.000
Self Efficacy	0.435	0.15	0.26	2.91	0.004
Prior Knowledge	0.155	0.05	0.29	3.23	0.002

Table 13 reveals the regression equation, namely the constant value (a) amounted to 35.564, regression coefficient self efficacy of 0.435, and regression coefficient prior knowledge of 0.155. Based on coefficient table, the value of statistical significance (Sig.) on constant and independent variable shows ≤ 0.05 , and the regression model can be used to determine the value of students skills. The regression equation obtained:

$$Y = 35.564 + 0.435 X_2 + 0.155 X_1$$

The constant value of 35.564 indicates if there is no self efficacy (X_1) and prior knowledge (X_2) then students skills (Y) score is 35.564. Regression coefficient of model indicates each additional self efficacy (X_1) and

prior knowledge (X_2) score will improve students skills (Y) of $0.435 + 0.155 = 0.590$. Based on regression equation can be concluded that the more dominant variable in influencing students' skills is self efficacy.

IV. CONCLUSION

Based on the research and the data analysis of this research on the Effect of Self Efficacy and Prior Knowledge againts Students Skills in Advanced Computer Networking, can be conclusion level of prior knowledge, self-efficacy, and skills of students in the Advance Computer Networks fit in good category from their mean value. The level of self-efficacy of students at 56.45 with intervals of 48-65, the level of prior knowledge of students of 79 146 at intervals of 50.70 - 99.99, and the students skill level at 72.38 with intervals of 51.50 - 81.50.

There is a positive and significant effect between self efficacy against students 'skills in the Advance Computer Network Course. The magnitude of the effect of self-efficacy on the skills of students in the Advance Computer Network Course at 9.2%. This magnitude indicates that there is a relationship, but in low category. Therefore, student self efficacy need to be improved in advanced computer network course.

There is a positive and significant effect between prior knowledge againts students skills in the Advanced Computer Network Course. The magnitude of the effect of prior knowledge on the students skills in the Advanced Computer Network at 10.7%. This magnitude indicates that there is a relationship, but in low category. Therefore, student prior knowledge need to be improved in advanced computer network course.

There is a positive and significant influence between prior knowledge and self efficacy againts students 'skills in the Advanced Computer Network. The magnitude of the effect of variable self efficacy and prior knowledge againts students skills in the Advanced Computer Network at 17.4%.

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BLENDING LEARNING METHOD BASED ON LOCAL WISDOM AS A SPIRITUAL GUIDANCE HOLY TRINITY COMMUNITY IN DISTRICT BENGKAYANG

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Abstract. Bengkayang is one of the districts the outermost in Indonesia. The district has limitations and underdevelopment in various fields, one of which is in the field of education. Writing this article aims to show that blended learning based on local wisdom is very helpful coaching Holy Trinity Community (HTC) in the district Bengkayang. It has been proven from previous studies, suggesting that coaching HTC with blended learning to be more flexible, effective and efficient. Blended learning has been applied HTC with a combination of conventional learning and e-learning in most areas in Indonesia. With the blended learning, the process of spiritual guidance becomes more flexible, effective and efficient so as to improve student in district Bengkayang.

Keywords: Blended learning, local wisdom

I. INTRODUCTION

In this era of globalization, the development of technology in education is very rapid so that the quality of education is increasing, but results of study students at one high school in district Bengkayang is very low because qualified teaching staff and infrastructure in high school is not adequate. It has been proven that when the early half of the new students, who are mostly from district Bengkayang difficult to learn. Education Fund Management Institution (LDPP) revealed that Bengkayang is one of outermost education district in west Borneo. When workshop west Borneo governor in 2010 also stated that the output of education in West Borneo is very low in terms of both the quality of teaching and education services are uneven. However, the District Education Office district Bengkayang stated that the quality of education in Bengkayang is very low so they have the highest priority targets for the next 5 years that is through programs and activities that support the promotion of education and achieving their vision and mission (Disdikbud, 2013).



II. METHODOLOGY

This research uses the qualitative methods. The method of this research is in-depth observations and interviews and the interviewees were used the five student members and one faculty adviser Holy Trinity Community (HTC). HTC at the high school located in Bengkayang. This research also used data from the supporters of the thesis entitled "Implementation of e-Learning As a Means of Education for Spiritual Development Members HTC (Holy Trinity Community)," (2015).

III. DISCUSSION

Local wisdom in district Bengkayang

A problem in society will cause a response. Local knowledge is a positive response to deal with problems that occur. There are some local wisdom of district Bengkayang include:

First; the majority of people's livelihood in district Bengkayang is planters, farmers, rubber incisions. As farmers and planters, sometimes they care for and maintain the gardens and farm during the outcome of the gardens and farm. Harvest results and agricultural takes weeks or it may be monthly and yearly depending on what is planted. Another case with rubber incisions, initially they made cuts on rubber trees for rubber stream they wish to take and then they let a few hours (depending on the age rubber) latex container until the container is full. They did this many times and finally they sell to a result of nick rubber. Therefore wait for crop plantation/agriculture and nicks rubber takes quite a

long time so they often have a habit of hanging out with friends so that they have a great kinship rope.

Farmers, has a culture that is called the new year rice, the party culture is done to celebrate the rice harvest so they celebrate it in a way coming from house to house. While growers produce corn, fruits, palm oil, and the others.

Second; utilization of wood available in nature often they use to craft the wood so they are very creative and quick in terms of carpentry. This is evident by the presence of some people who have a lot of work skills in carpentry.

Third; West Borneo has many rivers, so that small children are proficient to swim. Swimming is one of the entertainment for them, not just to clean the body, but also as a race and sports arena in the river. Examples swimming race, canoe race, and so forth.



Local constraint of district Bengkayang

First; custom to wait for the harvest of agriculture, plantation, and rubber is hereditary in their lives. Vegetables and fish used for the daily needs can be obtained from the forest so that they have a lot of spare time in daily life so we can say they are spoiled by nature. However, often time it was used for gambling, drunk, party and chatting with unlimited time. According to Metropolis dated on September 29, 2016 stated that gambling high in West Borneo.

On the other hand, residents of the district Bengkayang there is a hard worker such as traders, collecting materials, processing of materials so that the time, energy and thought they were drained at work that cause them not to think about other aspects of life which even missed technological development. Sambas in society often call with *urang nang kekapa'an, tehalle* meaning time and energy severely depleted that it can not think of any other aspect of life.

Second; after harvest or to open up new land often they cut timber in the forest and burn the forest without regard to the effects such as landslides, flooding, air pollution, and so forth.

Third; using the river water is not hygienic for bathing, washing, relieving themselves even for a drink. The river water has high levels of metals in some places due to a gold mine so that the river water becomes turbid and high metal levels (Badan Geologi, 2016). High levels of metals affects the brain's ability to think. On the other hand, the existence of oil palm plantations surrounding the lack of water for bathing, washing and drinking so they have to walk far to find the river although the river is turbid. The majority of them do not have wells due to cost limitations and the lack of water because it is absorbed by the oil palm.

Fourth; passive mental contained on citizens Bengkayang hereditary making it less responsive to existing problems (Sambas people refer to it as '*Lenne Gilla*') due to their need to exist in nature and habit of waiting for the harvest to spend free time in vain. They do not think about the dangers of the forest bare and air pollution when burned forest. On August through October 2015 have occurred that affect air pollution until at Kuching, Malaysia. Air pollution is caused by forest fires that often occur in previous years. Establishment of a beautiful environment for growing vegetables with *vertikultur* method is not performed. *Vertikultur* derived from the word 'vertical' and 'culture' which means the cultivation of plant by way of the story (Benny Sanusi, 2011



Blended learning method

Blended learning is a method that combines two methods of learning that e-learning and traditional learning classroom. However, both these learning methods have significant differences in the learning process which is a method that is online and offline.

Harvey Singh and Chris Reed, (2001) argues that blended learning is a learning method that uses more than one method that optimizes outcomes and costs. Therefore, Singh (2003) reaffirmed his opinion that:

Blended learning focuses on optimizing achievement of learning objectives by applying the "right" learning technologies to match the "right" personal learning style to transfer the "right" skills to the "right" person at the "right" time.

Thorne (2003) also expressed his opinion on the definition of blended learning that is:

"a way of meeting the challenges of tailoring learning and development to the needs of individuals by integrating the innovative and technological advances offered by online learning with the

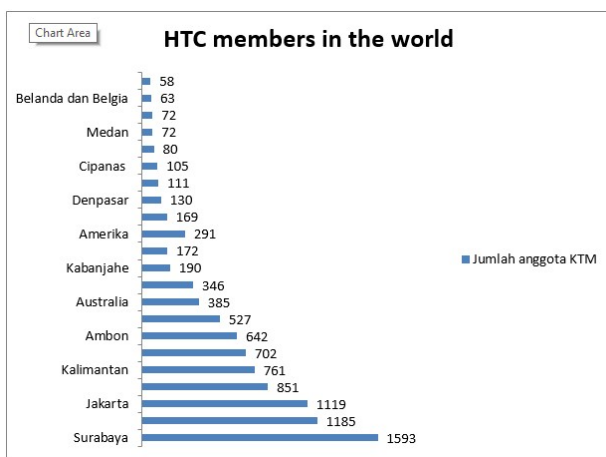
interaction and participation offered in the best of traditional learning".

Integrating the e-learning environment and is a fusion of traditional complementary. E-learning environment generates flexibility and efficiency that can not be found in traditional learning environment in the classroom. While the learning environment in the classroom to show a concept of learning face-to-face that support social interaction that is required in the learning process. Therefore, it can be said that blended learning is a combination of learning face to face and e-learning are complementary.

Blended learning provides many advantages both in cost reduction, efficiency of time and place that is flexible so as to provide ease of understanding and motivation for each individual in learning face to face.

Past research

HTC is Holy Trinity Community which is one of the lay religious community. Coaching members HTC blended learning methods that have been performed worldwide with 100 respondents from various countries in 5 continents.



Thesis titled "Implementation of e-Learning As a Means of Education for Spiritual Development Members KTM (Holy Trinity Community)" produces as follows:

1. Aspects benefits, KTM respondents agree strongly agree 45.7% and 33.7%.
2. Aspects of the use of *e-learning* as a complementary response states agree strongly agree 46.3% and 36.3%.

TABLE I
RESULTS OF INTERVIEW

No.		Statement
1.	Benefits of e-learning	<ul style="list-style-type: none"> · More familiar activities worldwide KTM · Obtaining information up to date
2.	flexibility	<ul style="list-style-type: none"> · KTM easier to obtain any materials
3.	Effective and efficient	<ul style="list-style-type: none"> · Time to upload and download can be tailored to the needs of students · A place of learning in e-learning can be done anywhere

IV. CONCLUSIONS

Blended learning is a combination of teaching methods between conventional e-learning and is already widely used in some areas in Indonesia, both in the field of education, spiritual formation, and so forth, for example, HTC spiritual development that has lasted until today. But the spiritual development HTC with blended learning method is still used by members of HTC in Bengkayang because of the results of in-depth interviews at 5 HTC members stated that they had never done before e-learning.

District Bengkayang is an area located on the border between Malaysia and West Borneo. However, Bengkayang has a quality education is minimal so it requires more time to understand and learn. From observations and in-depth interviews of five student members HTC and 1 builder HTC in a high school Bengkayang, they pointed out that the presence of blended learning then they are more easily expand their horizons and their knowledge that they can not get in a conventional classroom with downloading materials and obtain more information without thinking about time, space.

Blended learning method based on local wisdom to provide values, ethics and morals that can support the quality of spiritual development HTC Bengkayang. With local wisdom, the builder can customize according to the conventional coaching culture in district Bengkayang so as to bridge the coaching HTC Bengkayang.

Local wisdom is also easier flexibility of faculty adviser and member of HTC are nurtured. In terms of coaches, they are easier to socialize guidance material both online and conventional. Similarly, training material can be downloaded directly and more easily understood by members of HTC.

Efficiency and effectiveness of the time and place for this development is also seen from time and place that is not binding for the builder to enter the material and provide information for members HTC while abroad or in Indonesia without being bound by time and place. Similarly, the members of HTC in downloading, obtaining information and guidance to learn the material without being bound by time and place so that they can interact with supervisors, fellow HTC members who are far away though.

It can be said blended learning method based on local wisdom can enhance spiritual development in Bengkayang. It is advised to learning for students in Bengkayang.

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ENHANCING COLLEGE STUDENTS' CRITICAL THINKING ABILITY THROUGH VARIED DISCUSSION METHOD IN CIVIC EDUCATION SUBJECTS

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Abstract. This study aims to improve students' critical thinking skills in the subject of civic education in order to be able to solve the problems of citizenship. The learning method used in this study is varied discussion method. This research applied qualitative approach with action research method, and the form of this research was classroom action research.. Results showed varied discussion method can improve critical thinking skills. Critical thinking skills of students using varied discussions have increased in each cycle it can be seen the results of each cycle. In the first cycle of critical thinking of students' average 55%, the second cycle of critical thinking an average of 65% and critical thinking siklus III average of 80%.

Keywords: Varied discussion methods, students, critical thinking

I. INTRODUCTION

In line with the development of science and technology, humans are in demanded to be creative and be able to develop themselves both on the intellectual and social aspects. In the era of globalization, educated human resources and able to compete sure will be able to follow the development of knowledge and technology.

In the era of globalization, human should develop citizenship competences (civic competence). One of those competences citizenship is citizenship skills (civic skills) which is closely related to college students, for example it can be seen from their ability to criticize public policy. College Students as young intellectuals should be able to have a critical thinking regarding every public policy created by the government, both in the local and national scal. But, the reality that arises in everyday life, there is a tendency of having low criticality (as a form of civic skills) of college students to public policy issued by the government. College students sometimes are apathetic to everything that arises as a companion result of the policy from the government. College students critical thinking to actual public policy can be developed or enhanced by applying learning strategies that can bring an active participation of students in the learning process.

Civics learning in College generally practiced by the lecturers which emphasize more on knowlegde and understanding, while other aspects of application, analysis, synthesis, and evaluation even just a small part of learning to do. This leads to poorly trained students to develop their mind to solve problems and apply the concepts they have learned in real life. Students are less able to express their

arguments so that students' critical thinking skills will develop.

Here are presented some of the results of previous research that are relevant to the study of critical thinking skills. Redhana research results I. W. (2003) concluded that the activity of learning and students' critical thinking skills can be enhanced through the implementation of cooperative learning with problem solving strategies. In line with the opinion of the research results by Anggreini L. (2012: 1-15) also concluded that the application of the case study method can improve students' critical thinking skills which are characterized by an increased ability of students to identify problems, analyze problems, find information, megambil conclusions and present results of analysis in front of the class. While a research by Dwijananti, P and Yulianti, D (2010), the results showed students' critical thinking skills that can be developed on a learning model of problem based learning are: classifying, assume, predict, hypothesizes, evaluate, analyze, and make conclusions. With the average value of each of the first cycle, second cycle and third cycle, respectively: 63.10; 76.32; and 79.80. The increase in the average value of critical thinking skills along with the increasing number of students are categorized as very critical and critical in the hierarchy of categories critical thinking skills.

While a research by Dwijananti, P and Yulianti, D (2010), the results showed students' critical thinking skills that can be developed on a learning model of problem based learning are: classifying, assuming, predicting, hypothesizing, evaluating, analyzing, and making conclusions. With the average value of each of the first cycle, second cycle and third cycle, respectively: 63.10;

76.32; and 79.80. The increase in the average value of critical thinking skills along with the increasing number of students are categorized as very critical and critical in the hierarchy of categories critical thinking skills.

Departing from the results of the study, the researcher thinks it is necessary to conduct research on improving critical thinking skills through varied discussion methods. In general, most of lectures are already implementing the learning process by the method of discussion but there is no variation. In this study, researcher views that it is to apply varied method, therefore the variation that has been done is the use of media in the learning process and the cases that need to be resolved relating to issues of citizenship.

II. METHOD

Research on improving students' critical thinking skills through discussion varying methods using a qualitative approach. The method used in this research that action research methods to study the form of classroom action research (PTK). This study is a collaborative action research that is practical based on the real problems in the lecture in the subject Civic Education in Prodi Pancasila and Citizenship Education Teachers' Training College-PGRI Pontianak. Subject of the perpetrator is the one person lecturer Citizenship Education. Subject recipient of the action is 56 students. Subjects who helped in this study is the first lecturer in Citizenship Education.

Data collection technique is the most strategic step in the study, because the purpose of the research is to obtain data. In this study, researchers used data collection techniques such as observation, interviews, documentation, and literature studies. Data analysis techniques in qualitative research is conducted before entering the field, while in the field, and after its completion in the field. Data analysis technique used in this study, namely: data reduction, data presentation, and conclusion / verification.

III. RESULTS AND DISCUSSION

The research was conducted in three (III) cycles. Each cycle comprises several stages such as planning, implementation, monitoring and observation. At the first meeting, the lecturer explained the steps undertaken in varied discussions, and provided direction what things are emphasized in the learning process by using the method of discussion varied.

Planning of the use of the varied discussion method before starting of research activities, the researcher and lecturer were discussing to create lecture scenarios with varied discussion methods. then the researcher prepared a set of learning materials including the syllabus, reference of unit class, as a starting point for the continuation of the lecture Civics. Furthermore, researcher made the observation sheet to see the level of students' critical thinking skills that will be used as documentation of results of students during the lecture progresses.

Before implementing the action, it needs a lesson plan, Suharsimi Arikunto (2014) says that in the planning phase, the researcher finds focal events which needs special concern to be observed, then makes an observation instruments to help researcher to record the facts that occurred during the the action takes place. If it is used

separated forms, namely research and implementation of teacher is different, in the planning phase there should be an agreement between the two of them.

Based on the explanations described above, it can be concluded that the learning plan is a process of preparation of learning materials, the use of instructional media, the use of a model or approach to learning, and the use of time allocation that will be implemented in the learning process to achieve a predetermined goal.

In cycle one (KE) lecturing process was running based on the Reference Unit Class (SAP) that was created by researchers and collaborative lecturers. In this cycle of lecturers has been carrying out actions according to the learning scenarios using varied discussion. Based on observation result, it showed that the ability of the faculty in the application of methods of discussion in cycle 1 rated good 42%, just 50%, and less than 8%. Furthermore, based on observations and tests obtained an average yield of 55% of students critical thinking. This can be explained that the learning about critical thinking involved less college students for lecturers focused more on the mastery of the material, and the discussion seemed monotonous it, no variation given by lecturers resulting students to feel bored. Therefore, for the implementation of the cycle two (II) lecturer should carry out the lecture with discussion method that is punctuated by questions and answers.

In the second cycle (two) the action in this second cycle, each group presented the paper while another group responded. After the lecturer gave comment and reinforcement from the debriefing and discussion group that was been done by the students. Lecturers are already implementing actions in cycle two (II) in accordance with the learning scenarios using varied discussion. The ability of the faculty in the application of methods of discussion in cycle 2 rated good 75%, just 25%, and less than 0%. The average critical thinking an average of 65%. This fact can be explained that the students' critical thinking skills is better than in cycle 1. Although the results were better but the lecturer makde less use of the material that is less challenging and less use of varied media so it was not interesting, lectures unpleasant and serious impressed

In cycle three (III) lecturer had been carrying out actions according to the learning scenarios using varied media-based discussion and problem solving cases. The ability of faculty in applying methods of discussion vary in cycles of 3 rated good 92%, just 8%, and there is no shortage. Furthermore, based on observations and tests obtained an average yield of 80% of critical thinking skills. This fact can be explained that the students' critical thinking skills was better than the action cycle 2 and it can be seen from the number of students who express their opinions in a systematic way, had the audacity to ask for an explanation and responding to questions, and to respect the opinions of others.

The implementation of varied discussion method conducted by researcher that there are several stages in the implementation of the varied discussions method conducted by researchers, first, each group presented a paper by 7-10 minutes after that another group responding / ask of the material that is not yet clear. Furthermore, the lecturer

evaluated the results of discussions with students and the lecturer concluded the material had been discussed.

The result above is in line with some experts opinions as stated by Tjokrodiharjo (Trianto 2007) that in conducting discussions, there will be five stages, namely; stage one telling the objectives and adjust the settings, -stage two, direct the discussion, stage three, held discussions, stage four, end the discussion, and finally, stage five do question and answer brief.

Based on the result of the observation and the test, students' critical thinking skills using varied discussions had increased in each cycle. In the first cycle that the ability of lecturer in the application of methods of discussion in cycle 1 rated good 42%, just 50%, and less than 8%. Furthermore, based on observations and tests of critical thinking of students average 55%. Based on observations, it is showed that the ability of the faculty in the application of methods of discussion in cycle 2 rated good 75%, just 25%, and less than 0%. Furthermore, based on observation and critical thinking test average of 65%. Based on observations showed that the ability of the faculty in the application of methods of discussion vary in cycles 3 rated good 92%, just 8%, and there is no weaknesses. Furthermore, based on observation and critical thinking test average of 80%. This fact can be explained that the students' critical thinking skills is better than the action in cycle 2 because the majority of the students were able to speak systematically, having audacity to question, asking for explanation, giving response to the questions, and respecting others' opinions.

The results of this study as the results study of Redhana I. W. (2003) which concluded that the activity of learning and students' critical thinking skills can be enhanced through the implementation of cooperative learning with problem solving strategies. In line with the opinion of the research results Anggreini L. (2012: 1-15) also concluded that the application of the case study method can improve students' critical thinking skills are characterized by an increased ability of students to identify problems, analyze problems, find information, megambil conclusions and present results of analysis in front of the class. While Dwijananti, P and Yulianti, D (2010) in his research shows students' critical thinking skills that can be developed on a

learning model of problem based learning are: classifying, assume, predict, hypothesizes, evaluate, analyze, and make conclusions. With the average value of each of the first cycle, second cycle and third cycle, respectively: 63.10; 76.32; and 79.80. The increase in the average value of critical thinking skills along with the increasing number of students are categorized as very critical and critical in the hierarchy of categories critical thinking skills.

This notion is in line with what was raised by Ennis (Komalasari, 2011: 266) who splits up the indicator critical thinking skills into five groups, namely: a. Give a simple explanation (elementary clarification), b. Build basic skills (basic support), c. Make inference (inferring). d. Make further explanation (advanced clarification), and e. Set the strategy and tactics (stategies and tactics).

IV. CONCLUSION

Varied methods discussion by posing a problem to be solved and supported by the use of the media can improve students' critical thinking. It can be seen from the fact that many students have been able to express their opinions in a systematic way, they have audacity to ask for an explanation, to response to questions, to analyze certain civics' issues.

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ENVIRONMENTAL LEARNING APPROACHES IN IMPROVING LEARNING OUTCOMES IN ACID-BASE SUBJECT

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Abstract. Learning in the understanding of acid-base chemistry in schools needs to be improved so research to determine differences in learning outcomes between students taught using environmental approaches and methods lectures in class XI SMA on acid-base subject needs to be done. In this study, using a quasi-experimental method using a data collection tool achievement test essay form. The test statistic results of the post-test learning has been obtained Asymp value. Sig (2-tailed) 0,026 that showed the differences between students' learning outcomes with a control experimental class with effect size of 0.63 or much influence difference with the percentage 23.57% which indicated that the learning environment approach can improve learning outcomes of high school students.

Keywords: Environment approach, motivation, learning outcomes

I. INTRODUCTION

Learning activities conducted by the students is a process attempts person to obtain a new change in behavior as a whole, as a result of his own experience in interaction with the environment [1].

The chemistry is a part of natural science that is used to understand natural events through systematic methods. The chemistry that learned not only to find chemicals that directly benefit the welfare of mankind, but the chemistry can be used to understand natural events that are found in everyday life, knowing the nature of the subject and changes its form, applying the scientific method, and can develop ability to propose ideas. [2] stated that chemistry is a part of natural science that studies the composition and structure of chemical substances, as well as its relationship both with the nature of the substance.

According to Susanto [3], there are three problems in science learning. First, science education is oriented on product knowledge only and less oriented to the process of science. Second, science teaching devoted only based on the knowledge without practice or laboratory work. Third, the teaching of science focused on the teacher as the students answered questions in accordance with the taught by a teacher or written textbook. Students should explore their own problems and find answers to the problem through a practicum or trial. Thus it takes innovation in the learning process to make it more meaningful such

as by using the environmental approach. According [4], environmental approach is an approach to learning that seeks to increase student engagement through the utilization of the environment as a learning resource. In line with the statement of [5] which states that environmental approaches to learning can encourage the creation of learning fun and to improve students' motivation in learning. According to [6] with the motivation to make a student able to learn more extra to achieve the learning outcomes as desired.

Based on the observation of the learning process at colloid chemical subject in class XI SMAN 1 Sungai Raya on January 13, 2015, learning process is still centered on the teacher. This causes students to feel bored and not motivated to follow the lesson. The low student motivation adversely affects the student learning outcomes. This is evident from the percentage of completeness learning outcomes of students grade XI in restating the end of the first semester is still low with an average percentage of 15.42%. While the percentage of completeness student learning outcomes in acid-base subject of the school year 2013/2014 amounted to only 38.1%.

Results of interviews with five students of class XI Science shows that students are less able to understand the subject presented for the teacher to explain too fast, rarely use the media, not doing practical and motivating learning to students and often give homework but not discussed as a whole.

Based on these problems researchers interested in conducting research to determine the effect of

learning by using environmental approach to motivation and learning outcomes of students of class XI in acid-base subject.

II. METHOD

This study aims to determine the effect of learning with environmental approach to motivation and learning outcomes of students of class XI IPA at SMAN 1 Sungai Raya on acid-base subject. Forms of research is experimentation with form a quasi-experimental design or quasi-experimental design.

The population in this study were all students of class XI IPA 1, IPA 2 IPA 3 IPA 4 and IPA 5 in SMA Negeri 1 Sungai Raya, while the subjects were students of class XI IPA 1 (30 person) and IPA 4 (23 person). In this research, sample selection was done by purposive sampling. Researchers selected a sample based on learning outcomes for a repeat end of the semester and the results of discussions with teachers of chemistry lesson. Samples were taken two classes based on the average value of replications end of the semester is almost the same. Selection of the control and experimental classes performed by lottery.

Data collection techniques used is a measurement technique with a data collector in the form of learning and motivation questionnaire about the pretest and post-test. The research instruments validated by one lecturer of chemical education in FKIP Untan and the teachers of chemistry subject at SMA Negeri 1 Sungai Raya. Based on trial results obtained information about the level of reliability that the matter is prepared is low with a coefficient of 0.25. Student motivation questionnaire using Likert scale. The response of the statement on the student questionnaire responses are divided into four categories, strongly agree (SS), agree (S), disagree (TS), and strongly disagree (STS). While the test to determine differences in learning outcomes between control and experimental classes used SPSS 22. The detailed procedure of this study consisted of three phases: the preparation phase, the implementation phase, and phase analysis.

The preparation phase: at this stage of the pre-research, prepare research instruments (tests of learning outcomes, motivation questionnaire, lesson plan (RPP) with environmental approach, lesson plan (RPP) with lectures, worksheets, and

observation sheet enclosed used to see keterlaksanaan RPP has been designed.

Implementation stage: at this stage the researchers who act as teachers carry out the scenario for the experimental and control class. First, before the treatment is given to control and experiment class were given a pretest. The purpose of giving this pre-test is to determine the ability of beginning students. And the continuation of the treatment in the experimental class using the practical approach to the environment, while the control class just use the lecture method. Furthermore, given the matter of post-test as a form of evaluation and administration of students' learning motivation with questionnaire to control and experiment class.

Phase analysis: at this stage the researchers conducted an analysis of data have been obtained in the form of a questionnaire learning motivation and achievement test. Then proceed with the preparation of research reports.

III. RESULTS AND DISCUSSION

Research result

Motivation Questionnaire Results of Classroom and Experiment Control

The initial step in processing motivation questionnaire is to calculate the number of students who choose to strongly agree (SS), agree (S), disagree (TS) and strongly disagree (STS) on every item. Only then can be calculated percentage of agree / disapproval for each item. Based on the results of these percentages can be determined interpretation. The results of the control class motivation questionnaire are presented in Table 1.

Based on Table 1 it can be seen that the outline of each indicator on the control class has been reached. This can be seen from the percentages and positive statements and negative interpretation of each indicator > 60% except indicators 1 positive statements and indicators 2 negative statement was <60%. While the experimental class, as well as the percentage of positive and negative statements interpretation of each indicator that is > 60%. So if compared to the results of the experimental class on motivation questionnaire is greater than the control class.

TABLE I
RESULTS OF LEARNING MOTIVATION QUESTIONNAIRE OF CONTROL AND EXPERIMENT CLASSROOM

No	Indicator	Statement	Control class	Experiment
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		class		
			Percentage Interpretation	Percentage Interpretation
1	The drive to learn chemistry	Positive	42,39% Enough	74,17% Strong
		Negative	64,13% Strong	77,50% Strong
2	Their desire to obtain good learning results	Positive	72,82% Strong	85% Very strong
		Negative	58,69% Enough	90% Very strong
3	Hopes of ideals	Positive	64,13% Strong	77,50% Strong
		Negative	67,39% Strong	82,50% Very strong
4	Their interest in learning activities	Positive	73,91% Strong	71,67% Strong
		Negative	71,73% Strong	65,83% Strong
5	Their need for students to gain an appreciation of learning	Positive	66,30% Strong	78,33% Strong
		Negative	73,91% Strong	71,67% Strong
6	Their classroom environment conducive	Positive	75% Strong	81,67% Very strong
		Negative	73,91% Strong	85% Very strong

Based on statistical calculation normality test showed that the data on the control and experimental classes are normally distributed. Therefore, to determine whether there are differences in the two performed by t-test and obtained the value 0.524. Motivation to learn the difference between control and experimental classes are presented in Table 2.

TABLE 2
RESULTS DIFFERENCES IN LEARNING MOTIVATION QUESTIONNAIRE OF CONTROL AND EXPERIMENT CLASSROOM

No	Value Mean ± sd	Control class 41,48 ± 5,57	Experiment Class 47,87 ± 5,85
1	Highest score	55	64
2	Lowest score	28	39

Effect of Environmental Approach to Student Motivation

Having in mind of the motivation questionnaire normality test results of each class, it can look for the influence of environmental approaches on the students motivation to use the formula effect size and obtained values of 1.15 (in the table 0.3749), so that percentage to 37.49%. Based on the calculation effect size of student motivation can be concluded that the influence of environmental approach to the learning outcomes of students belonging to the high criteria for effect size is $ES > 1$.

Learning Outcomes Grade Control and Experiment

In the control group there were 23 students and 30 students in experimental class who follow the learning process. Based on the statistical test for normality result classroom learning control and experiment presented in Table 3.

TABLE 3
LEARNING OUTCOMES OF CONTROL AND EXPERIMENT CLASSES

No	Value Mean ± sd	Control class	Experiment class
1	Pretest	46,30 ± 21,38	65,10 ± 36,20
2	Posttest	55,93 ± 15,51	65,12 ± 29,64

Differences Learning Outcomes Grade Control and Experiment

On normality test results of pretest control and experiment class shows that one among distributed data is not normal. So to test his hypothesis used U Mann-Whitney test and obtained Asym. Sig. values (2-tailed) is 0.187, which means there is no difference between the initial ability of control and experimental classes. Therefore, to determine differences in learning outcomes between control and experimental classes use the value of the post-test. In the post-test normality test showed that one among the data were not normally distributed. So to test his hypothesis used U Mann-Whitney test and obtained Asymp. Sig. values (2-tailed) 0.026, which means there are differences in learning outcomes between the control and experimental classes.

Effect of Environmental Learning Approach to Student Results

Having in mind the learning outcomes of each class, are used to determine the influence of the learning environment on student learning outcomes using effect size. Based on the calculation of the effect size obtained values of 0.63 (in the table 0.2357) so the percentage is 23.57%. Effect size of the calculation result of learning can be concluded that the influence of environmental approach to the learning outcomes for students classified as moderate effect size is > 0.4 .

Discussion Classroom Learning Process Control

During the learning process there are some students who do not listen to the teacher's explanations, there is a busy themselves (talking with friends) and there is also another lesson task. Even some students out of the classroom with a reason to washroom. As teachers deliver subject only a few people are paying attention. When the teacher gives students the chance to ask questions

about the subject that was submitted, no student is going to ask. Then the teacher went on to explain the hope that they have understood the subject described earlier.

During the learning process seen student lackluster in completing the tasks assigned by the teacher and less enthusiastic when the teacher explains the subject. Learning is done on the control class is the teacher using the lecture method in presenting the subject. This lecture method causes students to feel bored and less motivated to participate in the learning process. This is in accordance with the submitted [7] that the dominance of conventional learning process such as the use of lecture and administration tasks performed by teachers will result in a lack of motivation to learn and low student learning outcomes.

Experiment Classroom Learning Process

During the learning process of students seemed enthusiastic to follow. Students listen to the directives given by the teacher and the learning environment is fairly quiet. Several students asked by show of hands later after a welcome by teachers and then they asked. As teachers share worksheets and ask the students to work on the problems that student worksheet, they do it by discussing with the group. This is in line with the views expressed by Moh Uzer Usman (2002) that teaching by empowering small group allows students to learn more actively, giving a sense of responsibility is greater, the development of creativity and leadership qualities in students, and can meet the needs of students optimally.

During do in the laboratory and do the problems on worksheets, if one is not understood them directly to ask the teacher by show of hands first. This makes the learning environment more conducive for interaction well between teachers and students. The learning process such as this provides an opportunity for students to dare to express their opinions and answer his questions in accordance with his knowledge. Thus the students' answers are not completely the same as the book, but the result of knowledge developed in accordance with the results of the experiment.

Student Motivation

Having in mind the motivation questionnaire normality test results of each class, it can be

searched effect size motivation to learn in the control and experimental classroom. Based on the calculation effect size learning motivation of control and experimental classroom values obtained of 1.15 (in the table 0.3749), so that percentage to 37.49%.

Value of effect size is relatively high because of the value of the effect size range $0.4 < ES < 1$. The difference in the motivation to learn this as the effect of the use of environmental approach in the learning process in the experimental class. This is in accordance with the opinion of [5] which states that the use of environmental approach in the learning process will encourage learning fun and to improve students' motivation. Thus it would make students more stepped up its efforts to obtain satisfactory academic results.

Through environmental approach students may be more motivated to follow the learning process. The high motivation in this study will have an impact on learning outcomes. Atmosphere or environment conducive to learning in the classroom that will affect the students' motivation in school. According to [6] motivation to learn it well can be developed, improved or modified through learning and training through environmental influences. That is, a good learning environment tends to encourage children to learn in a quiet, comfortable and concentration. [6] also stated that with the motivation to encourage and provide encouragement for someone to achieve success. Motivation will encourage and guide one's actions so as to direct the activities that correspond with the objectives to be achieved. Strong motivation can make a student able to work more extra to achieve the learning outcomes as desired.

Student learning outcomes

On the pretest of normality test results obtained control and experimental classes that are not normally distributed data. Therefore, to test the hypothesis used non-parametric statistical tests that U mann-Whitney and Asym values obtained. Sig. (2- tailed) is 0.187. This means that H_0 rejected and H_a received or there is no difference between the initial ability of control and experimental classes. So as to determine differences in learning outcomes between control and experimental classes use the value of the post-test.

In the post-test of normality test showed that one among the data were not normally distributed. So to

test of his hypothesis used non-parametric statistical tests Umann-Whitney and Asymp values obtained. Sig. (2-tailed) is 0.026, which means H_a accepted and H_o is rejected or there is a difference in student learning outcomes between control and experimental classes.

Learning with environmental approach involving students directly. This approach assumes that the learning activities will attract the attention of students when it learned removed from the environment, so that what is learned in touch with the life and environmental benefits. This is in accordance with the views expressed by Yulianto (2002) that the environmental approach means linking environment in a learning process in which the environment is used as a learning resource. Learning resources are intended practicum subject are easily available and tightly close to the daily lives of students. This is supported also by the opinion [7] which states

that the best learning is through direct experience. This means that in learning through direct experience students are not merely observe directly, but he should live, directly involved in the actions and responsible for the results.

Differences in learning outcomes between the control and experimental classes can be determined using the formula effect size. Based on the results of the calculation of effect size class learning control and experimental values obtained of 0.63 (in the table 0.2357) so the percentage is 23.57%. This means that the effect size in the criteria for being classified as the value of the effect size have range $0.4 < ES < 1$. Learning in the control classes that only use the lecture method tends to make students feel bored and less motivated to participate in the learning process, while in the classroom learning experiment using environmental approach tends to be more fun because the students can be involved directly in the learning process.

Learning to approach the environmental impact is not too large to student learning outcomes. This is because there are other factors that affect student learning outcomes among students of physiologic factors. Physiological factors affecting students is the time spent in the learning process. The learning process in the classroom experiment took place during the day is at 9:15 to 11:25 pm and the provision of post-test question at 11:25 to 11:45 pm. While in class learning control at 08:30 to 09:40 pm

and the provision of post-test after the first break, or approximately at 9:40 to 10:00 pm.

According to [8] that the physiological factors that can affect student learning, among others fatigue in learning. This fatigue can be distinguished between mental fatigue and physical fatigue. People who experience physical fatigue in the body there is a substance that poisoned. Meanwhile, people who experience mental fatigue can be viewed their lethargy and boredom that will lose interest and the urge to produce something.

IV. CONCLUSIONS AND SUGGESTIONS

Based on data analysis that has been done, it can be concluded that there are differences in students' motivation in class XI IPA at SMAN 1 Sungai Raya is taught using the approach of the environment and is taught by lecture method on the acid-base subject. In addition, there are differences in learning outcomes of students between classes taught using the approach of the environment and is taught by lecture method on the acid-base subject. Further study using environmental approach gives effect to the motivation and learning outcomes of students with the calculation of effect size of 1.15 and a percentage of 37.49% for the motivation and 0.63 and a percentage of 23.57% for learning outcomes.

Suggestion

From the research that has been done, there are some findings that can serve as suggestions in order to develop chemistry in high school. As for suggestions in this research study by using environmental approach can improve motivation and student learning outcomes, it is expected to teachers and prospective teachers can develop it as an alternative to school learning, especially in subject of acid-base and preferably before doing practical teacher demonstrates first so that students better understand before making his own lab.

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IMPLEMENTATION OF TEXT TRANSFORMATION IN PHYSICS EDUCATION TO REDUCE STUDENTS' MISCONCEPTION

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Abstract. This research aimed to know the effect of text transformation in educational physics especially Impuls and momentum to reduce students' misconception. This study was held at state senior high school (SMAN) 2 in Pontianak, West Borneo. The instrument in this study has made with diagnostic test using certainly of responden index method. The research design in this study using one group pretest-posttest design. Population in this research is all students of science major in state senior high school 2 in Pontianak. This study have found that implementation of text transformation giving effect significantly to reduce students' misconception according Wilcoxon test ($Z = -3,418$, $p = 0.01$). However, this research is not finding corelation which is significantly between skill to make a note using text transformation and reduction of students' misconception ($r_s = 0.119$, $p = 0.490$). The value of effect size in this research is 1.65.

Keywords: misconception, implementation, text transformation

I. INTRODUCTION

Over the past 25 years the construct of situation awarness debates concept, isunderstandings, and misconceptions aside, where does the operational community stand with respect to the construct of situasion awarness [1]. Physicists might have done the most to study their students' misconceptions and then acted on their findings. They utilize "concept inventories" to assess students' conceptual understanding. That is, rather than asking students to perform calculations, students are asked questions that probe their conceptual framework. Distractors in these assessments are common student misconceptions that have been discovered through careful research [2]

Concepts can be considered as ideas, objects or events that help us understand the world around us [3]. Misconceptions, on the other hand can be described as ideas that provide an incorrect understanding of such ideas, objects or events that are constructed based on a person's experience Martin (2002) [4] including such things as preconceived notions, nonscientific beliefs, naïve theories, mixed conceptions or conceptual misunderstandings [5].

Distinguishing between different qualities of conceptual understanding and between phenomenonbased and model-based conceptualizations as well as considering processes of concept formation offers insights into students' misconceptions. Some misconceptions occur as a result of students repeated experiences with phenomena of their everyday world [6].

Piaget suggests that children search for meaning as they interact with the world around them [3] and use such experiences to test and modify existing schemas. There are many possible sources for the development of misconceptions. First, not all experiences lead to correct

conclusions or result in students seeing all possible outcomes. Second, when parents or other family members are confronted with questions from their children, rather than admitting to not knowing the answer, it is common for them to give an incorrect one. Another research from Philips Sadler (2013) found that misconception which students gain are related with teacher knowledge which is analogy in Figure 1.



Fig 1. analogy picture about relation students and teacher misconception [7].

Misconceptions themselves can be related to such things as misunderstanding factual information or being given conflicting information from credible sources such as parents and teachers. The big issues are that once a misconception has been formed, it is extremely difficult to change and that possessing misconceptions can have serious impacts on learning [8].

The misconception is a lot happening in the field of physics. Wandersee, Mintzes and Novak [9] states that occur

misconceptions in all areas of physics. Among these 700 studies on misconceptions in physics, there are 300 misconceptions about mechanics; 159 on electricity; 70 about the heat, optics, and material properties; 35 about earth and space; as well as 10 study of modern physics. Mechanics, ranks first, most students who have misconceptions, because the mechanics become the main starting materials and in high school, so the field was widely studied. Research Aysel Gul and Musta Sabri (2008) [10] found many students had misconceptions about momentum, approximately 63.3% of students experiencing misconceptions about the impulse and momentum. Findings were similar occurs also among high school students of State in Pontianak. In addition, the average value of the midterm physics academic year 2012/2013 in the class XI SMAN 2 Pontianak just 53.56. Many students who have misconceptions of physics concepts. Therefore, there needs remediation activities that help students overcome these misconceptions. Master class XI SMAN 2 Pontianak stated that he not understand what is meant remediation. This statement, strengthen remediation activities undertaken in the research. Text Transformation Shaped Note: TS Text transformation aided Hypermedia software for the first time introduced by Ted Nelson. [11]. Text transformation has been widely used in research in the field of education. Text transformation in physical education have been developed by Victor Lopes (2010) [12]. Text transformation is currently included in the curriculum developed by the National Center on accessing the General Curriculum (NCAC) in America. However, the text transformation has not been studied in Indonesia. Text transformation is an activity to alter or modify the text from its original form to forms other grain [13]. Briefly implementation of software-aided transformation hypermedia text is presented in Figure 2.

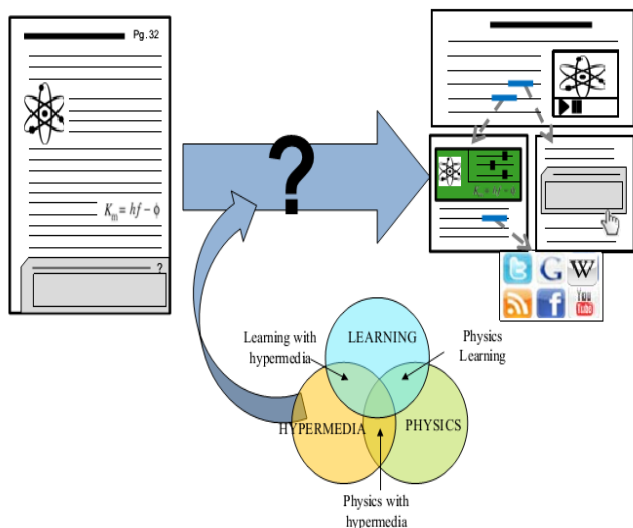


Fig 2. Text Transformation using hypermedia software (Lopes, 2011: 3)

However, the text transformation aided Hypermedia software is difficult to do in a research study because Hypermedia software must be connected to the Internet and is a paid software. This study used the Text transformation shaped note: TS.

Note: TS is short for "Note: Write and Compose". Note: TS-record consists of writing and preparation of records. Writing-record is a record of what was presented in the textbook. Preparation of-record is written about thoughts, impressions, feelings, reactions or questions students when studying a textbook. Note: TS including engineering recorded a high level that can help students improve memory [14].

Text transformation shaped note: TS can help students construct their own knowledge because during studying textbook, students write their responses. Mark Reardon [14] has been using the technique note: TS in training SuperCamp. Shape note: TS created by Mark Reardon presented in Figure 3



Fig 3. Form of Note: TS Made by Mark Reardon [14]

Text transformation shaped note: TS in this research, mentransformasikan textbook high school physics class XI, entitled "Physics for Senior High School 1st Semester Grade XI". This book is a bilingual version of the package authored by Marten Kanginan. Text transformation shaped note: TS is expected to improve learning outcomes, especially in the matter of impulse and momentum. The intended learning outcomes in this study is the result of the initial test (pre-test) and final test (post-test). The difference of the results of the initial test (pre-test) and final test (post-test) will illustrate changes in the number of misconceptions. Briefly application of text transformation shaped note: TS presented in Figure 4

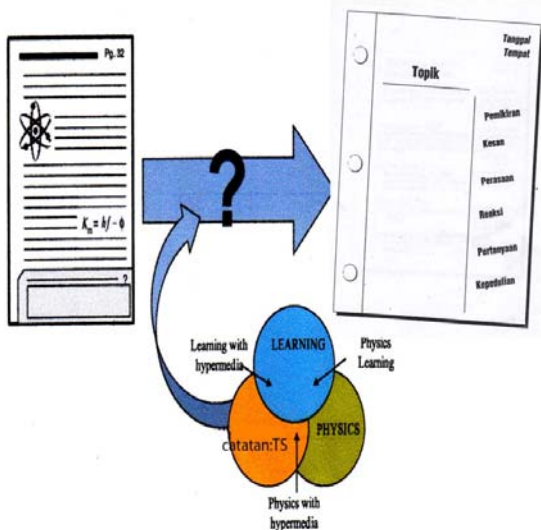


Fig 4. Text Transformation shaped Note:TS

This research in the form of remediation using 'text transformation' shaped Note: TS geared to help students overcome misconceptions about the impulse and momentum. Text transformation is an activity to alter or modify the text from its original form to a form more grain [13]. In a study conducted, the text in the textbook converted into a note: TS. Note: TS is short for "Note: Write and Compose". Note: TS-record consists of writing and preparation of records. Writing-record is a record of what was presented in the textbook. Preparation of records means that writing about thoughts, impressions, feelings, reactions or questions students when studying textbook [14]. It is expected to make a note: TS, students can construct their own knowledge.

Text transformation shaped note: TS in this research, mentranstranformasikan textbook high school physics class XI, entitled "Physics for Senior High School 1st Semester Grade XI". This book is a bilingual version of the package authored by Marten Kanginan. Text transformation shaped note: TS is expected to reduce the number of misconceptions in students especially the material impulse and momentum. Issues that will be answered this study is whether to use a text transformation remediation shaped note: TS effect on decreasing the number of misconceptions students, especially in the matter of impulse and momentum. Moreover, given the text transformation that followed did make a note: TS is a skill it is also questionable how much the relationship between the magnitude of the decline of these skills with student misconceptions.

II. METHOD

This is experimental research. This research is made using review some journal, article some literatures and analyzing data of students' misconception in physics especially in impuls and momentums. Form of the research in the form of pre-experimental design with the design of one group pretest-posttest design is presented in TABLE 1.

TABLE 1 : One Group Pretest-Posttest Design

Pre-test	Treatment	Post-test
O ₁	X	O ₂

[15]

Students (102) at SMAN 2 Pontianak who has followed the subjects of physics at the material impulse and momentum in grade XI of the school year 2012/2013 target. By way of intact group have all students of class XI IPA3 as a sample. However, only 25 students who follow all the action. Therefore the data from these were analyzed. Misconceptions about the students dug with 27 multiple choice diagnostic tests. The validity of pre-test was 4.07 and the post-test was 4.10 on a scale of 1-5, while the level of reliability of each are 0.584 and 0.564.

III. RESULT AND DISCUSSION

Result

Normality test (Kolmogorov-Smirnov) showed that the number of misconceptions from every students pre-test results are not normally distributed ($p = 0.711$, $\alpha = 0.05$). Therefore, data analysis using nonparametric statistical tests (Wilcoxon and Kendall rank correlation (τ_a)). Wilcoxon and Kendall rank correlation (τ_a) selected for the data in the form of scores are ranked, both variables are ordinal scale (large-small sequential) [16].

Wilcoxon analysis showed that there was a significant effect of this remediation activities, the decrease in the number of misconceptions from every student ($Z = -3.418$, $p = 0.01$) in. calculation of the effect size of 1.65 to find the price barometer effect size John Hattie (2009). It was concluded that the effect of remediation is high.

Kendall rank correlation analysis (τ_a), TABLE 2 showed no significant correlation between accuracy in making note: TS and changes the number of student misconceptions ($\tau = 0.119$, $p = 0.490$).

TABLE 2 Result of analysis Kendall's tau

Kendall's tau _a	Change Number of Misconception	Correlation Coefficient	Change	note:TS
			Number of Misconception	
		1.000		.119
		Sig. (2-tailed)	.	.490
		N	25	25

Discussion

This research found the effect of remediation using text transformation shaped note: TS against reduction in the number of misconceptions persiswa ($Z = -3.418$, $p = 0.01$) in the effect size ($ES = 1.65$). This finding is consistent with other research, Ayse Gul and Musta Sabri (2008), Rio Rikardo (2008), and Emi Sulistri (2010) [10], [17], [18]. This finding is also consistent with research conducted by Victor Lopes (2011) [12], although there are differences of this type of research used and modified treatment. Victor Lopes research shaped experimental research and treatmentnya transform text in the textbook with hypermedia software. Text transformation is done with the help of

hypermedia software converted into three forms of hypertext, interactive applications and multimedia files.

This study found no significant correlation ($\tau_a = 0.119$, $p = 0.490$) between the ability to make notes: TS and changes in the number of students' misconceptions. This fact, probably caused by students who first received training make a note: TS. Students are used to record the teacher's explanations on the board, so that students' difficulties when instructed to make a note: TS their own and write the responses. Another drawback may be caused by the availability of data, which are not restricted only guess that does not represent the actual occurrence of the complete course there is also a weakness caused by design choice.

IV. CONCLUSIONS

This research found the effect of remediation using text transformation shaped note: TS significant change in the number of students' misconceptions ($Z = -3.418$, $p = 0.01$) in the ES 1.65. The average percentage decrease in the amount of 50.53% each student misunderstanding. The correlation between the ability to make notes: TS and changes in the number of students is not significant misunderstanding ($\tau_a = 0.119$, $p = 0.490$).

Based on the research conducted, put forward some suggestions as follows: (1) is recommended before remediation using text transformation shaped note: TS in learning activities, students are given special training in making note: TS, (2) for further research, it is recommended to be taken on development of text transformation, such as to text transformation of textbooks, apart from the record: TS, (3) should be used in the form of better research for instance true experiment, with the draft "pretest-posttest control group design", so as to minimize the factors that influence internal validity, (4) preferably after the data are grouped using CRI modified method, conducted interviews outside the remediation activities to students who belong to guess in order to represent a complete data.

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IMPLEMENTATION OF MODEL SAVI (SOMATIC, AUDIOTORY, VISUALIZATION, INTELLECTUAL) TO INCREASE CRITICAL THINKING ABILITY IN CLASS IV OF SOCIAL SCIENCE LEARNING ON SOCIAL ISSUES IN THE LOCAL ENVIRONMENT

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Abstract. This research is motivated by the lack of critical thinking skills of fourth grade students of SDN Tanjung III, Subang district. On the basis of the need for repairs done either by applying the model of SAVI (Somatic, Auditory, Visualization, Intellectual). So the purpose of this study was to determine the increase critical thinking skills of students in Social Science before and after applying the model SAVI, the performance of teachers in applying the model SAVI, activities and students' response to the model SAVI. The method used in this research is the CAR (Classroom Action Research). Subject of research that fourth grade students of SDN Tanjung III by the number of students as many as 23 people. The instrument used was *LKS* (Student Worksheet), observation sheet of students and teachers as well as student questionnaire responses. From these results, it can be concluded that by applying the model in study SAVI social science with social problems in the local environment can enhance students' critical thinking skills. The result can be seen from the percentage of the overall level of mastery learning increased from 52.2% in the first cycle, 78.3% in the second cycle and 100% in the third cycle. The average grade class of students increased from 44.3 prasiklus of data with less criteria, up to the third cycle, which reached 91.3 with the criteria very well. With the improvement of students' critical thinking skills that are calculated based on the n-gain of 0.53 with the criteria of being in the first cycle, and 0.65 with the criteria of being on the second cycle, and 0.81 with the high criteria of the third cycle. The results of observations also showed that the ability of teachers and students' activity in applying the model of SAVI increased. Based on questionnaire responses, 100% of students showed interest in learning social science model with SAVI. Therefore, it is suggested that teachers use models SAVI to enhance the critical thinking skills of students so that students used to learn to analyze problems well.

Keywords: Model SAVI (Somatic, Auditory, Visualization, Intellectual), critical thinking skills students, the Learning Social Science

I. INTRODUCTION

Education is a conscious effort made by humans in order to grow flowers well in the surrounding environment, in school, community and family. Primary School is one form of educational units that conduct educational programs for six years. The aim of education in primary schools is provided supplies basic ability for students to develop the skills they have. In the implementation of education in primary schools cling to the curriculum. The curriculum is a set of plans and arrangements regarding the objectives, content and learning materials as well as methods used to guide the delivery of learning activities to achieve specific educational objectives. In order to develop human resources (HR) quality through education, the government through the curriculum SBC recommend Social Science as one of the compulsory subjects are given to elementary school students to high school.

According to [1] Social Science is a discipline that studies the intellectual humans as social beings scientifically, focusing on humans as members of society and on a group

or society which he forms. This is in line with the opinion of Hamalik [2] that the purpose of Social Science, namely: 1) Preparing students for further studies in the field of *social science*, subjects such as history, geography, economics, and cultural anthropology should be given partial, Social studies, who had not fragmented efforts need peramuan parts of other subjects; 2) Social Science essentially a compromise between 1 and 2 above science. As a simplification and screening of social sciences, with the ability and intelligence of the students; 3) Learn *closed areas* or social issues that deserve to be discussed in public. The material relating to the area of economic, social knowledge to the political, and even cultural fields; 4) Educate students to become active citizens. In the context of culture through scientific and psychological treatment appropriate; 5) According to the guidelines specific areas of study Social Science, learning activities Social Science lead to two things: a) the values and attitudes contained by Pancasila and the 1945 Constitution as a fundamental and intensively imparted to the students so that nurtured the will and determination to live responsibly for the advancement of self, nation, state, and country, b)

teach the basic concepts of sociology, geography, economics, history, civics, pedagogical and psychological; 6) Develop the ability to think critically and creatively, inquiry, problem solving, and social skills, and build commitment and awareness of social values and humanity; 7) Improving the ability to cooperate and compete in a pluralistic society, both nationally and globally.

In line with these objectives, educational objectives Social Science is "nurture students to become good citizens, who have the knowledge, skills and social awareness useful for him as well as for society and the state" [3]. While the details [4] to formulate educational purposes Social Science is oriented to student behavior, namely: 1) knowledge and understanding; 2) attitude to life learning; 3) social values and attitudes; 4) skills. From the above it can be concluded that Social Science is an attempt to obtain, understand the knowledge about the environment and the various activities that are nearby as well as other social phenomena, so that he can solve social problems that occur in their environment.

Learning social studies for elementary school children should be adapted to the stage of cognitive development. At the age of elementary school students is an important phase in the life of a person, according to the theory of cognitive development [5] children at age 7 to 11 years are at the concrete operational stage. Where in this phase children have been able to know the symbols but can not understand the things that are abstract. Thus, learning needs to be designed that allow the students can see, feel and do something concrete. The role of teachers as educators should be able to design a learning process that makes the material is abstract can be mastered easily by the Social Science students so that learning objectives can be met.

From the description above can be concluded that teachers as educators must design a learning process so as to make all students reach the learning objectives of Social Science, the Social Science can be expressed so that the learning goes well. In social studies in primary school course examines various social problems that occur in the environment. Material submitted must be understood in depth, thus requiring a learning process that emphasizes direct observation through the use and development of skills Social Science. Do not let the students think that learning materials Social Science just need to remember and memorize so it does not require the ability to think critically, when the destination Social Science above has described one of his goals is to develop the ability to think critically and creatively, inquiry, problem solving, and social skills, and build commitment and awareness of social values and humanity.

[6] suggests that in the twenty-first century there are four minimum learning competencies that must be mastered, one of them is the ability to think critically. According to [7] critical thinking is an activity with a critical mind to suit a wide variety of intellectual standards such as clarity, relevance, adequacy, coherence and others. For that students are required to have the ability to think critically is good that the students were able to express their opinion regarding the material of the lessons learned by them and can understand and analyze the problems on the lessons and find a solution to solve the problem, especially in social

studies learning and that students are able and ready to compete globally in the future.

According to [8] studied *the relative* principles generally accepted one of them is the direct involvement or experience. Learning must be done by the students, thus students must experience, learning can not be delegated to others. It was reinforced by Dale [9] that the classification of a learning experience that is poured dalam cone experience suggests that good learning is learning through direct experience. Thus the concept of the student obtained through this process will be more meaningful and lasting for students directly involved in the thought process. But in reality, not a few teachers still use conventional learning in the learning process, while conventional learning less support critical thinking skills of students for learning centered on the teacher (*Teacher Center*) and teachers tend to use the lecture method in presenting the material so it is only suitable for students who have style auditori learning that can easily comprehend the material simply by listening to the explanation from the teacher. Unlike the students who have learning styles somatic, visual, and intellectual they would be difficult in the face of teaching learning methods lectures, in addition students will feel tired and bored when learning takes place passively, this also affect the low ability of critical thinking in class IV SDN Tanjung III, based on the results of the analysis of preliminary data from 23 students only 3 students with a percentage of 13% stated achieve Criteria for completeness Minimal (CCM). And as many as 20 students with a percentage of 87% has not been reached Criteria for completeness Minimal (CCM). With an average of 44.3 with the results of the evaluation study less category.

It is important for a teacher to have a strategy in order to anticipate this problem, create a fun learning environment, engage students actively, and facilitate student learning. From several alternatives that can be used, researchers prefer to apply the model SAVI (*Somatic, Auditory, Visualization, Intellectual*).

Model SAVI was first introduced by Dave Meier, he said that learning SAVI embrace flow cognitive science modern states to learn the most good is emotional, the whole body, senses, and all the depth and breadth of personal, respecting individual learning styles other realize that people learn in different ways [10]. Additionally [11] suggests that learning involves more senses to enhance understanding of learners optimally. For the model of SAVI is most appropriate in social studies material social problems in the local environment, because it combines four student *learning*. With so students can attend learning activities well, through a series of learning activities involving gestures, sense of hearing, sense vision and thinking of students in a learning process. Students can practice learning materials and direct experience so that students are easier to remember and understand the essence of the material being taught to be able to train their critical thinking skills.

Social studies is not only enough to lecture only, therefore there should be a practice or real process easier for students to be able to find the concept of a learning material, so students can understand the concept of what is taught to develop their critical thinking skills. Based on the above, through the application of models SAVI is expected to assist

students in improving critical thinking skills in social studies.

II. BASIC THEORY

1. Model SAVI

a. Definition Model SAVI

Model SAVI is a form of learning created by Dave Meier in his book entitled *The Accelerated Learning Handbook*, the underlying theory Meier, in proposing the SAVI approach is the theory of active learning that is termed [12] with the *Learning Based Activities (LBA)*. This theory is backed by [12] education in New England in the 19th century who tend to view the body of the human mind that it is separate and distinct. Thus, the rational mind the focus of education, while the body is considered not relevant to the learning process, not only the physical movement is not considered important, but also disturbing. In addition, many cases that mention learning to use physical movement is a sign of low intelligence or innate learning disabilities, the activity of the body and mind are separated in learning activities so that learning takes place stiff and unpleasant. In addition, education in New England at the time of the emphasis on individual learning. This was opposed by Meier and encouraged him to do research.

Meier [12] reveals also that learning is not a separate cognitive event but something that involves the whole person (body, mind and soul) and the intelligence intact. Opinion was delivered Meier in a research conclusion that man has a dimension of somatic, auditory, visual and intellectual. Based on this view Meier propose an active learning approach called SAVI approach. SAVI approach is pressed learning by utilizing the senses of students.

[13] explains that the model of SAVI is a learning model that combines four student learning that is somatic, auditory, visual, and intellectual. Where in this learning model learning students can move, speak or hear, see and think directly what they are learning, so that learning becomes more meaningful.

According to [14] theory that supports learning SAVI is *Accelerated Learning*, learning based on constructivism, theory of multiple intelligences. SAVI Learning menganutliran modern cognitive science that learning is best to involve the emotions, the whole body, all the senses, and all the depth and breadth of personal, respect the other individual learning styles by realizing that people learn in different ways.

b. Basic Principles of Learning SAVI

Due SAVI learning in line with the movement of *Accelerated Learning (AL)*, the principle is also in line with the AL Meier [12] principles, namely:

- 1) Learning involves the whole mind and body
- 2) Learning means to be creative instead of consuming.
- 3) Cooperation helps the learning process
- 4) Learning takes place in banyak levels simultaneously
- 5) Learning comes from doing the work itself with feedback.
- 6) Positive emotions are very helpful learning.
- 7) Brain-imagery absorb information instantly and automatically.

So basically this SAVI learning further highlight how students create their own creativity. This will affect the

students' way of thinking becomes more open and try to dig ability in acquiring new knowledge.

c. SAVI Learning Characteristics

Meier [12] describe the characteristics of the four sections, namely:

1) Somatic

Somatic comes from the Greek meaning of the body - *soma*. So, Somatic learning means learning with tactile, kinesthetic, involves physical as well as using and moving your body while learning. Activity-based learning in general is much more effective than those based presentations and materials. Physical movement increases mental processes, parts of the human brain that are involved in body movement (*motor cortex*) is located right next to the part of the brain used for thinking and problem solving. Therefore, blocking the movement of the body means that hinder the mind to function optimally. Instead, it involves the body in learning tends to generate fully human integrated intelligence.

2) Auditory

Learning to speak and hear. Our minds are more powerful than we realize, our ears continuously capture and store information even without us knowing. When we create own voice by speaking a few important areas in our brain becomes active. This can be interpreted in learning teachers should encourage students to talk about what they are learning, translating the experience of students with sound. Talk to them when solving problems, making the model, gather information, create a work plan, master the skills, making reviews the experience of learning, or creating personal makna meanings for themselves.

3) Visual

Learn by observing and describing. In our brain there are more devices for processing visual information than all the other senses. Any student who uses visual learning easier if it can see what is being talked about a speaker or a book or a computer program. In particular, a good visual learners, ie when they can see examples from the real world, diagram, map ideas, icons and so when learning.

4) Intellectual

Learning by solving problems and thoughtful. Measures learners do something with their minds internally when using intelligence to reflect on an experience and create relationshSocial Science, meaning, purpose, and value of the experience. This is reinforced by the intellectual meaning is part self reflect, create, and solve problems.

2. Critical Thinking Skills

a. Understanding Critical Thinking

Critical thinking is the ability to think one should have, among students in elementary school. This ability must be trained since elementary school so that students do not feel trouble when you find problems or tasks that require the use of the capacity to think, especially critical thinking skills of students in analyzing and solving problems in the learning process.

As expressed by [15] thinks is a mental activity in order to formulate understanding, synthesize, and draw conclusions. [16] argues that thinking is an activity of the human person which lead to the invention directed to a destination. Human thinking to find knowledge and understanding he pleases. Santrock [17] also expressed his

III. METHODS

opinion that thinking is to manipulate or manage and transform the information in memory. Thinking is often performed to form concepts, reasoning and wonder critically, make decisions, think creatively and solve problems.

If you think a part of the brain that is always done to organize information in order to achieve a goal, then the critical thinking is part of the thinking brain is also performed. [17] revealed that the ability to think involves six types of thinking, namely, metacognition, critical thinking, creative thinking, cognitive processes, the ability to think and understand the role of core content knowledge. According Santrock [18], critical thinking is reflective thinking and productive, as well as involving the evaluation of evidence. While [19] argues that critical thinking means mental processes are effective and reliable, are used in pursuit of relevant knowledge and true about the world.

Another definition put forward by Glaser [7] defines critical thinking as 1) an attitude would think deeply about issues and things that are within the reach of one's experience; 2) knowledge-knowledge of inspection methods and logical reasoning; and 3) a kind of a skill to apply these methods. Critical thinking requires effort to examine any belief or knowledge assumptive based on supporting evidence, and conclusions resulting advanced.

Based on several expert opinions above, researchers can conclude that critical thinking is a process of mental activity that is focused and clear to be able to find and solve the problem in a systematic, critical and creative with good reason in terms of indicators think critical that ultimately produce a concept believed to be based on reliable sources. Critical thinking skills is an ability that needs to be trained and developed student, given the ability to think critically affect students' way of thinking when it finds problems or tasks that require students to think critically and to help students understand concepts in depth Social Science. In addition, conditions are rapidly growing world requires people to have critical thinking skills to address the global challenges that exist, to encourage students to come up with ideas or new thinking about the world. Students can tell which opinions are relevant and irrelevant, making conclusions by considering the data and facts.

b. The purpose of Critical Thinking

Johnson [16] says that the purpose of critical thinking is to achieve a deep understanding. Meanwhile [6] suggests that the purpose of critical thinking is simple: to ensure that our thinking is valid and correct.

Based on the above opinion, it can be said that the purpose of critical thinking is to achieve a deep understanding of a material or concept so as to ensure that the students' thoughts on the material or the concept is valid and correct along the right reasons.

c. Indicators Critical Thinking Skills

The indicators that will be used in research to measure critical thinking skills are divided into 5 groups according to [20], namely: 1) provide an explanation (*elementary clarification*); 2) providing basic skills (*basic support*); 3) find a conclusion (*inference*); 4) make a further explanation (*advanced clarification*); and 5) set the strategy and tactics (*strategies and tactics*).

1. Research sites

The location of this research is in SDN Tanjung III located at Jalan Cipunagara Km. 8 Village Parigimulya Cipunagara District of Subang Regency 41 257.

2. Research subject

The subjects were students of class IV SDN Tanjung III, amounting to 23 students. This research subject is very heterogeneous views of his ability, that there are students with high ability, medium, low and very low.

3. Design Research

The study design will be used referring to the model developed by Mc. Taggart [21] is the spiral model. This model has four stages, namely stages: 1) planning ; 2) action ; 3) observation ; 4) reflection

IV. DISCUSSION

1. Critical Thinking Skills Students After Applying Model SAVI

Through the results of the first cycle, second cycle and third cycle show that by applying the model SAVI can enhance students' critical thinking skills in social studies class IV SDN Tanjung III material social issues on the local environment. It can be seen from the increase in the average score of students after the given action and improvements in each cycle, the average value of the critical thinking skills of students before being given the mere act of 44.3 to less category and the results of the first cycle studies show that the ability to think critically students has increased by an average of 72.5 in both categories. Then increased to 83.2 in both categories once in the second cycle and the third cycle increased back to 91.3 at an average yield of the third cycle are included in the category of Very Good. The percentage of students in the classical mastery learning has increased. Before the given action, as many as three students with a percentage of 13% stated achieve Criteria for completeness Minimal (CCM), while 20 students with a percentage of 87% has not been reached Criteria for completeness Minimal (CCM), and after being given the action in the first cycle of students who otherwise completed the first cycle were 12 students with a percentage of 52.20 % otherwise reach Criteria for completeness Minimal (CCM). In cycle II increased to 18 students with a percentage of 78.30% are reached Criteria for completeness Minimal (CCM). While in the third cycle as of 23 students with 100% perasetase otherwise reached Criteria for completeness Minimal (CCM). This is supported by a statement that 100% of students stated that learning Social Science model with SAVI make students happy and interested in social studies, and as much as 100% of students find a simple way to understand the subject matter Social Science model with SAVI. This is supported by the opinion [22] states that the best learning is learning by experiencing something that is by using the five senses. Besides Cornbach, Glaser [23] suggests that learning involves more senses to enhance understanding of learners optimally. Learning with media images, video, real media, songs and compose the word does not make the students understand the material it is stated by the positive response of students by 100%. Supported also by the theory [24] which states that the learning system which involves the use of various props

such as learning objects, interactive tools, video clSocial Science, drama, music, smells, and other creative elements capable of providing a stimulus to make the students' responses woke case this triggers the attention and comprehension of students. A total of 100% claim that the students enjoy learning Social Science model with SAVI of the learning model that is usually because it can use the senses and limbs in learning. [12] states that if the student is in a state that is relaxed, open, less depressed, and have positive feelings learning will take place properly, whereas if the student is in a state that otherwise learning will be slow and not even helpful at all.

2. Response Against Student Learning Application Model SAVI at Social Science

At the beginning of fourth grade students who become subjects in this study had a positive attitude toward social studies, but not optimal, it is proved by the results of the calculation of the questionnaire that 56.50% of students showed interest in social studies learning, but learning is given in a way that is saturating. This is also supported by the results of questionnaires that 65.2% of students stated learning very unpleasant Social Science before using SAVI models. Additionally only 52.20% of students agreed that the Social Science is very useful for everyday life. However, after the researchers applied a model SAVI interest of the students towards learning Social Science increased to 100%, and they stated that the SAVI models makes them happy to lessons learned by the Social Science as a model SAVI interesting and not boring. This is supported by the opinion [25] stated that by using the senses as a means of sensory information, students will be able to build a real picture in mind so that the sensory experience into knowledge that is not forgotten. [24] which states that the learning system which involves the use of various props such as learning objects, interactive tools, video clSocial Science, drama, music, smells, and other creative elements capable of providing a stimulus to make the students' responses awoke this triggers the attention and the terms of students 'understanding and use of instructional media after the researchers adjusted the model SAVI make a positive response to the students' learning SAVI at 100%, that the media can help students understand the material. [12] revealed that the body and mind is a unity that can not be dipisahkan, therefore learning by engaging the senses and physical activity can affect both and help the learning process, from the theory 100% revealed that students were delighted to learn Social Science SAVI models because it can use the senses and limbs. [26] states that the best learning is learning by experiencing something that is by using the senses, it is supported by student responses at 74.0% stating that the model of SAVI students become more daring in expressing his opinion and 91.3% of students are more motivated to learn Social Science after getting this learning. From the results of student questionnaire responses can be concluded that the students' response to social studies learning by using model SAVI declared positive.

V. Conclusion

1. Critical thinking skills of students after applying the model SAVI increases. It is based on the analysis of data from the average score of students 'critical thinking skills before being given action only 3 (13.0%), which reached

Criteria for completeness Minimal (CCM), an average of 44.3 students' learning outcomes with less category, the first cycle increased to 12 (52.2%), which reached Criteria for completeness Minimal (CCM), averaging 72.5 with the learning outcomes of both categories, and the second cycle increased to 18 (78.3%) students who otherwise reach Criteria for completeness Minimal (CCM) with an average of 83.2 learning outcomes with both categories once and optimal improvement occurred in the third cycle as of 23 (100%) or all students otherwise reach Criteria for completeness Minimal (CCM) with an average of 91.3 to learning outcomes either category yet. The increase in critical thinking skills of students in the third cycle 0.89 to a high category.

2. Student responses to the application of learning models in social studies learning materials SAVI social problems in the local environment tend to be more positive. It can be seen from the analysis of student questionnaire responses. Initially only 56.5% of students who showed interest in learning. But after applying the model SAVI student response increased to 100% which states that students feel happy and interested in learning Social Science. And 100% easier for students to understand the material because students can take advantage of the sense organs and limbs during the learning process.

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IMPROVING STUDENTS' READING ABILITY BY USING LOCAL FOLKLORE COMICS

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Abstract. The purpose of this research is to improve the students' reading ability by using local folklore comics. Local folklore comics are used as teaching materials by considering the aspects of cultural and historical of west Kalimantan heritage which are relevant to the students' narrative understanding in learning English. The aspects of reading ability that had been revealed positively through this Classroom Action Research are improvements in the interest of reading, understanding in generic structure of narrative reading as well as understanding in its language features. Based on the provided data from the two cycles, it can be concluded that the use of local folklore comics are able to improve the students understanding and interest of narrative reading, arose the students' culture of reading literacy, and has met the criteria of contextual teaching and learning (CTL).

Keywords: Contextual Teaching Learning, Local Folklore Comics, Narrative Generic Structure

I. INTRODUCTION

Reading literacy skill is needed to be trained and taught in school learning environment, as well as the students' interest in reading that is also needed to be arisen. Reading is the process to grasp knowledge of words and match the word meaning in sentences. Moreover, reading acquires skill in order to have analytical thinking in understanding text. By having reading skill, students are able to have some information and as the result from the reading process, they are able to understand the text and message which is included from the reading that they read so it can enlarge their point of views about something, experience the changing of life behaviour, gain entertainment and learn to find out solution in their lives.

The activity of reading book is very rare in SMA Negeri 4 Pontianak. It is proved base on the data provided in students' visit to the school library each month which is only 16% and if they borrow the books, they are only books concerning with certain subjects only. The students tend to find out instant information from the internet which can not solve the problems deeply rather than book. In fact, if the students read diligently, they will gain benefit; that is the acquisition on something and solving of the problem.

Besides, there are many factors which create the students' uninterested in reading in SMAN 4 Pontianak. One of them is less interesting of the

reading text in learning which tends too long so it makes the students bored and confused to understand the reading text, difficult to find out main idea and explicit information from the text, and difficult in identifying the generic structure of the text. In addition, the reading text much more presents the folklore from other places rather than the folklore relating to the local place where the students exist. Then, another problem comes from learning media; such as book, picture, or photo which are not interesting in English learning process. In fact English is the international language which should be mastered well by the students. Due to those problems faced by the students which the material of reading text tends to ignore the element of local wisdom and is not interesting in the learning process, make the writer assume that the students need creative material through local folklore comic to increase their reading skill, their interest in reading, and their understanding about the reading material.

By using local folklore comic from West Kalimantan as a learning media, the writer intends to prove that there is significant improvement in students' reading understanding especially on narrative text. The local folklore from West Kalimantan is chosen in order to introduce the students' own culture and enlarge their point of view about their cultural and historical ancestor in their memory. The local folklore comics media are designed especially for teenagers of Senior High School ages. Another reason is that the

pictures in comic illustrate the ideas so when the students read the text, they will clearly understand the reading. The illustration, plot, simple them, and the character existing in comic can invite the readers' attention to read. So it can make the students easier to understand the reading text through pictures, and ease the students to grasp the main points of the story and find out the meaning of words.

II. METHOD

In this research, the writer applies Classroom Action Research (CAR) as Irais [1] explains that "Classroom action research is carried out by teachers in their context, in their classrooms. Teachers identified a problem or an area they wish to improve and based on theory or experience or a hypothesis they think of an intervention". In this study, the writer focuses on improving students' reading comprehension on narrative text by using local folklore comic.

The participant of this research was purposively taken from XI IPS4 class. XI IPS4 class was from second grade students of senior high school that had low motivation in reading English text. XI IPS 4 was the class that also had lack of vocabulary. They got difficulties in grasping and memorizing the meaning of the words because they seldom used them and weren't motivated in reading text. It is because they were unable to understand the essence of the text, and difficult to identify the generic structure as well as the language features.

The figure of actions can be illustrated as follows:

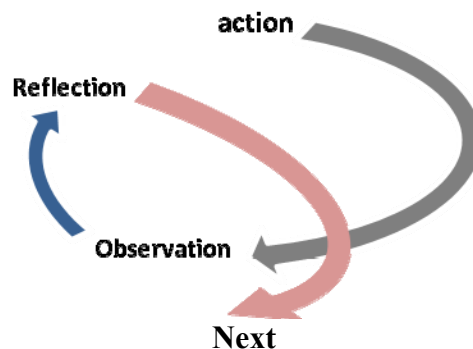
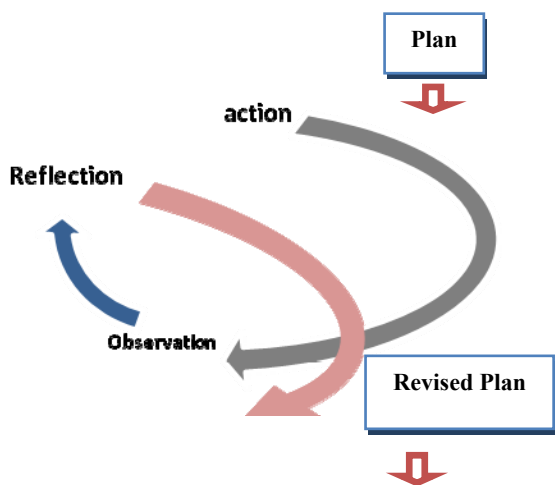


Fig. 1 Model of Classroom Action Research
Modified from Kemmis and Mc Taggart cited in Hopkins (2008:51) 4th Ed.

Based on the model above, the procedure of classroom action research can be described as follow:

a. Planning the Action

Planning was identified the problem area. The writer prepared everything related to the action such as; made a lesson plan about a certain topic, material, media, time, schedule and instrument. The topic of reading comprehension in lesson plan was based on the syllabus in curriculum. The media that used was local folklore comics; such as, Splited Stone (Batu Balah Batu Betangkap), The Origin of Mountain Senujuh (Asal Mula Gunung Sejujuh),The legend of piantus hills (Legenda Bukit Piantus) in teaching reading comprehension. Recording, observation checklist and field notes were used by the writer as intrument of observation. While the material which was chosen by the writer was narrative text concerning with local folklore of West Kalimantan. The last is test. It was done to know whether students' reading comprehension improved or not.

b. Implementing the Action

In this step, the writer did the teaching process based on the lesson plan. In this case, the writer became the real teacher who had the authority and responsibility to manage the class. The collaborator used observation checklist and field notes to see and to know about the condition of the class and students during the teaching and learning process.

c. Observation

After doing the teaching process, it is time to gather the evidence. The collaborator observed the effect of the action which had been done by the writer, analysed the media whether solution was successfull or not. In this step the writer gave a

test by giving multiple choice questions based on the story that had been read by students.

d. Reflecting the Action

Here, the writer analysed the evidence that she had gathered. Was the problem solved or not? If not, what steps would she try to apply for the next meeting? In this research, the cycle would have been stopped if the students had reached the target of successful process, including score.

In this research, observation checklist table was a tool to observe the teaching and learning process. It was conducted to get information about classroom environment, class condition, and teaching learning process by using the media of local folklore comic. In the implementation, the observation had been done by both of the writer as the teacher and the collaborator. In this study, the writer also recorded the students' behavior in teaching and learning process by using video recorder. The activities were recorded, in terms of; what the students did during the classroom action research with the object of reading comprehension using comic. Its aims are to know how high the student's motivation and the student's enthusiasm in learning reading comprehension.

In addition, in this research the writer took notes to all activities during the lesson and noted the students' response to the learning reading comprehension using comic. The writer acted as the teacher who taught the students. Field note was used by the writer's collaborator. The collaborator helped the writer to take some notes, evaluate and offer suggestions about the implementation of media.

In order to accomplish the goals of this study, the data were analysed by using qualitative and quantitative approaches. According to [2], "Qualitative analysis is a process of reviewing, synthesizing and interpreting data to describe and explain the phenomena or social worlds being studied". Qualitative here has been derived from observation technique that were observation checklist, field notes and recorder. In observation checklist, the writer was analyzed the condition of the classroom during the teaching and learning process, the observation sheet was filled by the collaborator and analyzed by the writer systematically. The data from observation checklist was categorized based on two categories; they are, "Yes" and "No". Yes was for statements that showed students' response and No was used if

there was no students' response. Then the field note was completed after finishing teaching and learning process by the collaborator, meanwhile the writer was written a description based on the result of the field notes such as: the students activities or what students did during the teaching and learning process and the students' response to the learning reading English. While, concerning with the data, it had been measured by quantitative and qualitative data.

1. Quantitative Data

Quantitative here is to measure the students' English achievement which would be taken from multiple-choice item or test. In this research, the writer analysed the students' individual score according to the reading test given. After the researcher has obtained the individual score and calculated it, the next step is to calculate the number of students in the class, to compute the class test the researcher used the formula of mean score [3]

2. Qualitative Data

Qualitative data is used by the writer in order to observe the students' behaviour during teaching and learning process. Qualitative data of the research was collected by using some techniques of data collection including: field notes, observation checklist and recording.

In this research the process of analyzing the qualitative data was made simply which contained 3 components, they were; reduction of data, coding the data, and conclusion or verification [4]

III. RESULT AND DISCUSSION

The implementation of teaching reading comprehension by using the media of local folklore comics consisted of two cycles. Each cycle consisted of two meetings, one meeting for presenting the material and one meeting for conducting the test. Meanwhile, for each meeting took 2x45 minutes. For the first cycle the writer used local folklore comic of The Legend of Splitted Stones (Batu Belah Batu Betangkup) to teach reading comprehension with topic "Analysing the generic structure and language features of the story". For the second cycle, the writer continued giving another local folklore comic of The Origin of Senujuh Mountain (Asal Mula Gunung Senujuh) with the topic "Find out the generic structure, explicit and implicit, and

main idea". Every cycle consisted of a series of steps; identifying the problem, planning the action, implementation the action, observing the action, reflecting and evaluating the result of the observation and revising the plan.

Moreover, the research implementation contained the implementations of the actions that was teaching by using local folklore comic based on theories from some experts. During the teaching and learning process, the writer worked together with the collaborator. The collaborator observed the students' behavior by using checklist and notes on the sheet.

1. First Cycle (Cycle 1)

a. Qualitative Data

Based on the data which has been obtained from field notes and observation checklist, the writer and collaborator found that the students were impressed and excited with the material from local folklore comic. Relating to the reading comprehension, some students could actually explain the writer's questions concerning with generic structure and language features, implicit and explicit information, and main idea but there were some of them could not explain at all. They forgot and they had no idea about it. After the students gave good responses, The writer explained to them what they should comprehend in reading narrative story by using comic. At the first time of learning reading comprehension by using local folklore comic as a media, it seemed that the students were curious to know more about their own local folklore, since they have never read and even used the media of comic in the learning reading comprehension. The writer explained the procedure of learning process before the lesson began. The students were enthusiastic in listening to the writer's explanation and interested to join the learning process. But some of them still did not enjoy with the writer's explanation. They were busy with their own conversation and their own business. They were still confused what they should do.

b. Quantitative Data

Based on the data gained from the reading test result on the first meeting, the students' achievement was still too far from the expectation target. They still had difficulties in understanding the reading material and solved the item problems. It can be shown from the

percentage score of students' reading understanding belows:

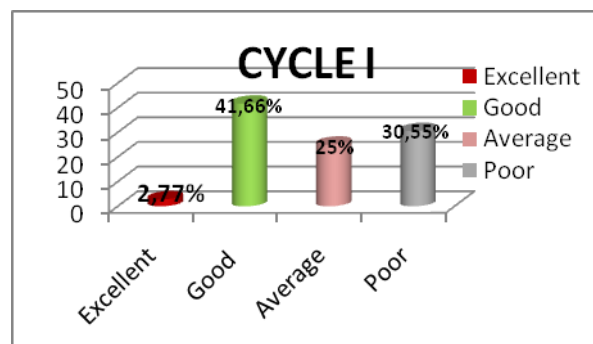


Fig.2 The Percentage Score of Students' Reading Understanding

From the data figured above, the writer found out the problems faced by the students which indicated that they were still confused about the plot of local folklore The Legend of Splitted Stone comic. They tended to answer the questions based on their feelings. They still faced difficulties in finding out the main idea, finding implicit and explicit information, and identifying the generic structure and language features of the text. Besides, they still had weakness in vocabulary which made them difficult understand the comic given.

c. Reflecting the Action

Based on the discussion with collaborator, and analyzing the students' percentage score on reading understanding, it could be concluded that Cycle 1 wasn't satisfied yet and still needed some efforts to achieve the objectives from the material given. Based on the result analysis of observation checklist, field notes, and the recording, it could be concluded that the students still far from being serious and still confused how to understand reading comprehension using comic. They still had less focuss during the teaching and learning process. In doing the test, the students still made any noise and tried to disturb their friends. They still had no idea how to answer these questions well. Based on the result, the writer concluded that the students showed confused about the usage of comic in the reading comprehension and the way how to understand the story.

2. Second Cycle (Cycle 2)

a. Qualitative Data

In the second cycle process, the writer has revealed the following evidence of students' significant progress in understanding the story of The Origin of Senjuh Mountain (Asal Mula

Gunung Senujuh). Moreover, the writer learnt much from the previous phase, so in this second cycle she well prepared for everything related to the media, teaching strategy, procedure, and test. First, the writer needed to explain to the students how to understand the content of the story of The Origin of Senujuh Mountain; such as, the students should know about the tittle of that story, in order to make students easier to understand its plot. Second, students should know about the message conveyed by each image in the comic. So that they were able to conclude the content of the story. They also had to pay attention and know the characters of the story.

b. Quantitative Data

On the second cycle, the writer gave test to measure the students' understanding on reading comprehension. The result of the second cycle test showed that there was significant progress if it was compared with the first cycle. The result could be seen below:

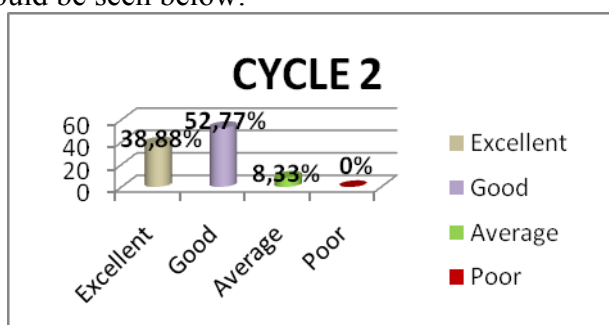


Fig. 3 The Percentage Score of Students' Reading Understanding

The above figure means that the students had significant improvement in understanding the reading comprehension by using comic. It was considered that the students had achieved the criteria of success.

c. Reflecting The Action

In this phase, almost all students could achieve the learning objectives. Based on the data, it showed that the application of comic not only had improved students' behavior but it could also influence students better understanding of the reading text positively.

It meant that using comic could influence the students' reading understanding positively. The weaknesses on the first cycle could be minimalized on the second cycle so the students' score had much increasing. Thus, the teaching

learning process also became much better than the first cycle, so the cycle could be stopped.

IV. CONCLUSIONS

Based on the provided data, it can be concluded that the use of local folklore comics are able to improve the students understanding and interest of narrative reading, arose the students' culture of reading literacy, and has met the criteria of contextual teaching and learning (CTL). The result showed that on the first cycle only 2,77% students' interest and understanding of narrative reading that was considered excellence, and on the second cycle showed the increasing become 38,88% of students' interest and understanding of narrative reading that was considered excellence, and no students were considered in the poor category.

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IMPROVING LECTURERS' PAEDAGOGIC COMPETENCE THROUGH THE IMPLEMENTATION OF LESSON STUDY IN FACULTY OF TEACHER TRAINING AND EDUCATION OF PAKUAN UNIVERSITY, INDONESIA

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Abstract. This research is aimed at improving the lecturers of Faculty of Teacher Training and Education of Pakuan University paedagogic competence through the implementation of lesson study which covers learning management competence including developing chapter design and lesson design, media making, teaching and learning, evaluation, post evaluation follow-up and learning supervision. This research involves four study program. The method used in this research is qualitative descriptive. The data are collected through documentation, observation, interview and questionnaire. The data are analyzed descriptively to investigate the improvement of the lecturers' paedagogic competence in teaching through the implementation of lesson study. Lesson study has been implemented for two years in Indonesian and Literature Education Study Program, English Education Study Program, Biology Education Study Program, and Primary Education Study Program. The findings show that there is an improvement of the lecturers paedagogic competence in developing chapter design and lesson design, developing material and designing media for learning (plan stage); running the lesson (do stage); and observing the lesson as well as evaluating and reflecting it (see stage). Besides, it is found the lecturers develop learning innovation to create students' active learning. The collegality among the lecturers is also develop well through the implementation of lesson study. The questionnaire result also shows that the implementation of lesson study can make the student become autonomous learners.

Keywords: lecturers' competence. Paedagogic, lesson study

I. INTRODUCTION

Background of the Study

Faculty of Teacher Training and Education of Pakuan University always tries to achieve national education goal and fulfill global demand in order that the graduates able to compete with other graduates nationally and internationally through the improvement of learning quality. By the improvement of learning quality, it is expected that the national education goal can be achieved. One of the efforts to do it is through the improvement of the lecturers' pedagogic competence.

Lecturers' pedagogic competences are among others: 1) understanding learners' characteristics; 2) understanding learners' learning styles and learning difficulties; 3) facilitating the development learners' potency; 4) mastering the theory and the principles of educating learning; 5) developing the curriculum that triggers learners' involvement in learning; 6) designing educated learning; 7) doing educated learning; 8) evaluating the learning process and result.

However, the reality in the field shows first, there are variety of competence and lecturers' difficulty in planning the lesson such as making chapter design and lesson design. Second, in administering the learning process and delivering knowledge, the lecturers have not given optimum effort to give knowledge, skills and attitude to the students by involving them actively. Third, there is no accurate measurement to investigate the

students' understanding of the materials and the lecturers' success in teaching and students' success in learning and students' learning autonomy. Fourth, the learning process is not relevant the students' need.

If those conditions continuously happen, it will result in the low quality of education which cover: 1) the lecturers' uncompetence in planning the lesson; 2) the lowness of learning autonomy and competence of the students in understanding the lecturer's explanation; 3) imperfection in building students' character; 4) students' low thinking capacity.

To anticipate those condition, the lecturers of Faculty of Teacher Training and Education of Pakuan university implement Lesson Study. It is one of the efforts to develop lecturers' quality and professionalism in facilitating the learning process. Lesson study is an activity that encourages a learning community, which consistently and systematically does self revision individually and managerially. Thus, it is expected that by the implementation of Lesson Study the lecturers' pedagogical competence improved.

Focus of the Study

The study focuses on the effort in improving lecturers' pedagogic competence that covers ability to plan a lesson, to administer the students centered-based lesson, and to evaluate the learning process and the learning result through the implementation of Lesson Study. The learning components observed are the

lecturers, the students, the materials, the method, the media and the evaluation.

Statement of the Problem

Based on the background of the study and research focus, the problem can be stated: "Is there an improvement of Faculty of Teacher Training and Education lecturers' pedagogic competence through the implementation of Lesson Study?"

II. THEORETICAL FOUNDATION

The Nature of Lecturer's Pedagogic Competence

The development of science and technology gives impact to the way the lecturers teach. It also encourages them to always improve their competence in order that they are able to use updated material and teaching method that is appropriate with the present situation need and challenge. Thus, the lecturers need to improve their pedagogic competence.

In Indonesian Fundamental Law No. 14 Year 2005 about teacher and lecturer, it is stated that pedagogic competence is "*kemampuan mengelola pembelajaran peserta didik*" (the ability to manage learners' learning). Department of National Education (2004:9) defines this competence as "*kompetensi pengelolaan pembelajaran*" (learning management competence). This competence can be seen from the ability to plan the learning program, ability to interact with the learners and to manage learning, and ability to evaluate. The competence in planning the lesson according to Joni (1984:12) covers 1) planning the organisation of the learning materials, 2) planning learning management, 3) planning classroom management, 4) planning the use of media and learning resources, and 5) planning learners' learning assessment. Department of National Education (2004:9) states that the competence of planning a lesson covers 1) ability to describe the goal, 2) ability to select the materials, 3) ability to organize the materials, 4) ability to decide learning strategy/method, 5) ability to decide learning resource and teaching aids, 6) ability to develop evaluation tool, 7) ability to decide evaluation technique, and 8) ability to manage time. Based on the description, designing a lesson is a lecturers' competence towards the activities that the learners should do during the learning process which include stating the goal, describing each lesson, planning the lesson, selecting different media and learning sources, and planning the evaluation based on the goal of learning.

Pedagogic competence is the ability that should be possessed by a lecturer related to the learners characteristics seen from different aspect such as physics, moral, social, culture, emotion, and intellect. Thus, lecturers' pedagogic competence can be described as the whole knowledge, skill and attitude reflected in a set of responsible smart actions possessed by a person whose profession is a teacher.

According to Gagne, there are various indicators showing the competence of a lecturers in teaching if they do the following roles:

1. Teacher as a planner who prepares everything that will be done in the classroom teaching (pre-teaching problems).;
2. Teacher as an organizer who creates situation, gives stimulus, moves and leads the learning process based on the plan, in which he plays a role as a resource, and as a wise leadership consultant who is democratic and humanistic during the teaching and learning process.
3. Teacher as an evaluator, who collects, analyzes, interprets, and assesses the success of learning process based on the stated criteria, in terms of the effectiveness of the process and the quality of the product.

Through good understanding about those roles, the lecturers will be able to conduct effective learning that can be seen if the lecturer can achieve the learning target. The learners are able to accept, understand, and apply well the materials delivered by the lecturer. In an effective learning the lecturer's role is very important, because he should know what the learners have already known, what they haven't known, and what they should know. It is expected that a lecturer uses creative and innovative learning method that will make the learners motivated to learn more.

Professional is a quality attitude of a member of a profession towards his profession and degree of their knowledge and expertise they have to do their job. (Surya, 2014:352). Professional teacher is a teacher who is competence and able to use his competence in creating a condition in which the teacher and the students interact to elaborate learning materials. It is also stated that a professional teacher is a teacher who are qualified in planning a lesson and administering the learning process in order to achieve expected specific attitude change.

Besides, teacher professionalism can be seen on teacher's creativity in organizing the learning materials. Teacher's skill in making learning media makes it possible for the students to interact and actively use the learning media. The teachers' competence in conducting the whole evaluation can be seen from both the process and the result by observing students' attitude, students' learning result, and students' skills. In conclusion, teacher professionalism can be reflected through his performance and attitude in doing his job.

The Nature of Lesson Study

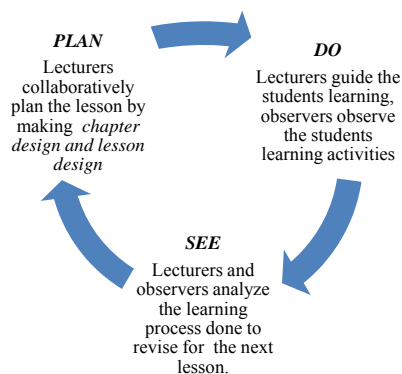
Lesson study is a model of educator profession guidance through analysing learning collaboratively and continuously based on the principle of collegiality and mutual learning to develop learning community. (hendayana, 2007:28-38) Lesson study guidance can be used as a teaching guidance model for a teacher or lecturer towards the students, and as an effort to improve teacher's quality and professionalism in facilitating a learning process.

As Lewis stated that if a teacher wants to improve a learning quality, one of the obvious ways is by collaborating with other teachers to design, observe and reflect learning. (Lewis, 2011: 2). Thus, Lesson Study is done in three stages: plan, do, see. The three stages

belong to one cycle and is done continuously. In other words Lesson Study is a strategy to improve the quality of education that never ends (continuous improvement).

The improvement of lecturer's pedagogic competence through Lesson Study is done in bottom-up way because the development of learning is done by considering suggestion, criticism, and recommendation from the observers, which is synthesized collaboratively and continuously.

The pattern of Lesson Study is developed as follows:



III. RESEARCH METHOD

This research applies qualitative descriptive method, and conducted in Indonesian Language and Art Education study program, English Education study program, Biology Education study program, and Primary Education study program.

The result of the research is based on document analysis, observation, and the analysis of the learning process. The research was started by investigating the learning activities done by the lecturers from four different study programs. The instruments used in the research are observational guide and questionnaire. The information is then synthesized to find out the need of lecturer's pedagogic competence in doing learning activity. The target is improving lecturer's pedagogic competence in each study program of Faculty of Teacher Training and Education of Pakuan University which is proven by analysis result.

Research Finding and Discussion

To find out the effectiveness of Lesson Study program done in Faculty of Teacher Training and Education of Pakuan University, the researcher compares the condition before and after the implementation of Lesson Study. From the instruments used the researcher got comprehensive information about the situation and condition in the field, because the data are taken from quantitative and qualitative survey. Both are used in the survey before Lesson Study is implemented (baseline survey) and after Lesson Study is implemented (end-line survey) along the learning activities.

Quantitative survey is done through questionnaire distribution and students' academic competence test. The questionnaire is responded by the Head of each study program, the lecturers, and the students. To do the quality assurance of the instrument as the data collection tool in evaluating the effectiveness of the program, those

instruments are validated in advance through review, try-out and revision process.

Qualitative survey is done by observing the learning process, interviewing, and analysing video of learning process. The qualitative instruments consist of learning observation guide and interview guide. Those instruments are also developed through review, try-out and revision process.

Monitoring of Lesson Study action is done on every stage of Lesson Study, starting from plan stage, do stage, and see stage. On the plan stage, monitoring is done by directly observing the lecturers' activity of each study program when they plan the lesson. The implementation stage and reflection is done by directly observing the situation and interviewing the model lecturer (the one who carries out the lesson), observers, sample students taken from the open lesson class and the Head of each study program. The monitoring instruments and evaluation used in Lesson Study are as follows:

Data from Interview:

a. Interview data with lecturers about the condition and situation of the present learning situation

Based on the result of the interview with the lecturers about the present learning situation, the majority of the lecturers said that Lesson Study is a new breakthrough to improve the quality of learning. The lecturer is more skillful in designing the lesson, applying learning model, approach, strategy and the use of learning media. Besides, Lesson Study develops learning community and collaboration among the lecturers so that the success of students' learning can be improved.

b. Interview with students about the condition and situation of the present learning situation

The students conclude that the learning done by the lecturers by implementing Lesson Study can improve their learning motivation, learning strategy, learning autonomy, and learning result.

c. Interview with Head of study program about the condition and situation of the present learning situation

From the interview with the Head of each study program, it is found that the lecturers' teaching spirit and collegiality among the lecturers improved. The lecturers' pedagogic competence which covers planning, learning action, and reflecting is also improved.

d. Observation and Video analysis of the learning process

Based on the observation of the learning process from the video taken from each lecturer model, it can be seen that in the learning process the students are more active, creative, and joyful. However, the pictorial shot is less smooth, neat and appropriate as the result the important moments and expressions are not caught properly by the camera.

e. Academic test in each study program

Academic test of each study program is developed based on the goal of learning of each subject by the

team in accordance with the chapter design and lesson design.

Evaluation Data from Lesson Study Activity

a. Oservation result from Plan stage

Based on observation result on plan activity, the lecturers agree that before learning is carried out, the lecturers identify the problems to focus on the problems or difficulties that are often faced by the students in particular learning materials. Through Lesson Study the lecturers get used to work collaboratively with other lecturers in deciding learning scenario and learning media that will be used.

This activity is available since Lesson Study is applied. Before Lesson Study was carried out the lecturers worked alone; only a few of them who worked collaboratively with other lecturers who taught the same subject. Through Lesson Study there is an improvement in collaboration among the lecturers.

b. Oservation Result from Learning Activity (Do)

Based on observation result from the learning activity (Do), the lecturers agree with the implementation of Lesson Study because through Lesson Study, all teaching tools are prepared well. The lecturers strongly agree with Lesson Study-based learning. It can be concluded that the implementation of Lesson Study in the learning process shows the improvement of the lecturers' pedagogic competence, as well as the improvement of the students' learning motivation, learning strategy, and learning result.

The improvement of the lecturers' pedagogic competence can be seen by teamwork in plan, do, see stages. Lesson design and chapter design are the products of the lecturers' competence in designing the lesson plan. Before Lesson Study was implemented there were no skills and products as a result of lesson planning design. The benefit of designing the lesson is that the lecturers have a guideline for administering a class which can be measured both its process and its product. In the implementation of Do stage it was found that teaching by being observed triggers the lecturers' creativity in producing learning model and media, Learning innovation can be achieved by many breakthrough in learning model and media development as well as the Lesson Study-based research. The model lecturers feel satisfied in conducting Lesson Study. Besides, by conducting a learning reflection, the lecturers are expected to always improve and carry out better lesson.

Data from Questionnaire (Observer)

Based on the data from questionnaire filled by the oservers, it is found that the observers agree with the implementation of Lesson Study and the stages of plan, do, see. Through Lesson Study they find that the students' learning autonomy improved. Lesson Study can

change their perception towards learning process that is open for suggestion and criticism. In conclusion, the observers respond positively to Lesson Study to improve the quality of learning.

Data from Questionnaire (Students)

The result of questionnaire given to the students show that they are motivated to learn better. The mastery of the lesson with Lesson Study pattern makes the students participate actively in learning the lesson. The lecturing through Lesson Study shows the change of the students' attitude into a more positive one. The students are motivated to learn collaboratively, to be more responsible, and autonomous. Thus, through Lesson Study the students find their own strategy to learn the lesson.

IV. DATA ANALYSIS

The data taken from questionnaire, observation, and interview are analyzed quantitaively and qualitatively with the following result:

No	The components	Result
1	Plan	Almost 100% lecturers agree that plan is carried out before administering the lesson
2	Do	The lecturers agree that through Open Lesson all the learning tools are prepared well
3	See	Reflection is effective in revising the plan before Do stage
5	Model lecturer	Lesson Study based learning reinforces the lecturers to be professional and competence, to e able to work collaboratively and develop collegiality
6	Observer	Almost 100% lecturers are motivated to be model lecturers and believe that Lesson Study can improve the quality of learning

V. DISCUSSION

Based on data description and analysis, it can be concluded that Lesson Study is able to:

1. Improve lecturers' skill in designing the lesson, administering the lesson, and evaluating the lesson.
2. Improve collegiality among the lecturers and student-teachers in learning by exchanging experience through Lesson Study.
3. Improve the accountability of lecturers' teaching tasks which are open mind, responsibility, and well planned and evaluated work.
4. Develop learning community among lecturers, among students, and between the lecturers and the students.
5. Improve students' learning autonomy.
6. Improve learning documents and scietific paper writing from learning development result through Lesson Study.

Based on the output, documenting and publishing Lesson Study activities conducted in four different study programs in Faculty of Teacher Training and Education give positive impact to the lecturers, the students and the study program. They are among others:

1. The availability of innovative and creative learning tools as the result of Lesson Study
2. The documents of Lesson Study results done by Faculty of Teacher Training and Education
3. The improvement of scientific publication as a result of Lesson Study-based research
4. Giving real illustration in improving the lecturers' pedagogic competence.
5. Motivating the lecturers to participate in doing Lesson Study to improve their pedagogic competence and improving the quality of learning.

VI. CONCLUSION

Learning activity done through the implementation of Lesson Study is proven to improve lecturers' pedagogic competence in designing the lesson by collaborating with other lecturers and giving suggestions to each other in designing the lesson. Before Lesson Study was implemented the lecturers worked alone, but now they work with team so that they have many fruitful suggestions from other lecturers who become the observers. Lesson Study improves the quality of learning, especially through the improvement of lecturers' pedagogic competence in designing, administering, and evaluating the lesson. The implementation of Lesson Study in the class gives positive impact in producing the students who are skillful in learning. The expectation to produce the students who are smart, leading, competitive, and dignitive as expected by the government can be achieved through the implementation of Lesson Study.

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INFLUENCE BETWEEN USING THE MALAY SAMBAS LANGUAGE IN MOVIES TOWARD DEVELOPMENT AND VITALITY OF THE EDUCATIONAL CHILHOOD LANGUAGE

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Abstract. A language is reflecting a culture, a human society has a richness that cannot be bought. with a language, people have interaction and love each other, hence the language is very important taught from an early age. Early age children learn language by means of listening, they are listening to the surrounding environment. Such as white papers, early childhood accept all information like graffiti painted rainbow colors in the surrounding environment. In recent years many movies by local communities that have been packed well, so it is interesting and fun for many people. Those movies are using the Malay language dialects like Sambas with the comedy genre which made the children very happy to watch movies. The children are repeatedly watching those movies just for fun, but because of that, the children get tremendous impact on the use of language by themselves. The impact felt is that the children will mimic a pure dialect in the movies. this is a homework for parents to give understanding to the child, when and where the local language is used and how important the Indonesian is used. The Malay language with Sambas dialect have a positive effect for children to preserve the local language maintained and inherited as a legacy. If the local language is not inherited, it will lead to generation of "Alay" which had no language area. Other impacts that will be caused by this phenomenon is when parents are negligent, then the children will be difficult to use Indonesian well and correctly, Indonesian language which is a tool to unite the nation. This study was based on the author's own experience. Regional movies nuances with humor genre is often used as a spectacle for entertaining family and impacting children to speak Indonesian well and correctly because influenced dialect in movies. This phenomenon is also related to the vitality of language in human society

Keywords: Language, movie, childhood

I. INTRODUCTION

Each country has a communication tool that can facilitate a relationship between individuals. This communication tool we call language. Language is a system of arbitrary epitome of sound produced by the human vocal organs and used by the public communication, cooperation, and self-identification. Oral language is the primary language, while the written language is a secondary language. Arbitrary namely the absence of a sound relationship between the symbol of the object. Indonesian is the communication media used to communicate between the Indonesian people in the area. Indonesian also known as the identity of Indonesia itself. Indonesian is already known from children to adults because it is a national medium.

Bilingual (bilingualism) are almost all over the world, in all social classes and all age groups [1]. Most of the children in the world learn to speak two languages and only about 1/4 away from children who had access to interact with the bilingual environment does not become bilingual [2].

Sambas society, as is generally the other language communities in Indonesia, is a bilingual community (bilingual community), at least passively bilingual. They can speak Malay (Sambas) and also the Indonesian language as the national language. Sambas children in general are also bilingual. Status of Indonesian as the national language, children's access to literacy, as well as the use of language in the family and the environment were the factors most likely to cause them to be bilingual [2]. For children whose first

language (L1) is their mother tongue, ie Sambas Malay language, the Indonesian language is a second language (L2). They are generally introduced in Indonesia language in school, between the ages of 5-7 years, both as a language of education and as a subject. Sambas for children whose first language is Indonesian, Malay language Sambas is their second language. They are usually introduced in Indonesian by their parents (caregivers) and learned to speak Malay Sambas from the everyday environment in the home of a family member spacious and environments such as friends and neighbors.

This research moved from the impression of bilingualism where children Sambas have become bilingual from a very young age. The phenomenon is facing lately is the number of films comedy genre that has spread among the public and use the Malay language dialects Sambas. The films are packed extremely interesting is aimed at preserving local culture is a culture of Sambas. On the other side of the language used in this film, which is a dialect of Malay language Sambas greatly influenced the development of early childhood language, which often watch such films as daily entertainment. Children will eventually be mastered the local language used in the film than Indonesian. It is a daunting task for parents to drive children when using the local language, and how important Indonesian.

Developments in the child's first language acquisition process is also associated with a change in the child's social orientation. Pronunciation of children aged 12 years in Meilton Keynes New Town, USA [3], for example, is different from the pronunciation by children 4 years of age.

Children aged 4 years were pronounced influenced by parents / guard them, while the pronunciation of children aged 8 to 12 years are affected by the pronunciation that characterizes the New Town and less influenced by the pronunciation of the parent / guardian them.

On the bilingual society, often people educate their children in a language they thought would benefit their children later in life. Sometimes their native language does not play a significant role both in the economy, politics, education and employment opportunities in their communities. Language status of a community within the community will determine the success of a person speaking [4]. Is there any effect of the use of the Malay language Sambas to early childhood language development and vitality of the language?

II. METHOD

This research is descriptive synchronous to see the language behavior Sambas in the period of time now and explain the phenomenon of the review of the science related descriptively, as they exist in the field. Specifically, this study looked at the relationship the child's first language with spoken language abilities or performance Sambas children are influenced by the films the local area. The study also tried to look sosiolinguistic factors that may influence the ability of Indonesian children Sambas.

The research method applied is a research method kuantitatif. Informasi about the linguistic background of children, education and social background of parents as well as the behavior of the language in various domains were collected using a questionnaire (questionnaires) are uplink-check-depth interview based on questions in the questionnaire. The data collection process through three main stages, namely: 1) preparation; 2) collecting data, and 3) processing and analysis of data. The preparation stage includes activities such as the determination of the methods and techniques of research subject selection, preparation of questionnaires and questionnaires deployment techniques, methods and data collection techniques.

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activities such as the determination of the methods and techniques of research subject selection, preparation of questionnaires and questionnaires deployment techniques, methods and data collection techniques.

This study is a preliminary study to try to look more deeply about the effects of the use of the Malay language in the film Sambas to early childhood language development and vitality of the language. As for the question as the basic questions that underlie this study are:

1. Is there any effect of the use of the Malay language in the film Sambas on early childhood development and vitality of the language?
2. What are the factors of linguistics and sociolinguistics that may affect the use of the Malay language Sambas in early childhood?

The cognitive approach first proposed by [5] who said that the child's cognitive development include changes in mental processes (cognitive) and capability (ability). At first a child begins to realize the existence of a concept such as the size of different objects, and then he will have the words and patterns of language to convey the concept. Children will convey simple ideas first before ideas are more complex. However, this theory has a flaw Peaget because they can not explain why children learn language earlier than learning other things.

Theory of Imitation and positive reinforcement (Imitation and Positive Reinforcement). This opinion are those of the adherents of the theory of behavior (behaviourist) were popular in the 40s to 50s. According to this theory, children learn language in a way to copy or imitate, and what they hear from adults. Strengthening and improvement of the mistakes they made in the language also plays an important role in their language acquisition process. This was later questioned by experts of other languages. According to them it is not possible the whole process of child language acquisition obtained through imitation or copying. Many children who pronounced sentence is grammatically incorrect is not he perdatap of imitating adults.

Teori native (Nativist Theory). The native theory stems from the opinion of Noam Chomsky [6] which says that man has 'inbuilt cognitive readiness for language' or cognitive readiness to language. Child birth is equipped with a 'language-acquisition devices (LAD)' ie components that contain innate knowledge of the rules of the language. According to Chomsky, LAD is an abstract components that facilitate or children acquire language. This opinion was later expanded Chomsky into a theory known as Universal Grammar, which states that in the brains of all humans have innate set of principles (innate principles) and the parameters that can be adjusted (adjustable parameters) that lets kids capture the structure of language his mother (mother tongue) after being introduced in that language, and allows them to master the language of his mother at the age of 3 years.

In the process of language acquisition known a period called critical period or the critical period [7]. This critical period is the period where the child should be introduced to a language that is exposed to him. The critical period ends approximately at the end of childhood are age 12 years or maybe puberty. Lenneberg say that when it comes to this age children are not introduced in any one language, then he will never learn the language of normal and functional. Many

experts, which argues that this hypothesis is difficult to prove. According to them, there are other factors that influence the process of child language acquisition and adults differently. They argue that children learn a language without effort; speed in acquiring language due to the possibility because the environment is prepared in such a way to give him a chance as often and seoptima. This is in contrast to adults who learn a language where in the early stages of language learning, the adults had a good opportunity to learn the vocabulary and grammar, but the pronunciation will never match the native speakers .

Recent studies on language acquisition. Research on child language acquisition, both first language and second language, shows various aspects that come into play in the process of language acquisition. The studies that have been conducted by the renowned linguists prior to this, such as showed that in the first language acquisition, children are very influenced by his own friends than by his parents.

The research result Payne showed that children of migrant families in Philadelphia more influenced by their friends in terms of acquisition of certain sounds that are characteristic of the area despite their parents give maximum input. Similarly, where the research results [3] which show the influence of friends on the acquisition of sounds (ou). But a recent study , shows that the linguistic knowledge of children in Sui (southwestern China) are not affected by a parent or friend, but by the clan (clan).

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MEDIA LITERACY COMPETENCY-ORIENTED LIFE SKILLS FOR HIGH SCHOOL TEACHER IN THE CITY OF BANDUNG IN THE FACE OF MEA

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Abstract. Use good media mass media as well as electronic media increases over time, especially with the presence of new media that is able to collect, process, and exchange information quickly. Research literacy competency media beorientasi life skills aims to describe the media literacy competency-oriented life skills which belonged to the high school teacher in the city of Bandung. Research methods using a descriptive qualitative approach method. The expected results are: (1) the discovery of the level and type of media literacy and competency (2) discovery of quality, factor endowments, and restricting the media literacy competency-oriented life skills teachers HIGH SCHOOL in Bandung. The results of the analysis of the data shows that the competence-based media literacy-oriented life skills teacher HIGH SCHOOL city of Bandung were still on secondary media literacy.

Keywords: Competence, Media Literacy, life skills

I. INTRODUCTION

The presence of technology, information, and communication has changed the orientation of the life of mankind. The ability of technology, information, and communication in providing everything necessary for the continuity of human life and comfort make the technology, information, and communication of successful entry into all aspects of life. Language activities in relation to the activities of the write medium in order to understand any form or manifestation of technology, information, and communication as one of the activities that supports the survival of human beings, is now no longer an unbounded keaksaran activity deals with the media physically write medium (paper). Media write medium is now combined with the media Vantage-listen or audio-visual digital media as well as the shape of the stroke technology. The presence of technology, information, and communications have influenced various aspects of the dynamics of human life began way of thinking, a way of feeling, to the way human behave very pronounced will "touch" technology, information, and communication. Man that was struck was not what dikreasikan can be turned into a hostage (technology of determinism). This condition caused no other strong influence and the role of technology, information, and communication are available.

Influence of media on the battle of life must be followed by the preparedness community. Activities interact and communicate, who had limited activities keaksaran bermedia paper and unbounded. Now such a significant shift towards activities that require an understanding of multimedia, multimodal, and multimodel along leaps and bounds of civilization that are generated by the entry of technology into the realm of information and communication. Cases of misuse of the media emerged as an indicator of society's unpreparedness in the face of technological development, information and

communication. The literacy abilities of unbounded on the activities of the physical write medium must be really terkuasai very well. Alphabet literacy or literacy must be immediately shifted with the literacy level of the media towards may or media literacy. No longer write medium unbounded but understand and productive, participating actively in order to not so principals or even victims are harmed due to misuse of information and communication media.

The abuse cases prove that the community has not been able to absorb the information and convey information well through the media. This is related to the literacy ability has not been good among the public. Some perpetrators of cases of abuse of the media is the teacher and the student. This proves that as an educator, there are many teachers who do not yet have a good media literacy ability. This imposes on learners. Lack of literacy education from teacher to learner led pesereta learners don't have good media literacy ability, finally the learners to become pekaku in the misuse of media information.

Media literacy is becoming important to prepare the audience for the media to be more sensitive and more anticipatory when coming into contact and the influence of media on the other. Media literacy abilities already possessed by the appropriate teacher. It is aligned with the content of the Government Regulation (PP) number 74 in 2008 about the teacher who States that teachers should have the competence, the competence of personality pedagogy, social competence, and professional competence. Aspects of competence that should be owned by the teachers, one teacher's competence with regard to the pedagogic competency is media literacy, i.e. the utilization technology of learning by teachers or social competence, that teachers need to use information and communication technology are functional. The contents of the PP Number 74 in 2008 about the Teacher became one of the runways, the teacher should have a good media

literacy the competence to develop the profession of seoptimal possible.

HIGH SCHOOL teachers are educators in the secondary high school. High school teacher is an educator who plays a major role in the formation of the character of learners. With good media literacy ability, teachers as educators, will absorb, deliver, and make good information. This research is early research of advanced research, namely literacy education for HIGH SCHOOL teachers. On this initial research, researchers want to chart the first literacy abilities of high school teacher in the city of Bandung, based on the level, type, quality, memegaruhi factors, as well as the availability of facilities and infrastructure supporting media literacy competency-oriented life skills teacher HIGH SCHOOL in Bandung.

The Study Of Theory

Understanding Of Media Literacy

The definition of media literacy, according to Buckingham and Livingstone using the trikotomi approach covers three areas, namely, media literacy means: (a) have access or facilities and infrastructure to the media, (b) understand the scope of the media, and (c) create/express yourself by using media (Darmasuti, 2013; Amalia, 2013). In General, media literacy is the ability of a person controlling influence the content or message of media on their lives. Irianto (2009, p. 68), specifies the media literacy activities include activities of accessing, analyzing, evaluating, and produce content or message media. This means that media literacy is a person's ability to use various media to access, analyze, evaluate, and generate information for various purposes. Someone will be influenced by the media around, good media content from television, film, radio, music, newspapers, magazines, even the internet can now be accessed via a cell phone. It happens in everyday life.

According to Rahardjo (2012) the things that are important from a media literacy, among them "... the media literacy encourages the emergence of critical thinking from the public against programs that served the media, media literacy also allows the creation of ability to communicate are competent in all forms of media, being proactive rather than reactive in understanding media programs ... ". Thus, media literacy is directly related to the problem of the skills, knowledge, and competence.

The Main Elements Of Media Literacy

The main elements of media literacy there are six, namely (1) awareness of the impact of the media; (2) an understanding of the process of mass communication; (2) strategies for analyzing and discussing media messages; (3) understanding of media content as a text that gives an insight into the culture and life; (4) the ability to enjoy, understand, and appreciate the content of the media; (5) an understanding of the ethical and moral obligations of media practitioners;(6) skills development proper and effective production. (The first five elements by Art (1995). Two additional elements by Stanley j. Baran, 1999, pp. 49 – 54).

The types in Media Literacy

There are two media literacy, i.e. the type of media literacy based on the destination media include (1) media literacy in a broader sense, compared to the media literacy of the word ' media literacy ' forms of literacy for the literacy activities

of literacy. However, the equivalent of the word literacy does not reflect the major elements that literacy is not enough to just being able to read and understand text or discourse. Media literacy in the broad sense is still defined as a written media literacy in the content or print newspapers and the like. (2) media literacy in the sense of narrow, generally media literacy is the ability of an intelligent audience in utilizing media and can be applied to all individuals. Meanwhile, in the narrow sense, media literacy, still dwelling on certain media, i.e. the media audiovisual-based or informative has more to do with television. It is still we see in many media literacy in African-American activist site or foreign media literacy which showed that it was primarily intended for television media. Of course now the pop media literacy has relatively the same understanding that media literacy is applicable for all types of media, both old media or new media, both print and electronic (Amalia, 2013). (3) new media literacy, is the effect of advances in technology in particular. Digital media literacy is the conception of the enclosing skills and understanding for media based multi-dimensional, mutlimodel, as well as multimedia in between internet-based media, computer-based media, and media-based cell phones. Digital literacy is reinforced with the understanding that new media messages have consequences at the personal and dynamic public, the contents of the message content and new media are converging, and new media are able to liaise on participant communication from anywhere (social media).

The second type, i.e. the type of media literacy based on the level of proficiency that is trying to appear include the following matters: (1) the initial level of media literacy, media literacy is usually in the form of the introduction of the media, especially the impact of positive and negative potential produced by the media are presented; (2) intermediate media literacy aims to grow in proficiency understand, understand, and apply the messages that are presented from the media; (3) advanced media literacy, media literacy in the outer bore of know-how to understand media ranging from the planning up to the production of messages, the structure of knowledge against the media are relatively complete, critical understanding and on the level of action, e.g., advise on certain media and criticized certain media (Amalia, 2013). In relation to the life skills literacy media type based on the level of life skills who want to appear is the personal skills, social skills, academic skills, and competence of the Polytechnic in the form of a reflection of teacher professionalism.

Media Literacy Activity Skills

Understand and bring up individual skills in using the media is the main goal of the literacy activities in the media. This goal is more important when compared with the aim to introduce the media or even to grow a critical understanding of the media. There are seven skill or ability that will emerge from the media literacy activities: analyze, assess, classify, induces, mendeduksi, synthesize, mengabstraksi (Potter, 2008). Such skills should also be strengthened with media literacy aspects according to Art (1995, p. 13), i.e., process, context, framework, production value. Based on the activities of the media literacy competencies has been mentioned by Potter (2008) and Art

(1995), media literacy competencies that appear on research literacy competencies, namely media that cover the activities of accessing, analyzing, evaluating, and producing content/media messages (Irinato, 2009, p. 68). The fourth activity is the outline that represents the media literacy competence in theory Potter (2008) and Art (1995). Life Skills

Skills to manage and solve the problem of life is an absolute must-have skills of humans in ensuring continuity and comfort his life. Skilled or qualified to be an indicator of the success of the education given to someone. Skills or abilities that are used in living a life that is known for its istilah life skills.

Life skills are the skills possessed someone to boldly face the problems of life and the life of graceful without feeling depressed, then proactively and creatively seek and find a solution so that finally was able to overcome it (Supriatna, 2007). Based on the understanding of media literacy competency-oriented life skills at this high school teacher should be able to contribute to the improvement of the ability, willingness, and skills needed by a high school teacher to keep continuity of learning (live) and self development especially development concerning teaching-learning cycle in order to increase the skills of learners one on media literacy skills.

Supriatna (2007) outlines regarding the abilities, ability, and skill that is intended, namely (1) the ability is the realisation of the nature of cognitive life skills, (2) is capable of realization of life skills which are more affective, and (3) skill is the realisation of life skills which are psychomotor. Life skills include some basic capabilities, i.e., personal skills, social, academic, and Polytechnic (Marwiyah, 2012). The MoE life skills grouped into two, namely that life skills are generic (generic life skills) include personal skills (personal skills) and social skills (social skills). Life skills which are specific (specific life skills) includes academic skills (academic skill) and Polytechnic prowess (vocasional skills) (Supriatna, 2007).

As for life skills in the context of media literacy competence in these researchers include the following skills.

a. Personal Skills

Personal prowess in this study specifically is the ability to use and leverage the media to mengoptimalisasikan themselves, improve insight, knowledge, and abilities of self. Tecermin of personal skills and capabilities the ability to access, analyze, and evaluate the issues, problems, or a phenomenon produced by the information, ideas, or ideas on the process and results of media literacy. Then, convert the media content into products that can be utilized to support the learning process and learning.

b. Social Skills

Social skills in this study specifically is the ability to use and leverage the media to establish cooperation and communication with the general good relationship between educators and learners, educators and educators, educators and educational personnel, educators and environmental educators, educators, students and parents as well as educators and the community.

c. Academic Prowess

As for his academic prowess in this study specifically is the ability of teachers in using and utilizing the media to hone the Customs and scientific capabilities to enhance the learning process. Utilization technology of learning also maksud in it technology media utilization in the field of information and communication are the Foundation of kompetensi media literacy.

d. Proficiency Polytechnic

Polytechnic skills include more specific capabilities contribute to the field of expertise of the teacher as a professional profession or skills related to the professional competence of the Polytechnic should posses as a form of teacher professionalism. Polytechnic prowess in this study specifically is the ability of teachers in using and utilizing the media or media content to improve the Professional (teacher).

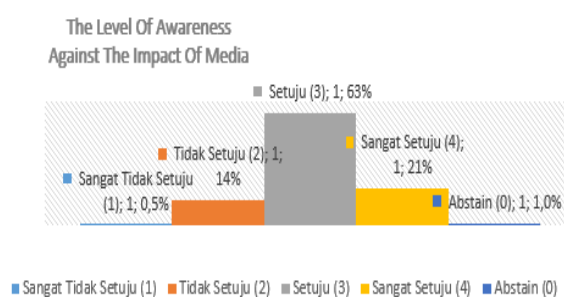
II. METHOD

The methods used in this research is descriptive qualitative approach method. The qualitative approach used in this study is taken from Creswell (1994, p. 177). Researchers put the qualitative approach, since it is expected to be more revealing view of respondents high school teacher. Descriptive analysis techniques used to study further data and interpreted so as to produce a summary of comprehensive, relevant, and accurate, and relevant. Dekriptif analysis technique used is the percentage of engineering Sugiyono (2013). The population of this research is the high school teacher se-Bandung. This research sample taken based on a combined area of passing grade category (GW) academic HIGH SCHOOL line of Bandung city 2016. A sample of teachers in three schools that were taken randomly from the population. This is done so that the data obtained are accurate.

Media Literacy Level Of Competence-Oriented Life Skills

Media literacy Competence levels of initial

Of the research data obtained number percentage level of awareness of the impact of the media in human life as a main subject the user or users of the media, especially the high school teacher of Bandung city, amounting to 76% of expected awareness scale (100%).



Gambar 1 Persentase Tingkat Kesadaran Terhadap Dampak Media

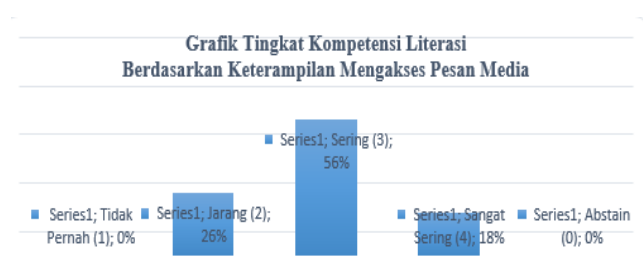
As for the description of the percentage level of awareness of respondents against the impact of the media in more detail per aspects of media content as follows: percentage of the level of awareness that media content can (1) affects

the idea or the idea of its users amounting to 88%; (2) affects the needs of its users, of 85%; (3) add insights and new science users, amounting to 84%; (4) the emotional feeling or affect its users amounting to 80%; (5) raises the question or the issue of new users, amounting to 78%; (6) affect the chance of its users, of 77%; (7) affect decisions and habits of its users, amounting to 76%; (8) certain goals and inculcate, 76%; (9) affects the viewpoint and the mindset of users, amounting to 71%; (10) to produce a deal, amounting to 70%; (11) affect the behavior and actions of its users, amounting to 69%; (12) give rise to disputes, amounting to 67%; (13) affect the confidence of its users, amounting to 63%.

Media literacy Competence levels of intermediate

Access the Skills of media messages

Based on data collected from the respondents obtained the percentage of skills to access media content on a high school teacher of Bandung city, amounting to 73% of the expected access skills scale (100%). Figure 2 here's a per-scale rician frekuentatif activities to access the media.



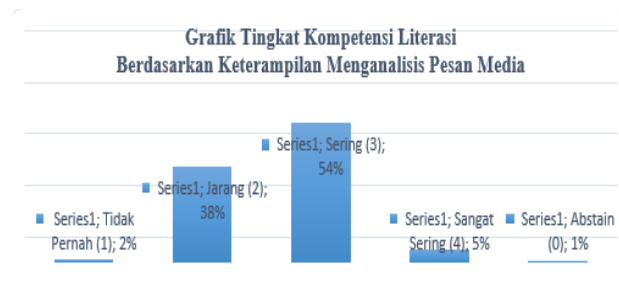
Gambar 2 Persentase Frekuentatif Kegiatan Mengakses Pesan Media

Activities to access the media message in Figure 2 are intended to describe the skills to access the media as one of the activities within the competence of the media literacy which (1) using social media to communicate with se-profession, with a percentage of 80% frekuentatif (representation of social skills); (2) accessing the various media to add insight and knowledge, with the percentage of frekuentatif amounted to 79% (personal skills representation); (3) read the latest issues of information, with the percentage of frekuentatif amounted to 79% (representation of social skills); (4) to access the media as additional materials and information for teaching, with the percentage of frekuentatif amounted to 79% (Polytechnic prowess representation); (5) access medium for sharing learning design products (RPP, Syllabus, teaching Media, etc.), with a percentage of 71% frekuentatif (representation skills Polytechnic); (6) look for things that can be of assistance to our daily lives, with the percentage of frekuentatif of 69% (personal skills representation); (7) monitoring of information on regulations and legislation in the utilization and use of media, with a percentage of 64% frekuentatif (representation of academic skills); (8) access the journals research results, with a percentage of frekuentatif of 63% (representation of academic prowess).

The skills to analyze media messages

Middle-level literacy competency, which was excavated from the skills to analyze media messages obtained as a

percentage of the skill to analyze media content on a high school teacher of Bandung city, amounting to 65% of the skills scale analyzes the media messaging expected (100%).



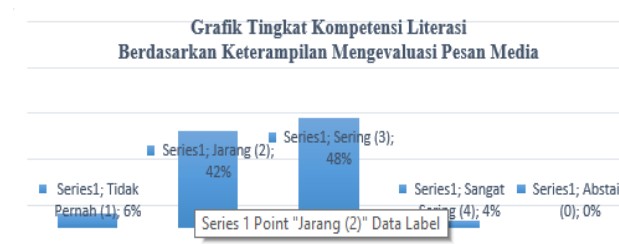
Gambar 3 Persentase Frekuentatif Kegiatan Menganalisis Pesan Media

Activities analyse media messages to describe the skills to analyze the message content or media as one of the activities within the competence of the media literacy-oriented life skills which (1) review the truth (relevance) and benefiting (the credibility of) the source of the news, with the percentage of 70% frekuentatif (representation of academic skills); (2) identify the media content that is not appropriate to the learners, with the percentage of frekuentatif of 69% (Polytechnic prowess representation); (3) analyze media distimulus by personal inclination or interest in the topic, with the percentage of frekuentatif amounted to 66% (personal skills representation); (4) analyze media content with the point of view of religious values, ethics, and morality, with the percentage of frekuentatif of 64% (personal skills representation); (5) to feel angry, upset, sad, happy, enthusiastic, emotional and other perceived according to what myself and others after reading a media content, with the percentage of frekuentatif of 63% (the representation of social skills); (6) send information/news as material for discussion, with the percentage of frekuentatif by 60% (the representation of social skills).

Advanced media literacy Competency

The skills to evaluate media messages

Based on the results of the analysis of data obtained by frekuentatif percentage figures of 62% of the skills scale evaluates the expected media messages (100%). Percentage of the frekuentatif obtained from the analysis results from Figure 4 below.



Gambar 4 Persentase Frekuentatif Kegiatan Mengevaluasi Pesan Media

Based on the graph in Figure 4, the collected data of 48% respondents said often in doing these activities evaluate the messages the media as media literacy competency *beroerientasi* description life skills. As for the details of activities that reflect the skills and competencies of the media literacy *beorentasi* life skills activities in evaluating media message, among them (1) assess the media based on the viewpoint of morality, with the percentage of *frekuentatif* of 68% (representation of social skills); (2) evaluate media content with discussing the along with colleagues or establishing, with the percentage of *frekuentatif* of 65% (the representation of social skills); (3) close the access to media that is not answerable morally, with a percentage of 60% *frekuentatif* (representation skills Polytechnic); (4) evaluate media content based on basic rules of applicable law, with the percentage of *frekuentatif* of 61% (representation of academic skills); and (5) evaluating the media refers to the study of the theory, with the percentage of 57% *frekuentatif* (representation of personal skills).

The skills of producing media messages

Advanced literacy competence this last one, excavated from the skill of producing media messages. Based on the results of the analysis of data obtained by presentation skills produce media content on a high school teacher of Bandung city, of 48% of the skills scale produces the expected media messages (100%). Figure 5 here's a per-scale percentage of *rician frekuentatif* activities producing the message media high school teacher of Bandung city.



Gambar 5 Persentase Frekuentatif Kegiatan Memproduksi Pesan Media

Based on the graph in Figure 5, the obtained data on the percentage of *frekuentatif* activities producing the message media of 43% of the respondents stated rarely and 33% were either never in doing these activities produce the message media as media literacy competency *beroerientasi* description life skills. As for the details of activities that reflect the skills and competencies of the media literacy *beorentasi* life skills activities in producing media messages, among them (1) making media content (news, advertising, film, etc.) as a teaching materials and media, with the percentage of 70% *frekuentatif* (representation skills Polytechnic); (2) directing or assigning students to actively criticize media content either in the media or in social media, with the percentage of *frekuentatif* of 64% (Polytechnic prowess representation); (3) refer a writings from other sources into social media, with the percentage

of *frekuentatif* amounted to 56% (representation of social skills); (4) make the content of the media (article and video) to share information and knowledge societies, with the percentage 54% of *frekuentatif* (the representation of social skills); (5) making media content as material for research, with the percentage of *frekuentatif* of 48% (representation of academic skills); (6) writing argument essays or to criticize an content or media messages in print, with the percentage of 46% *frekuentatif* (representation of personal skills); (7) post a question in the discussion forum online (online), with a percentage of *frekuentatif* of 46% (the representation of social skills); (8) making critical reviews about the dissatisfaction of a media content and put it on a personal blog, with a percentage of 40% *frekuentatif* (representation of personal skills); (9) following the discussion in the interactive television by telephone, with the percentage of *frekuentatif* of 38% (the representation of social skills); (10) sent a video to the news media that open service journalist audience e.g. sending video news to broadcast news journalist citizens (citizen journalism), with a percentage of 34% *frekuentatif* (representation of academic skills); and (11) make a video on the internet (Youtube) on the impact of media content, with a percentage of 33% *frekuentatif* (representation of academic prowess).

The results of the analysis and research on data describing the level of competence of media literacy-oriented life skills Teacher SMA Bandung can be inferred that the Bandung city high school teacher is at intermediate literacy competencies with competency percentage of 70%. This means that a fairly high level of awareness against the impact of the media (76%) have not been followed by productive competence or in other words still exist in the user's *tinggat* or reactive media users have not been on proactive and productive conditions.

Type-type of media literacy-oriented life skills teacher

Type of Media Literacy by type of Media

Types of media based on aspects of the access levels *frekuentatif*

Newspapers are still regarded as the most reliable information by HIGH SCHOOL teachers of Bandung in improving literacy competency. The use of newspapers and magazines is the interpretation that media literacy Teacher SMA Bandung still utilize literacy in terms of literacy. Table 1 below shows the *frekuentatif* types of print media that is often accessed by a high school teacher of Bandung city.

Table 1 Type of Print Media

No.	The Type Of Print Media	The Percentage
1	newspaper or newspaper	89%
2	Magazine	57%
3	Banners	29%
4	Posters	25%
5	Pamphle	18%
6	Other	11%

Source: research results (2016)

Table 1 shows the level of frekuentatif the use of the media the media literacy skills information in terms of narrow, i.e. media literacy competency only deals against there is not access to electronic media (audiovisual) broadcast television and radio (audio), as many as 82% of high school teacher of Bandung were still using media information broadcast television as a medium that contribute to media literacy competence whereas for level frekuentatif the use of the media any information broadcast radio (audio) only amounted to 43%.

Furthermore, table 2 below also shows the existence of a media literacy activity involving digital media. This means that the new media literacy has dominated the other informative media particularly the use and utilization of internet-based social networking media, whether it is site facebook, Twitter, Path, Instagram or application-based cell phone (smartphone) service providers and social networks such as Line or What'up. The dominance of digital media based social networking (96%) defeats the electronic media such as television (82%) and radio broadcasts (43%). That is, respondents or high school teacher of Bandung now shifts do media literacy activities at the new media literacy.

Tabel 1 Jenis Media Elektronik dan Digital

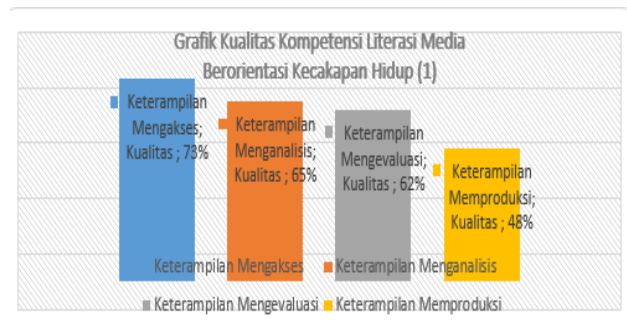
No.	Jenis Media Digital	Persentase
1	internet: jejaring sosial	96%
2	siaran televisi	82%
3	internet: surat-kabar <i>online</i> / <i>website</i> <i>newspaper</i> / <i>web-paper</i>	82%
4	internet: situs (<i>website</i>) resmi	50%
5	siaran radio	43%
6	<i>e-paper</i> : surat kabar atau majalah digital	32%
7	internet: situs (<i>website</i>) blog	32%
8	internet: situs (<i>website</i>) forum	32%
9	langganan berita daring (<i>online</i>)	14%

Location type

Media access activity to enhance the competence of the media literacy figures obtained persentase, amounting to 54% for the access to media literacy in school, 35% for access literacy media in societies, and 34% for the access to media literacy in the home. The school as a main container activity of educators and learners already provide support for media literacy competency activities menfasiltasi.

Media literacy competency-oriented quality of life skills

Based on the results of the analysis of data obtained a description of the percentage literacy competency quality media oriented life skills teacher high school in Bandung city amounted to 61% of scale quality of life skills-oriented literacy competencies expected (100%). The amount of data for frekuentatif activities access, analyze, evaluate, and produce content or media messages is done by high school teacher of Bandung city of 2035. Thus, the percentage of quality media literacy competency-oriented life skills teacher HIGH SCHOOL in the city of Bandung as a whole amounted to 61% from the results of a comparison of the actual score (1580) with a score of ideal (3360).



Gambar 6 Kualitas Kompetensi Literasi Media Berorientasi Kecakapan Hidup (1)

Based on Figure 6, can be seen the percentage dominance of mapping skills through activities that represent the life skills beorientasi literacy competence that owned Bandung city high school teacher, as much as 73% domination activities literacy competency skills to access media on the message or content of the media, then 65% of the activities of the media literacy competency skills at analyzing message content or media, 62% of the activities of the media literacy competence in the skills of evaluating the message or content of the media and only 48% of the activities of media literacy competence in skills produces a message or media content. That is, positive efforts are required in order for the high school teacher of Bandung was able to increase life skills beorientasi literacy competencies has to level productive.

Figure 7 shows the dominance of the Polytechnic in literacy competency skills of media oriented life skills for teachers of HIGH SCHOOL in the city of Bandung, amounting to 69%. That is to say, HIGH SCHOOL teachers in Bandung are already making use of the media and media content to improve the skills specifically related to the teaching-learning process or learning.



Figure 7 Berorientasi Media Literacy Competency Quality life skills (2)

Factor endowments and restricting factors

A Supporting Factor.

Based on the analysis of data obtained a description of the factors supporting this as follows.

1. Sarana-prasarana in the media literacy competency.

One of them access to these kinds of media have already obtained easily either at school (work), in the environment (society), and the teachers have started to open up access to media messages at home personally. Access advice and this includes presence availability prasaran infrastructure both print media (newspaper subscriptions), electronic media

(the existence of facilities such as television and radio elektronik), and digital media (internet) that can now be accessed at school, in the Community (public facilities), also in the House are even accessible for individual, personal, and private (Privacy).

2. Receptacle or teacher discussion forum regarding literacy competency.

The presence of colleagues or fellow to establishing who has the same focus in literacy competence in order to create a study group in kesalingan in the process of the transfer of science as well as ancillary skills literacy competency-oriented life skills for high school teacher of Bandung

3. Training that improves the literacy teacher competence.

Need for training-training for teachers in improving literacy competency. Peningkatan literacy competence should in theory to a practical level so the ability, willingness, and media literacy competence can be up to level productive. Such training should preferably be organized regularly and periodically either organized by the Government, social agencies, colleges, and school/work place themselves with the aim of improving the competence of teachers professionally especially related to peningkatan kemelekakan media and technology.

B. Factors Restricting

As for restricting factor of research data is (1) the limitations of the time teachers to perform the kegiatan self development especially improvement of media literacy competence so that high school teacher of Bandung city, so the high school teacher of Bandung city hasn't been able to memanfaatkan media optimally and productive; (2) the burden of teaching and other work load. The large number of weights class and the service work that is delegated to a particular teacher high school teacher in the city of Bandung made the existence of the time limitations in the development of the self; (3) Yet the existence of a container or forum that is the focus of literacy competency enhancement mastered specifically for high school teacher Bandung; (4) the lack of a container or forum on literacy competence enhancement; (6) lack of penyelenggaraan training, socialization, guidance or counseling regarding the competence of media literacy; and (7) the technical Constraints in the operation of various types of media in particular that based on ICT.

The availability of facilities and infrastructure supporting

The internet access has been very accessible either in the school as a teacher's working environment, in society or in public facilities that can be accessed by the public, and now the internet is already a personal or private nature since it was already accessible on a cell phone belongs to. In addition to access to the media-based digital or new media, availability of pengeloan internet filter that's been easy to come by so the protection or protection against sites not responsible can already was either constitutionally or by mail readers as a form of media literacy competence (a powerful mob) or social media facilities that can accommodate any complaints from the public to the providers of those services. Furthermore, access to the print media that is very adequate because print media particularly newspapers and magazines have become facilities obtained easily either at school, in institutions or companies of public service, many teachers who have

already done the service personally against print media at his house each. Lastly, the availability of books supporting the literacy competence can be accessed in the public library or school library to the public.

III. CONCLUSION

Media literacy competency beorientasi life skills teacher SMA Bandung needs to be improved. Not only on the level of awareness of the impact of media on penggunaanya but it is up to the level of advanced media literacy competency. High school teacher of Bandung city already has a good awareness to the impacts generated by the media and has been conducting activities that can whet the media literacy competency. Although, dominance on activities that are in the competence of intermediate media literacy, i.e. activities to access and analyze media messages. Increased activities on the level of information is still required. This can be seen from the level of frekwentatif on activities evaluate to produce media messages is still low. A high level of awareness against the impact of the media has not been followed by productive competence or in other words still exist in the user's tinggat or reactive media users have not been on proactive and productive conditions.

Judging from the media type, high school teacher of Bandung is already using the new media messages. It is seen from the domination of the internet-based informative media use, which is intended to facilitate the social networking, whether it is site or application in the shape of a mobile phone (smartphone). This is due to the existence of the facilities and infrastructure that are accessible, community school (public service), and home. Teacher educators as a subject (role models) must be capable of being the subject of media users and users of proactive, reactive, and productive. Media literacy competency improvement quite urgent and indispensable that teachers can utilize media optimally to help pengoptimalkan the process of education and learning as well as an increase in self development in a professional manner. A good media literacy competency can help in menghindari themselves of dependence as well as the use of media that tends towards the negative or on things that can harm yourself or others arising from the influence of the media.

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SMARTPHONE BASED LEARNING TO IMPROVE THE QUALITY OF VOCATIONAL HIGH SCHOOL GRADUATES

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Abstract The world of education has now entered a new era in the learning process, development of information technology, supported by progress needs education provide constructive feedback to improve the quality of education itself. Vocational High School (SMK) is one of the vocational institutions that shelter under the ministry of education and culture of the Republic of Indonesia, the equivalent of high school that provides technical knowledge in order to work properly either work individually or work in a team. Vocational learning that there is now almost entirely using computer spring so it is considered will not have difficulty in learning-based smartphone. Teaching materials presented at the SMK is also a large part of the teaching materials obtained from the ministry of education and culture and the industrial world. It is expected that all the knowledge given in accordance with the needs of the existing vocational kerja.Lulusan fraction compliant with world standards of work both in the government and the industry and are able to work independently and be accepted in the world of work, based on the knowledge gained during the implementation of vocational education for approximately three years. The method used is applied importif that development process on learning conditions that exist today in the learning process and make changes gradually to the delivery of materials into the device-based digital base mobile.Tujuan this paper is to design, improve the ability / knowledge and design models learning in vocational school to be converted into a smartphone as a device that can be used to access the learning materials whenever and wherever students are, so that students can study freely in accordance with the time available for 24 hours.

Keywords: learning Graduate SMK, based smartphones

I. INTRODUCTION

the development of information technology in today's era has entered a phase of development that will continue to evolve with advances in software technology to support the hardware. On the other hand the data show that mobile phone users in Indonesia has reached 270 million active cards, this data according to the information submitted former minister of Communication and Information Tifatul Sembiring in 2014. Most of the mobile users are users who are in their productive years, mostly among the mobile users are students. Civitas SMK is one such mobile phone users. SMK as one vocational institution that still use textbooks as a learning resource is felt less productive in improving the quality of teaching alumni.Tenaga using old methods to present the material that is only to explain and clarify the subject matter using a support device as is, for example, markers and whiteboard , There are some teachers are still learning one method will maintain this direction because it is seen still feasible to be used, but this method has less suited the era of information technology development. There are some things that are often encountered that causes the faculty still use this method, among others: the adoption of *the transfer of knowledge* that is considered difficult, their

thoughts always see more downside in penggunaan, information technology, the other side of learners who are already very adept at using and utilize information communication technology devices to be bored in a learning model that resulted learners lazy to follow A learning teaching process, which will probably cause other effects by interfering with friends. The number of teaching materials will be very useful when the method is used in conveying the material (information) on vocational school students using digital data containing and combining all elements, ranging from text, sound, video, graphics, still image and animation. The presence of mobile phones with all the existing facilities can be used in teaching and learning. In doing digital implementation of this, the executive education in imi schools need to protect against Internet access that can be used by all students, so as to ensure the expected results, namely the achievement of the learning process fun for students of SMK which is expected to improve its quality. The teaching materials would be very interesting if you combine these materials in the form of multimedia. Materials on SMK does require a lot of teaching materials that contain multimedia elements in its delivery to be more easily understood by students of SMK before doing the lab directly, for example in the subjects of computer networks that use simulations *tracerstudy*,then the application of

learning in the control circuit, known as *Festo Fuidsim* that will make it easier for students of SMK in the teaching and learning process because it can be done repeatedly without using paper, there's also *Mindjet MindManager* is the application of accounting learning and much more. Almost all subjects who have had no learning applications for understanding the changes are felt possessed students after using a digital-based learning method. All the applications mentioned above, it can largely be run using a *browser* that is application-based roaming website. With the development of the software implementation then all the applications mentioned above can be converted into a mobile device-based smartphones.

II. LITERATURE

In an article which states that learning can be done anywhere and anytime that is based learning ubiquitous learning is a learning system that allows the academic community (teachers and students) to interact with the computer continuously, anywhere, anytime, and how alone. [1] In this paper has the objective pernulis to explore (find something), identifying the content and develop services that could be delivered to smart phones to support learning and communication in teaching and learning in the classroom at a university. Run private general these models can be used if it meets the necessary requirements.

Furthermore, paper adoption of technology in the process pembelajaran, to present the instructional design elegant and suitable for use in a classroom environment for writing and explain the use of blended learning based smartphone that is, learning that combines face-to-face and online lectures in the classroom. [2] in this paper will be described in detail in the study a university method of adoption of smartphone technology in a learning system

Next is the influence of the smartphone that has also been discussed in the use of smartphones in the learning process which is seen from all points of view, ranging from hardware to software and to discuss the content and connections that are expected in the learning process [3] this paper describes the alumni scholars in cooperation with academic staff to see and establish the extent to which students are independent in using technology *smartphone* to support their learning.

the next thing that is of concern is the impact of *smartphone* technology education and use of the application in practice. [4] This paper describes the condition of India in involving the impact of *smartphones* in the learning process to improve the quality of education. India began to prepare everything needed to meet the standard requirements to be implemented learning activities mengajar berkualitas eg learning process using *online video*. For these activities require access internet speeds are high and the availability of *smartphones* with high quality and above.

After learning-based *ubiquitous learning*, adoption of smartphones with *blended learning* using *cocoa Talk*, *The Effects of Learning-based Smartphone, Impact Yang posed by smartphones* in the last discussion this time will be explained about innovations that can be done in improving the quality of teaching and learning process based *smartphone*. Paper as the reference time is *Innovating for*

quality paper discusses towards new vision to improve the quality of education to make this as something important [5] This paper shows data for the number of learners around the world who do not receive a quality education, especially in countries ity of low income. This paper sponsored by UNESCO international agencies dealing with education.

In Indonesia itself there is still happening Pros and Cons of a learning system that would use *smratphone* Ssebagai learning resources that exist, it is caused by a relatively few factors:

1. There is still a lack of understanding in the use of mobile for learning purposes, this is the case in both the teaching staff and students.
2. a large number of responses and the notion that *the internet* is only used to achieve information in completing a job and a place for entertainment.
3. There is also pendapata that said learning using a *smartphone* is a learning system that is expensive .
4. Pembelajaran-based *smartphones* are used only for students in college.
5. Not the uneven development of information technology in several places in the area,
6. and many more, especially in the education environment.

that's the most problems are often found in people of Indonesia in implementing based learning digital , Though it takes care of these above can be solved by making a small step and simply as a solution.

III. DISCUSSION-BASED

Learning *ubiquitous learning* is a learning system that allows the academic community (faculty and students) to interact with the computer continuously, anywhere, anytime and how alone [1] this learning method is suitable for use in modern learning system that combines all the capabilities of the teaching force in delivering learning materials because it can use all the facilities of existing technology. The process of delivering the material can be delivered in the form of text, sound, pictures movable or immovable, animation and others. *Ubiquitous learning* has some keunttungan among others: can save the lecture hall in the face as conventional teaching model. With the implementation of a *ubiquitous learning* the number of face to face meetings can be reduced so that faculty and students can perform other duties effectively without being limited by time and space. This is supported by the development of technology both hardware and software that is supported by the support infrastruktur. namun other hand there are things that need attention, especially in a location that support that infrastructure has not met the requirements.

Adopting Smartphone based Blended Learning is one model of learning undertaken by combines elements of *offline* and *online* in conveying materi. seperti described in a literature review that the main purpose of the application of *blended learning* is to explore, identify and develop a number of interactive mobile services to support learning with multimedia information to be distributed through the existing computer networks in university. Applications used is *cocoa Talk* that benefits include: (a) to know how an application-based smartphone mobile community and *cocoa Talk* can be implemented in the learning process by using

blended learning (a mix of *offline* and *online* both in class and outside of class. (b) for clicking evaluation of the effectiveness of learning blended learning for both lecturers and participants students.

Considering the smartphone learner: an investigation into student interest in the use of personal technology to Enhance Reviews their learning this paper is a case study which was appointed at an educational institution. in general students are interested and open to accept to make the *smartphone* as one learning resources [3]. the learning activities that dimaksud is covering the main activities in class as well as supporting activities outside the classroom that engage learners independently. this paper also combines collaboration method implemented by alumni and academics and innovation learners. Furthermore, the authors also provide information about the differences between existing information technology with information technology komunikasi ICT in view of the interest of students towards the learning process using a smartphone.

Impact of the Evolution of Smart Phones in Education technology and its Application in Technical and Professional Studies: Indian Perspective in this section India as one of the developing countries very concerned about the impact that caused by the development of *smartphones*, existing especially in the field of education to improve the quality of teaching and learning. [4] India while respecting the philosophy of science knowledge and translate that learning gained by sitting at the feet of the master or teacher. Where teachers will deliver verbally science to students. This tradition is in India inherited and implement in educational institutions. Along with the development of information communication technology ICT India begin to show changes in the education system both literature and learning model. The growth of *Internet* thehas changed the educational system in teaching and learning. This is supported by the growth of the institution and the number of learners, especially in the field of technical education. India also still uses distance education to meet the needs of the society.

In the process of teaching and learning are the factors that influence the success of the various problems faced by the people of Indonesia, these factors are the most important part in an educational institution, among others: students, faculty, school facilities and infrastructure, curriculum, learning models as well as models of existing organizations. [6] but in the framework of the nation living seawai with the mandate of the Constitution of the Republic of Indonesia, then the problem faced by approaching the menyelesaikannya. One that does the school is bekerja with State-Owned Enterprises that utilize co-operation in obtaining funds *Relathinship Customer Service* CSR. With the CSR is a little more greatly help boost the educational institutions in facilities and infrastructure. On the other hand pemerintah also require faculty who will act as a lecturer both in basic education institutions and higher education institutions, must be university graduates, especially undergraduate education. The resulting undergraduate education colleges have now been providing sustenance is considered sufficient to provide a method of teaching in educational institutions intended. In order to improve the quality of teachers has also been given support facilities for

the provision of certification both in primary education institution maupu higher education institutions, which would give a moral responsibility to the students to be more responsible in carrying out the tasks assigned to educate the nation's children.

In it also supports educational institutions to reform in order to improve the quality of education by trying to improve the quality of learning by leveraging the development of Information Communication Technology ICT. In the process of digital learning also explain the concepts to be applied msalnya, understanding how learners can understand how learners can solve problems and discuss to find solutions for problems that exist and openly shared. This is done to train students, providing experience in presenting their opinions.

The media is one device that can be used and exploited in order to improve the quality of learning. Methods that exist today are only using text and blackboard, developed with all the learning support are: Text, Voice, Picture Picture moves and does not move, animations and other necessary devices. All existing ICT devices used functions so that students will feel calm and comfortable in the learning process, which in turn is expected to improve the quality of the learners themselves. The presence of *smartphones* with sophisticated existing technology can be utilized for the learning process for all students. So that teaching and learning can take place anytime and anywhere, and in conditions that anyway. [1]

In the application of learning to use *the smartphone* as a source of knowledge, there are few teaching materials were distributed among others: methods of self-learning-based *smartphones* to improve the competence of motorcycle engines, development of instructional media in the application of the basic concepts of electronics and electricity, development of instructional media e-learning in web programming teaching materials and various other developments are constantly being developed seawai to the needs and capabilities of human resources who can design, design, develop and implement in lembaga education, from basic education to institutions of higher education institutions.



Figure 1. LessonsComputer Network

educationalSMK (SMK) is an educational institution level high school (SMA) prepared untiuk fill existing jobs, in levels as younger workers. The process of teaching and learning in SMK yanga greatly affect the quality of the Alumni themselves. Alumi vocational competence level 3 in Curriculum Competence National Indonesia (KKNI) as standards in dunai benefits earned by this agreement

between educational institutions with government agencies in charge of labor.

In order to improve the quality of Alumni SMK, then educational institutions still has a moral responsibility to the alumni at least able to provide and develop learning using a mobile *smartphone-based* learning, not just leave school subjects but also provide knowledge in both the business world and the self-employed information job market information. There are several educational institutions that already have and take advantage of ICT developments to monitor Alumni. Parties such as vocational education institutions can provide information services for the alumni as below:



Figure 2. Display Information in Job Search and information systems academic

With the information as a source of learning for Alumni eg containing job information and information subject expertise, is expected to be used as guidelines for learning outside of school. Information job vacancies contain data in accordance with the competence of alumni and contains terms and other things needed. From here the alumni can prepare competency abilities and utilize the school's academic information system that contains information subject matter expertise, along with troubleshooting guides. Free Competence is consistent with existing majors, for example, Computer Network TKJ contains information about ICT tools latest with the workings and *manuals*, another example adalah majoring in automotive containing information machines the most widely used in Indonesia also contains *manusul* and know the address distributors, the next instance of information is becoming young entrepreneurs Successful, this information provides tips and what steps are necessary for Alumni to become entrepreneurs, information *marketing*, finance, information how to collaborating with the source of the financiers in this case the bank, Human resources Management as well as related matters. Later the alumni can choose whether a worker or be witausahawan young. In addition to providing steps, you should also display information luminaries successful in their fields, successful people Indonesia usually give a full address in the form of email or set up a nonprofit that can accommodate inspire the nation miaslnya Habibie Center and how that should be taken if menngalami Termination layoffs or declining business. This will greatly affect the psychological condition alumni.

IV. CONCLUSIONS

1. based learning *ubiquitous learning* is a concept and initial steps carried out by the educational institution to implement a learning system based *smartphone* this method combines face-to-face classroom and meeting online conducted through electronic devices both *smartphones* and PC or laptop through *the Internet*
2. Adoptions *smartphone* with *blended learning* using a *cocoa* Talk. The applications in *the smartphone* actually specifically DAPT use and serve as a medium of learning online if done arrangements between faculty and students.
3. The effect of Learning-based *Smartphone* in the system of modern teaching that exist today, and advance the use of electronic devices, has an enormous influence in various penggunaan whether done publicly or use in teaching and learning, and this has proven very memberik benefits for faculty maupu learners, if in the process of implementation eligible desired by the Ministry of Education both existing at primary school level and SMA or ministry Higher Education.
4. impact that posed by the *smartphone* after determines the impact caused by the advancement of information communication technology ICT will have an impact that is positive impacts and negative impacts. The positive impact will provide benefits for faculty and students in the form of enjoyment in menggunakan ICT for the development of science and related information.
5. Innovations to improve the quality of education, the last thing that is needed in the use of technology-based learning *smartphone* this is an *innovation* because without innovation there is no assurance process teaching and learning can still take place.

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LOCAL LITERATURE REVITALIZATION IN ORDER TO MALAY LANGUAGE ENDURANCE

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Abstract. Literature activity is a part of human culture. As a part of literature work, local literature possess some significant function. In Malay society, literature activity can't separated from human life process. We found literature activities on wedding ceremony, birth ceremony, even on farming process. Local literature as the prime subject of literacy development consist of folklore, traditional poetry, traditional poem, and traditional magic spell (mantra). This paper describe local literature function on malay traditional society also how local literature work on malay language endurance. This paper using sociolinguistic approach with local literature emphasizing. Conclusion: local literature have some function in order to still live in traditonal malay society and it has ability to endure malay language in this globalization age.

Keywords: Revitalization, Local Literature, Language Endurance

I. INTRODUCTION

This Literature is a part of society life. It arise in all walks of life with different form and function. In this modern era, literature divide in to two main form: local literature and modern literature. These dichotomy arranged by some criteria i.e. form, structure, style, and story topic. Literature can't be separated from literacy level in society. It arise together. Literature should be eternal because it doesn't only talk about literature itself but also consist of life value, knowledge, in fact literature can be a media to language endurance.

Literature dichotomy into local literature and modern literature don't according to their function and form, but also from their medium language. Local literature use mother language as their medium. Whereas modern literature use Indonesia language. Using of mother language as medium language for literature production and distribution facing a few threat in this modern era. First, number of mother language speaker more and more slightly each year. Second, the younger doesn't have any attention to conserve and preserve the local literature existence. Third, language interference.

level that more and more high because of another language mobilization into mother language.

According to this paper introduction, we will discuss about two cases. First, local literature revitalization effort including their form and target. Second, local literature as a language endurance media.

II. METHODS

An easy way to comply with the conference paper formatting requirements is to use this document as a template and simply type your text into it.

A. Sociolinguistic Approach

Sociolinguistic make serious effort to describe the relationship between sociology and linguistic. Radford (2009) states that sociolinguistics is the study of the relationship between language use and the structure of society [4]. It takes into account such factors as the social backgrounds of both the speaker and the addressee, the relationship between speaker and addressee and the context and manner of the interaction, maintaining that they are crucial to an understanding of both the structure and function of the language used in a situation. Sociolinguistic analysis appear to answer social phenomena through the using of language.

Interaction in society possessed of comprehensive language. It happened in small and large society. Radford (2009) states that in addition to phenomena which arise in interactions between individual or small groups, sociolinguistics is concerned with larger-scale interactions between language and society as a whole [4]. One such interaction is language shift. Here, in a multilingual setting, one language becomes increasingly dominant over the other languages, taking over more and more of the domains in which these other languages were once used. Understanding the conditions which facilitate language shift and the dynamics of the process itself is properly viewed as a sociolinguistic task. It indicate a language may change because some factor i.e. human interaction or human interest to their mother language.

B. Local Literature and Malay Society

Local literature or traditional literature is product of localcentric literature activity and its spreading vertically from parent to their child. Local literature can't be separated from its distribution media. Majority of local literature produce and distribute by oral. In such a way that local literature bounded with oral tradition. Finnegan (1977) states that local literature is not an odd or aberrant phenomenon in human culture, nor a fossilized survival from the far past, destined to wither away with increasing modernisation [2]. In fact, it is of common occurrence in human society, literate as well as nonliterate.

Malay society put local literature in high position. Almost all of society activity bounded with literature activity. There are some wellknown local literature in malay society i.e Batu Ballah , Burong Ruai, Pak Saloi, Gunong Senujoh, marriage proposal poetry with muhakam, and magic spell for *bepapas, masang tulang bumbongan, antar ajong, and pengaseh*.

Local literature unite with malay society. But, in this age local literature has been threatened. The speaker, native interest, and external interference are local literature threat. If we can't left out the threat, local literature as eternal media and culture transfer will extinct day by day.

C. Language Endurance

Language endurance is an effort to maintain or conserve of language existence among its speaker. It is also a language transfer effort to next generation. Basicly, language endurance effort arise because of language interference and speaker mobilization. It potentially destroying mother language. Language endurance effort detectable on multilingual society. If a society belong to multilingual, society have a will to choose which one of language in daily communication. Language endurance effort considered necessary if society using his L2 (second language) and leave his L1 (first language).

III. RESULT

A. Local Literature Revitalization- Maintenance and Linguistic Identity

Local literature existence in malay society indicate it has been appreciate. Society appreciation on local literature because it has function. There are some local literature function.

1) Media of Culture Integration

If we talk about literature, it doesn't anly about literacy or literature activity. Literature is a tool to expressing human idea. So, it can reveal (stories) from the past, present, and future. Effendy (2006) states that malay local traditional at this time is blueprint of malay society culture [1]. It show common thought about kindness and wickedness, dos and don'ts. It formulated on phrase or all ready to do construction. In malay local literature, external culture element well integrated with internal culture. We can found this integration on language, phenomena, or situation.

2) Media of Plural Society Dialog

Effendy (2006) states that humanistic cultural dialog is really indispensable to create understanding or empathy of each other [1]. Social conflict at Sambas, Ambon, Sampit caused by the loss of cultural dialog. Local literature performance need a lot of people that stay in an occasion. It bringing people to sit together and make possible to discussing or talking each other. Plural society dialog mean people talk to another people in a society and establish their sense of human care.

According to some arguments above, local literature revitalization organized as:

- 1) Documentation, research, and publication by local literature researcher.
- 2) Establish local literature workshop with all out of government support.
- 3) Adding column or program that analyze local literature on mass media with publisher support.

B. Language Endurance through Local Literature

literature impact on:

1) Ethnic Identity Awareness

Ethnic identity almost quite similar with primordialism. But they are totally different. Identity awarenes actually an effort to keep society in their common vision. It materialized on many forms. Local literature is powerfull and transferable ethnic identity form. Society may use local literature in many occasion and well represented society activities.

2) Preservation of Malay Language

Society interaction using malay language as their communication tool. Revitalization of local literature impact on language endurance. To understanding literature meaning or to analyze literature material, a researcher or native should get to know the language all of it.

3) Attitude and Society Behavior Framer

Local literature contain a lot of life value. It show how society behavior and attitude should be. Local literature may counseling society and its really benefecial to society interaction. The common thought that established by local literature may lead society to reach their future.

IV. CONCLUSIONS

Local literature have some function in order to still live in traditonal malay society and it has ability to endure malay language in this globalization age. Revitalization of local literature may organized as documentation, research, and publication by local literature researcher, establish local literature workshop with all out of government support and adding column or program that analyze local literature on mass media with publisher support. Language endurance through local literature revitalization pointed out its function i.e. ethnic identity awareness, preservation of malay language, and attitude and society behavior framer.

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NATIONALISM APPLYING IN LEARNING CIVIC EDUCATION AS MORAL LEARNING MEDIA IN UNIVERSITY

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Abstract. This research will review about nationalism in university. The first part of this research will introduce the meaning of nationalism and relation with civic education in university. Nationalism is defined as a love of their country and most citizens feel a sense of nationalism. Civic education in the university is required to strengthen the students in shaping the attitude of nationalism. Students are spearheading the future of a country that they have to love their country because the science which is accepted must be applied in their social life. The main mission of civic education is to help students establish the values of their personality, in order to be able to realize the basic values of Pancasila consistently, also their sense of nationalism in developing science, technology and art with morality. The obstacle of applying nationalism in Civic Education is because of too theoretical and not oriented to the practice of students in community. Inculcation of nationalism should not use indoctrination. We need a civic education in students moral fortify until finally embedded as strong nationalism. This paper using library research. Secondary data was collected by identifying the relevant papers, books, and journal. The data was interpreted and analyzed descriptively. The second part: this research will give solution about method to inculcation of nationalism toward higher educational education. The final part : will give conclusion the best method to inculcation of nationalism in higher educational education and give suggestion to further research about inculcation of nationalism.

Keywords: Rasch model, quality assurance, evaluation

I. INTRODUCTION

Civic education in the university is required to strengthen the students in shaping the attitude of nationalism. Students are spearheading the future of a country that they have to love their country because the science which is accepted must be applied in their social life. The main mission of civic education is to help students establish the values of their personality, in order to be able to realize the basic values of Pancasila consistently, also their sense of nationalism in developing science, technology and art with morality. Civic responsibility is the responsibility of citizens in a society to participation in society and democratic government.

Civic as a democracy education, is all about government, constitution, rule and law, citizenship education [2]. Civic in Indonesia as a result between civic education/ democracy education and citizenship education based on Pancasila Ideology. Student have to solve problem about government, democracy, rule and law and participate active being an intellectual citizen.

The obstacle of applying nationalism in civic education is because too theoretical and not oriented to the practice of students in community. We need a civic education in student moral fortify as strong nationalism because inculcation of nationalism should not use indoctrination. This research will give solution about method to inculcation of nationalism toward higher education and give conclusion the best method to inculcation of nationalism in university and give suggestion to further research about nationalism.

II. METHOD

This paper using library research. Secondary data was collected by identifying the relevant papers, books, and journal. The data was interpreted and analyzed descriptively.

III. DISCUSSION

According to our review evaluation of quality assurance was very important to improve quality assurance of higher educational institution. Quality assurance will determine reputation of higher educational institution. Some aspects which we found about reputation related quality assurance which are (1) It is built upon the competitive elements of quality, reliability, delivery, history and price. (2) Once a higher education institution acquires a poor reputation for quality, it takes a very long time to change it. (3) Higher education reputations can quickly become national reputations. And (4) the management of the competitive weapons, such as quality, can be learned like any other skill, and used to turn round a poor reputation, in time.

Citizenship education in the university is required to strengthen the students in shaping the

attitude of nationalism. Students are spearheading the future of a country that they have to love his country because the science is accepted in school should be applied in social life. In accordance with the mission of Civic Education is to help students establish his personality in order to consistently be able to realize the basic values of Pancasila, a sense of pride and love the country, apply and develop science, technology and art with a sense of responsibility. The subject matter not maximal strengthening of nationalism in university because civic education too theoretical and not practice-oriented students in community.

The case of Hong Kong [4] civic education has been assigned the mission of preparing critical thinking, used to sense the function of instilling a sense of national identity, loyalty to the nation state, and patriotism. Indeed civic education in many Asian country is little more than a combination of moral and nationalistic education. In Hong Kong case, a curriculum framework with equal emphasis human right education, education for democracy, education for rule of law, nationalistic education, global education for critical thinking was proposed.

The purpose of this curriculum was to help students to understand the homeland, the nation, the "one country, two systems" policy and to cultivate the sense of belonging to China and the sense of pride of being a Chinese. Civic education in Hongkong include education for cosmopolitan nationalism, civic nationalism, cultural nationalism, cutural nationalism, anti colonial nationalism, and totaliran nationalism. Cosmopolitan nationalist refers to individuals who on one hand believe that all human beings are created equal and show great beings are created equal and show great respect for basic human rights, have deep concern and love for all mankind, disregarding to race, gender, nationality, religion, and responsibility to partipate for the betterment of mankind. Civic nationalism, this conception of nationalism emphasizes the equal right of individuals, regardless of race, colour, creed, gender, language or ethnicity, and also participate in the governing of their lives. Cultural nationalism, emphasizes both cognitive and affective domains which refers to the knowing of common historic territory, ancestors, language, share myths, memories, unity of the nation, kind of culture and national conciousness of nation.

The term of nationalistic in context in Hong Kong are education for civic nationalism and cosmopolitan nationalism which establish bridges between nationalism and democracy, human rights, and global citizenship. And also cultural nationalism important in Hong Kong because the understanding at China and nation in Hong Kong were taken as cultural conceps rather than the political conceps.

The Case of Indonesia, In a pluralistic society have a many values. So often a confusion and perversion of the meaning of real value. Moral education is aimed at helping learners to explore values and puts integrally in the overall context of his life [2]. Moral education includes and involves those teaching: that type of teaching methode; those student activities in the democratic way. Moral value of the Indonesian nation based on the values of Pancasila as the basis country. Due to instill the values of Pancasila, student can act and behave as God's creatures as well as part of a community of a country. Nationalism is love of the Nation Indonesia, crossed love of tribes. Nationalism is a manifestation of the love of the nation

Indonesia against the state and homeland based on Pancasila. Patriotism and nationalism is based on Pancasila lead students to have an attitude up holding the values of sincerity or the spirit of sacrifice, humanity, tolerance, and feel that Indonesia is a part of all mankind [6]. in moral education emerging awareness of comprehensive approach that is expected to produce graduates capable of making moral decisions and also has a commendable behavior due to habituation continuously in education [7]. Comprehenship approach are inculcation, modelling, faccilitation, and skill building. The obstacle of applying nationalism in Civic Education is because of too theoretical and not oriented to the practice of students in community. Inculcation of nationalism should not use indoctrination. Teacher must respect to all student, appreciate. Student can exspress opinion in the classroom and teacher give experience to all student. Second, Modelling, Teacher as a role modell for student. Teacher give experience to solve problem. Third, Facilititation, Teacher support and motivate students develop personality for example nationalism. Teacher listen the student in activity. Final, skill building, teacher motivate student for critical thinking, and solve a problem.

Further, I argued that inculcation of nationalism can be integrated between comprehenship method and PBL method. In PBL, students can solve a problem. Problem-based learning (PBL) can be considered as both an idea as well as a model for approaching learning. PBL is supported in many ways by theories in the learning sciences ranging from constructivis and cognition to problem solving. As an interventionist model, it has also been substantiated by research that demonstrates its effectiveness inpromoting higher-order thinking, knowledge construction, collaborative learning, and independent learning [5].

Problem-based learning (PBL) provides students with the opportunity not only to explore but also to immerse

themselves in real-world issues. Creating a prototype using the engineering design process or determining how to effectively control a damaging invasive species and presenting that plan to a city council are real-world problems that students can and should be attacking in their day to day student lives. While student-generated questions are the pinnacle of PBL, teachers can provide students with an ill-structured problem as an entry into the PBL arena. *Student steps, question, gather data, conclude, communicate, evaluate avaluation of final project conference. Teacher tasks are specify or approve a real world problems, identity the progression of tasks within problem, specify knowledge and skill for each tasks, teach necessary skills, and observation of students; feedback [1].*

The importance of unity as the cornerstone of a nation and state is not just resting on the hardware alone but need nationalism as a cultural existence. Associated with the definition of the nation, the nation is culture conception of a political community that is limited and sovereign [3]. Indonesia as a nation, united on the principle of wisdom. Nationalism needs to be imparted to the students because the foundation of the Indonesian state as a melting pot of various tribes into a nation is nothing but a political future goals to bring the country to bring values, personality and ideals together. Indonesia put state political nationalism as a unifier. The conception of nationality Indonesia also contain elements of cultural nationalism to defend the will of the historical heritage and cultural traditions of the previous power from a variety of ethnic diversity, culture. In this case, Indonesia has the conception of nationality distinctive modernist fusion with primodialis and perenialis. Indonesia has the conception of nationality distinctive blend of modernist with primodialis and perealis. Modernists are the nation is the fruit of modernization or rationalization. Experts modernists tend to reject interconnectedness nation with ethno-religious communities and traditions of the past are seen as a pre-political period. Perspective primodialis [3] argued that the nation is a historical provision which is present in human history and inherent strength in the past and the present generation. Perspective perenialis nation are found in various time before the modern period. Indonesia is multicultural obsessed with uniformity.

Therefore, it is necessary to facilitate the learning of citizenship values of peace between the clash of cultures and tribes in a pluralistic Indonesian society.

VI. CONCLUSSIONS

Strengthening of nationalism in civic education in this article is not centered on the methods of learning because in essence the value of nationalism must be implanted through any method used lecturers. Students are expected to be more aware of the importance of nationalism in social activities shown by self-sacrifice in the social activity. Therefore, civic education in university must relevant in society are not limited to campus activities. Cultivation of nationalism in university through civic education must realize the importance of using a variety of teaching methods.

Further, I argued that inculcation of nationalism can be integrated between comprehenship method and PBL method. In PBL, students can solve a problem. Problem-based learning (PBL) can be considered as both an idea as well as a model for approaching learning. PBL is supported in many ways by theories in the learning sciences ranging from constructivis and cognition to problem solving. Discussion and debate classes helpful for the success of moral teaching for the cultivation of nationalism in Higher Education. Students should be given the opportunity to argue as long as it does not come out of the material covered in class. Learning with the discussion can allow feedback. The results of the discussion class is that students can communicate skillfully to show nationalism as citizens. In addition, teaching with discussions allow students to develop an understanding of the issues that can diminish nationalism on topics such as conflict and disintegrative. In addition, faculty enthusiasm and creativity as a way to boost nationalism. Nationalism is reflected in the application of student life to make decisions in civic life.

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OPTIMIZATION APPROACH FOR USE SAVI TO LEARNING OUTCOMES CREATIVITY WRITING POETRY OF LEARNING TECHNIQUEST TROUGH DIRECT OBJECT

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Abstract. The process of learning to use a student's learning style is always associated with perception and senses. How to learn by seeing, watching, listening, doing, and imitate body movements during the study affect the improvement of competence. Student's learning style that is well trained will accelerate the catching capacity and enable long-term memory. SAVI approach is one of the approaches that integrate elements of somatic, auditory, visual and intellectual learning. SAVI approach can be applied in teaching creative writing poetry through the technique of direct object. Based on the description, it will be carried out research on the application of SAVI approach on the subjects of Indonesian especially with respect to material creative writing poetry. This study was conducted to understand the process of using SAVI approach in learning activities and knowing to how big influence on student learning outcomes following the use of the SAVI approach. This research is a quantitative type of experimental research design using *One-group pretest-posttest design*. Methods of data collection is done by observation and procurement of tests analyzed using percentages and *t-test*.

Keywords: SAVI approach, Creative writing poetry, direct Object

I. INTRODUCTION

Indonesian has a central role in the development of intellectual, social, and emotional and is supporting the success of students in the study of all fields of study (Ministry No. 22 of 2006). In essence, learning a language is learning to communicate. Therefore, language teaching is to improve students' ability to communicate, both orally and in writing. But to be able to communicate well, students must have the language skills. Tarigan [11] states language skills in school curriculum includes four aspects, namely (1) listening skills, (2) the speaking skills, (3) reading skills, and (4) writing skills. Each skill was intimately linked with the three other skills in a way that diverse. Each skill that is interconnected with three other skills in diverse ways, such as writing skills.

According to Tarigan [11] to write a language skill that is used to communicate indirectly, not face to face with other people. A writer must skillfully utilizing graphology (the science of the alphabet or writing system), grammar, and vocabulary. Writing skills do not come automatically, but through exercise and practice a lot and regularly, one of them through the teaching of literature in the form of literary appreciation learning and learning literary expression. In this case the students sharpened his sensitivity to the environment and can express it in essay writing, either in prose or verse. In writing the need to select a language that can represent the feelings, thoughts, and desires, but in the Indonesian language teaching, material that is considered difficult by students actually wrote mainly poetry.

Until now, the teaching of writing poetry is not getting the attention optimally. In practice, the teaching of writing poetry has not been completely worked well. In fact, learning to write poetry is still at the stage theories of poetry, for example, the characteristics of poetry, the author's name, and others. Learning to write poetry in many schools have problems and might be avoided.

The results of observations conducted by the author shows the quality of teaching writing poems in class VII B is still low. It is characterized by the acquisition value of the work of the students a preliminary survey which showed that 23 students (65.7%) who have not reached the minimum completeness criteria (KKM) and only 12 students (34.3%), which reached the KKM is 75. Based on observations, it is known that the learning process is less successful creative writing poetry in the classroom caused by several factors, namely: 1) students passive and less interested in learning to write poetry; 2) students' difficulties in developing ideas and imagination in writing poetry; 3) lack of interest and motivation in participating in learning to write poetry; 4) The learning process is still dominated by the use of the lecture method; 5) the teacher is not utilizing instructional media that could excite students in writing poetry.

Based on the above problems, solutions are needed to overcome the problems in the classroom is through the application of SAVI approach (somatic, auditory, visual, intellectual). SAVI learning is learning which emphasizes that learning should take advantage of all the sensory organs of the students. SAVI own terms adalah *mkepedekan of*; Somatic meaningful gestures (hands on, physical activity) where learning by experiencing and doing; Auditory meaningful learning must be through listening, listening,

speaking, presentations, argumentation, express opinions, and want to respond; Visualisation meaningful learning must use eye senses through observing, drawing, demonstrate, reading, using the media and props; and Intellectually which means that learning should be using thinking skills (minds-on), must learn to practice using mental concentration through reasoning, investigate, identify, find, create, construct, solve problems, and implement.

II. METHOD

The method used is experiment with the form of pre-experimental research design, while the design is one group pre-test post-test design is on this design are often used for educational research. This design is often used on the complete group, such as the classroom, where individual randomisation could not be done. Pre-test is usually done to equalize the group, compared to only post test scores alone. The research variables consist of independent variables and the dependent variable. The independent variables in this research is the approach SAVI and the dependent variable in this research is the result of learning creative writing poetry. Population is the generalization region consisting of the objects / subjects that have certain qualities and characteristics defined by the researchers to learn and then drawn conclusions [10] The population in this study were all students of class VII SMP Negeri 8 Singkawang which numbered 137 students. Based on the characteristics of the population and can not do randomization individual, therefore sampling in this research was done by using purposive sampling.

The sample is part of the number and characteristics possessed by this population [10]. Based on the characteristics of the population and can not do randomization individual, therefore, the sampling means sampling purposive sampling technique intentional. That is, the researchers determine their own samples taken because there are certain considerations. Thus, samples taken are not random, but is determined solely by the investigators.

The technique used in this study using measurement techniques with tools such as creative writing skills tests poetry. Data on the poetry creative writing skills tests done with the help of program microsoft office excel 2007. For prerequisite test analysis using the data distribution

normality test *uji- Chi Square* $X^2 = \sum_{i=1}^k \frac{(f_o - f_h)^2}{f_h}$, and hypothesis testing using different test mean (*uji-t*).

$$t = \frac{Md}{\sqrt{\frac{\sum x^2 d}{N(N-1)}}$$

III. DISCUSSION

SAVI APPROACH

Learning does not automatically increased by having people stand and move to and fro. However, combines physical movement with intellectual activity and the use of all the senses can have a big impact on learning. The

approach can be used herein are SAVI approach. Learning to use SAVI is a learning approach that combines physical movement with intellectual activity and the use of all the senses that can have a big impact on pembelajaran. Elements SAVI Dave Meier, among others:

- a. Somatic: Learn to move and act.
- b. Auditory: Learn to speak and listen
- c. Visual: Learning by observing
- d. Intellectual: Learning by solving problems and thinking.

SAVI learning is learning which emphasizes that learning should take advantage of all the sensory organs of the students. The term itself is kepedekan of SAVI; Somatic meaningful gestures (hands on, physical activity) where learning by experiencing and doing; Auditory meaningful learning must be through listening, listening, speaking, presentations, argumentation, express opinions, and want to respond; Visualisation meaningful learning must use eye senses through observing, drawing, demonstrate, reading, using the media and props; and Intellectually which means that learning should be using thinking skills (minds-on), must learn to practice using mental concentration through reasoning, investigate, identify, find, create, construct, solve problems, and implement.

Learning outcomes

Learning outcomes is an important part of learning. Aunurrahman [1] states "Learning is a process of information transfer or the transfer of knowledge from teacher to student". Purwanto [7] describes the study results are "behavioral changes that occur after following the teaching and learning process in accordance with the purpose of education". Dimiyati and Mudjiono [3] also mentions the results of the study "The results of an interaction act of learning and teaching acts". In terms of teachers, teaching acts ends with the evaluation of learning outcomes. From the student side, learning outcomes is the end of the teaching of the peak of the learning process. Soedijarto [7] defines learning outcomes as "The level of mastery achieved by the students in following the learning process".

Based on the understanding of learning outcomes above, it was concluded that the learning outcomes are the abilities of the students after receiving their learning experience. These abilities include cognitive, affective, and psychomotor. Learning outcomes can be seen through the evaluation exercise which aims to get the data evidence that will show the level of students' abilities to achieve learning objectives.

Purwanto [7] revealed the results of learning domain is "psychological behaviors to be changed in the educational process". Psychiatric behavior was divided into three domains: cognitive, affective, and psychomotor beriku this explanation.

1) Taxonomy of learning outcomes

The learning result is a change in behavior that occurs in the cognitive area. The learning process involves cognition includes activities since the reception and external stimuli by sensory, storage and processing in the brain until the recall information when the information is needed to resolve the issue. Therefore, learning involves behavioral change as a result of the

brain also occurs in the brain in the form specified by the brain's ability to solve problems.

2) Taxonomy of Learning Outcomes Affective

Taxonomy affective learning outcomes as expressed by Krathwohl [7] is divided into five levels of acceptance, participation, assessment, organization, and internalization. Learning outcomes systematically arranged hierarchically starting from the lowest level and the simplest to the most high and complex.

3) Taxonomy Psychomotor Learning Outcomes

According Harrow [7] psychomotor learning outcomes can be classified into six: reflexes, basic fundamental movements, perceptual ability. Physical ability, movement skills, and communication without words. But in its application of the most frequently digunakan taxonomy of Simpson [7] were classified into six psychomotor learning outcomes: perception, readiness, guided movement, accustomed movement, complex movement and creativity.

Based on some opinions on the above it can be concluded that the real result of learning is a change in behavior that occur during the learning results in accordance with what is to be achieved. As well as the achievement of learning outcomes can be viewed from various aspects of the support as shown in the above explanation.

Creative Poetry Writing Skills

Writing is a profession which, if done seriously will be able to lift the dignity of a person, because only by writing, one can earn a great income [8] Writing is a creative process of moving ideas into written symbols [9]. Writing is one of the language skills that are used in communication indirectly. Writing can be regarded as activities of arranging the letters into a word or phrase to be conveyed to others, so others can understand [2] Learning is a business teacher in conditioning students to learn, so that learning will rely on two [5]. Creative writing related to communicative based learning. Writing is a communicative learning which involves the active-creative interaction between students and teachers in the interaction in the classroom in learning literacy. Communicative interactions on designed to involve listening, speaking, reading, and writing became an inseparable unity. In communicative learning, students and teachers portray themselves as the speaker-listeners and readers-writers involved in the learning process. One of the skills of writing poetry is a creative writing skills.

Gani [4] argues in etymology, the Greek word poem comes from the word meaning poesis creation. Creator of the poem is the one who is considered almost like a god or a person who is very like the gods. In English, the equivalent word poetry is poetry that is closely related to the poet or poem. Regarding the poet said, Coulter (in Gani, 2014:14) explains the word poet means to make or create.

Waluyo [12] states poetry is a literary work that is compressed, shortened, and given rhythm with the sound coherent and choice of words are metaphors (imaginative). According Pradopo [6] states that poem expresses the thoughts that evoke feelings, which stimulate the imagination of the senses in a rhythmic composition.

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IV. CONCLUSIONS

PROBLEM SOLVING ABILITY IN PROBABILITY THEORY THROUGH PROBLEM SOLVING BASED LEARNING

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Abstract. The aims of this study are to determine level of problem solving ability after being given problem solving based learning and to determine the effect of problem solving based learning to problem solving ability in probability theory. The method used is quasi experimental, with pre-experimental design and one shot case study design. The population are the students of fifth semester in IKIP PGRI Pontianak and it consists of 3 classes. Sample just consists of a class, which obtained through cluster random sampling technique. Instrument used is problem solving ability test. Data is analyzed using descriptive statistics and inferential statistics. The study show that the problem solving based learning doesn't give good effect to problem solving ability, but it has average score is 67 or good level. Beside of that, the study also show that students have ability of understanding the problem with the average score is 75 or high level, ability of devising the plan with the average score is 66 or high level, ability of carrying out the plan with the average score is 50 or middle level, and the average score is 19 or very low level for ability of looking back.

Key Word: Problem Solving, Probability Theory

I. INTRODUCTION

Probability theory is one of compulsory subject that must be taken by students in Program Study of Mathematics IKIP PGRI Pontianak. In syllabus of probability theory, this subject consists of explanation about multiplication rule, permutation, combination, probability concept, probability calculation with multiplication, permutation, and combination rule, and distribution of random variables.

Problem often presented by the subject are problem relating to daily problems, so it requires student to have problem solving ability. Newman said that a problem solving skill consists of convergent and divergent thinking for creating the solutions [1]. And then, Polya [2] said that there are 4 steps in problem solving, they are: (1) understanding the problem, (2) devising the plan, (3) carrying out the plan, dan (4) looking back. In Bransford [3] opinion, steps of problem solving consists of: (1) identify the problem, (2) define and represent the problem, (3) explore possible strategies, (4) act on the strategies, (5) look back and evaluate the effects of your activities.

The researcher experience during teaching and learning about probability theory show that the students have difficulty in problem solving, especially in calculates the probability of an experiment. Because of that, researcher think it needs an effort to develop problem solving ability in probability calculation. One of the effort is giving teaching and learning using problem solving based learning.

Galloti said that the technique of problem solving described here is called means-ends analysis. It involves comparing the goal with the starting point, thinking of possible ways of overcoming the difference [3]. Pardjono

mention that problem solving based learning can increase high-level cognitive ability, such as ability of analysis, synthesis, and evaluation [3].

Referring to the study, researcher want to conduct a study to see the level of problem solving ability in each step of problem solving after being given problem solving based learning and to see the effect of problem solving based learning to the problem solving ability in probability calculation subject.

II. METHOD

Method of this study is experiment method with pre-experimental design. Design of this study using one shot-case study. There are two variables: independent variable (problem solving based learning) and dependent variable (problem solving ability). The population of this study are students of fifth semester in Program Study of Mathematics IKIP PGRI Pontianak, consists of 3 classes. The sample is selected by cluster random sampling technique and obtained class A with total of 32 students.

Steps of this study are:

Step 1. Researcher give the treatment to the sample through problem solving based learning for 7 meetings in multiplication rule, permutation, combination, probability concept, and probability calculation subject.

Step 2. After give the treatment, sample is given test for determine problem solving ability. Step 3. The results of the test were scored by steps of problem solving according to Polya theory. Step 4. The results of the tests were analyzed using descriptive statistic and inferential statistics. Descriptive statistics is used to description about problem

solving ability according to steps of problem solving. Then, the data are grouped in 5 level, as shown in Table 1 below:

Table 1. Level of Problem Solving Ability

Score Interval	Level
$81 \leq x \leq 100$	Super High
$61 \leq x \leq 80$	High
$41 \leq x \leq 60$	Medium
$21 \leq x \leq 40$	Low
$0 \leq x \leq 20$	Super low

[5]

Inferential statistics is used to answer the research hypothesis. The research hypothesis is problem solving based learning give good effect to problem solving ability. The effect of problem solving learning also were grouped in 5 level ,as shown in Table 2 below:

Table 2. The Effect of Problem Solving Based Learning

Score Interval	Level
$81 \leq x \leq 100$	Excellent
$61 \leq x \leq 80$	Good
$41 \leq x \leq 60$	Not good
$21 \leq x \leq 40$	Bad
$0 \leq x \leq 20$	Too bad

[5]

The hypothesis test using the test average in SPSS-18 application. One of the requirement of hypothesis testing is data must be normally distributed. Normality test is calculated using Kolmogorov-Smirnov test with significant degree 0, 05 ($\alpha = 0,05$)

Step 5. Researcher make a conclusion according to the result of descriptive and inferential statistics.

III. RESULTS AND DISCUSSION

1. Results

Problem solving based learning is done for 7 meetings: 1th Meeting. The explanation of sets. 2nd Meeting. The explanation of multiplication rule.

3th Meeting. The explanation of permutation and combination.

4th Meeting. The explanation of probability concept and definition of probability.

5th Meeting. The explanation of probability calculation using multiplication rule.

6th Meeting. The explanation of probability calculation using permutation and combination. 7th Meeting. The explanation of conditional probability and independent probability.

After complete for 7 meetings, then tests is given to the sample for determine problem solving ability. Tests using essay tests, consists of 6 questions. The questions will measure in each step of problem solving, that are (1)understanding the problem, (2)devising the plan, (3)carrying out the plan, and (4)looking back. The results of the tests were scored based on assessment rubric and analyzed. The first analysis to see level of problem solving ability based on the average score in each step of problem. The results of the first analysis shown in the Table 3 below:

Table 3. The Results of Problem Solving Ability Test

	Step 1	Step 2	Step 3	Step 4
Number of samples (n)	32	32	32	32
Total Score ($\sum X$)	2395	2130	1570	600
Average (\bar{X})	75	66	50	19
Level	High	High	Medium	Super Low

Next, the second analysis to see the results of hypothesis testing or to determine the effect of problem solving based learning to problem solving ability. The hypothesis test using the average test of one sample in SPSS-18 application. But before that, researcher do the normality test. The results of normality test shown in the Table 4 below:

Table 4. The Results of Normality Test

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
VAR00001	.128	32	.200*	.939	32	.069

Based on Table 4, value of sig is 0.2 > 0.05. It means that data is normally distributed. The results of hypothesis test shown in the Table 5 below:

Table 5. The Results of Hypothesis Testing

	Test Value = 60			
	t	df	Sig. (2-tailed)	Mean Difference
nilai	-.777	31	.443	-4.031
mahasiswa				

Based on Table 5, value of sig is 0.443 > 0.05. This shows that H_0 is accepted. It means that the hypothesis of research is rejected. In other words, problem solving based learning doesn't give the good effect to problem solving ability. Although the hypothesis of research is rejected, but the

average score of problem solving ability after being given problem solving based learning is 67 or good level.

2. Discussion

The first analysis show that there are differences in the level of problem solving ability for each step. In step of understanding the problem, the average score is 75 or high level. As well as first step, in step of devising the plan, the average score is 66 or high level. Different from the results shown in the completion of the second and third step, which is carrying out the plan and looking back, successively obtained an average score of 50 or medium level and 19 or super low level. It show that most of student have a good ability in understanding the problem, devising the problem, and carrying out the plan. This is caused by the use of problem solving based learning makes students familiar to solve the problem based on step of problem solving. In other words, a process of habituation becomes the most important factor for students in solving problems faced.

The step of looking back, the students are encouraged to looking back the complete answer according to definition. In the fact, just a small percentage of student were able to answer the questions. It can be caused of the student less able to remember definition and theorem relating to probability calculation. The second analysis show that problem solving based learning doesn't give good effect to problem solving ability, but the average score of problem solving ability after being given problem solving based learning is 67 or good level.

This result is considered reasonable, because learning is given for 7 meetings contains steps of learning suitable with steps of problem solving. So, during problem solving based learning takes place, students are constantly trained to solve problems by using the steps of problem solving. Same as Pardjono's statement, he said that problem solving based learning can increase the student's thinking ability [3]. It is also stated by Wenno, that students science learning outcomes by using science module based problem solving better than conventional learning[7].

IV. CONCLUSION

The conclusion of this study are problem solving based learning doesn't give good effect to problem solving ability but it has an average score is 67 or good level and through this learning, the students have the ability of understanding the problem with the average score is 75 or high level and 66 or high score for the ability of devising the plan. But they just have the ability of act the plan with the average score is 50 or middle level and 19 or very low level for the ability of looking back.

The other conclusion is lecturer should make an effort to improve understanding of the definition and theorem, particularly in probability theory. Beside of that, development of mathematical power must be accompanied by the process of practice to become a habit.

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A DESCRIPTION VOCABULARY MASTERY OF THE FIFTH GRADE STUDENTS OF SDN 3 SUNGAI PINYUH ACADEMIC YEAR 2016/2017

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Abstract. In education, English as one of the subjects that are taught from elementary through high school. to be able to use the English language, students must master the vocabulary. because the vocabulary is one of the important aspects to be able to use English well. Without studying and mastering the vocabulary will have difficulties in communicating and understanding the meaning of each word. Mastery of vocabulary in early childhood, especially in primary schools is highly recommended because it can increase their knowledge and insight. Each student is encouraged to be educated and taught to master the English language, because it is very useful and important for their future. This study aims to determine and describe the students' mastery of vocabulary, especially the mastery of English vocabulary. It is also to determine the students' ability in translating English SDN 3 Pinyuh River. This type of research used in this research is descriptive, with quantitative approach. Sources of data in this study is the 5th graders of SDN 3 Rivers Pinyuh academic year 2016/2017, amounting to two classes. The total number of students is 41 students. In this study, researchers used the instrument in the form of vocabulary test. The instrument contains questions of 40 questions about the vocabulary test with a reference based on materials that have been submitted. Results of the analysis showed that there are 22 students or 53.66% of the scores 40-59, and the value of the average (mean) is 53.60. Based grouping of categories, it can be concluded that the mastery of vocabulary for 5th graders of SDN 3 Rivers Pinyuh the academic year 2016/2017 in the category less.

Keywords : English, vocabulary, description

I. INTRODUCTION

People of the world entered the era of globalization, where all the information and technology is developing rapidly. Progress of the times require us to be able to master a foreign language as a means of communication in the era of globalization. In Indonesia, foreign language used is English. As a foreign language in Indonesia, many people are trying to learn and master English quickly so they will not experience difficulties when communicating with foreigners. In addition, the English language can be referred to as one of the languages of the world, because as the primary language used to communicate by people from different countries and cultures.

In the world of education, English as one of the subjects that are taught from elementary through high school. Policies that make English as one of the subjects at the primary level was well received by the public. This is done in order to get students ranging from elementary to know and master the English language as quickly as possible. So in addition to their master Indonesian and local languages, mastery of the English language is also a goal to be achieved. Department of Education (1994: 1) states that "English is the international language to be taught for the purpose of absorption and development of science, technology, and arts and culture as well as the development of relations between nations".

In fact the field, a lot of people who learn English, especially for the beginner level who are having problems in the mastery of vocabulary. They could not understand and master it well. When using the Indonesian certainly not be a problem because it is the language used in everyday life. However, the situation is inversely when they use English. In English, there are four components that must be mastered is the ability to speak, read, write, and listen. In order for the four components can work well is the key that is able to master the vocabulary. Without studying and mastering the vocabulary will have difficulties in communicating and understanding the meaning of each word.

Vocabulary knowledge is to learn about words, parts of words that give clues about the meaning of all the words. Richard (2003: 255) states that the vocabulary is a core component of language skills and provide the basis for many students speaking, listening, reading, and writing. Then according Hornby (1986: 850) vocabulary is the number of words that make up a language.

In other words, vocabulary can also be interpreted as; 1) all the words that exist in a particular language, 2) all the words are understood or used by humans, and 3) a list of words and their meaning, especially in the book to learn a foreign language (www.oup.com). Burns and Broman (1975: 295) defines the vocabulary is a set of words that people use, grade or professional, all of which have in common, but each one is clearly different. From some of the above explanation can be concluded that the vocabulary is a knowledge that consists of a collection of words of suattu specific language

can help a group of people to communicate such as speaking, listening, writing, and reading.

Swannel (1994: 656) defines mastery as a comprehensive knowledge or use of the subject or instrument. Hornby (1984: 777) also defines as a mastery of a skill or knowledge is thorough. From the definition above, we can conclude that mastery is the competence to understand and apply something that I learned.

Mastery is defined as knowledge or mastery in a particular case. Another definition states that mastery is the ability to understand something that is learned, so it can be said that vocabulary mastery is the ability to understand and interpret the words were learned and used by people, class or profession.

It also Amaliah (2013: 18) defines the vocabulary mastery as a student's ability to use or understand words in a language they have learned and heard certain disituasi. So it can be concluded that the vocabulary mastery is the ability to master the words of a language they have learned and used by a group of people to communicate.

Lewis and Hill (1990: 12) states that the mastery of vocabulary is very important for students. Even more than the grammar for the purpose of communication, especially in the early stages when students are motivated to learn basic words. Without mastering vocabulary, students will have difficulty in using the English language. Vocabulary mastery is the ability of students to understand the words of a language they have learned and they have heard in certain situations. Vocabulary mastery can be measured with the requirements of generalization (able to define the word) and application (use appropriate).

Without mastering vovabulary, children can not make the structure of sentences and paragraphs, with the vocabulary of children can master many words from the names of objects or the other. Mastery of vocabulary in early childhood, especially in primary schools is highly recommended because it can increase their knowledge and insight. Each student is encouraged to be educated and taught to master the English language, because it is very useful and important for their future.

Teaching vocabulary not only convey the meaning of words and ask the students to understand every word. Teachers should use the techniques and methods of teaching are different in English vocabulary learning activities to provide motivation to the students, enrich their vocabulary knowledge and allow them to speak English well. Michael Wallace (1988: 34) states that in the process of learning English language as a foreign language, it is very important to know about the vocabulary, because the vocabulary used in listening, speaking, writing, and reading.

To master English vocabulary is not easy for younger learners. English teachers should help students to introduce new vocabulary as the knowledge that must be mastered. Vocabulary is very easy to survive in the memories when we never had to remember and use. Therefore, in the process of learning vocabulary teachers are expected to develop teaching techniques, because it was as one of the effective ways and so be beneficial in helping students when learning English.

In the learning process there are two very important things, namely teaching methods and instructional media.

Selection of specific teaching methods will affect the kind of appropriate learning media, although there are several other aspects that must be considered in selecting media, such as learning objectives, and the types of tasks that are expected to be mastered by students after doing the learning.

The results of the study and the fact the field indicate that the implementation of English language learning children still have many shortcomings and weaknesses, including vocabulary, while the vocabulary is a very important component in mastering English. In addition, research results Budi Setiawan (2010: 3) showed that children as learners face several challenges in the vocabulary. The indicators are: (1) students have limitations in vocabulary; (2) difficult for students in memorizing artti words; (3) The English language test scores were low.

It is also based on the observations found some problems that the reason why people have a weak vocabulary and mastery of complex, namely (1) the person has a weak memory; (2) does not remember being instruction; (3) do not listen to the instructions given; (4) emotional instability, sepertirasa shame, quick-tempered, obstinate, and lack of concentration; (5) the lack of the use of language, speak one or two words in a sentence fragmentary; (6) the lack of participation in the group and passive; (7) lack of interest in reading, more interested when the teacher read or tell (Jamaris: 2014). In this case the problems arising is still a lack mastery of vocabulary in students.

This study aims to determine and describe the students' mastery of vocabulary, especially the mastery of English vocabulary. It is also to determine the students' ability in translating English SDN 3 Pinyuh River.

II. METHOD

A. *Types of research*

This type of research used in this research is descriptive, with quantitative approach. Where the study was conducted to describe, explain about the phenomenon that is or what happened today.

B. *Place and Time Research*

This research was conducted in SDN 3 Pinyuh River. The study was conducted in August 2016.

C. *Data Source Research*

Sources of data in this study is the 5th graders of SDN 3 Rivers Pinyuh academic year 2016/2017, amounting to two classes. The total number of students is 41 students, which consisted of 22 female students and 19 male students. To determine the number of samples, because its population is only 41 people, the authors take all students to be used as a sample.

D. *Techniques and Data Collection*

In this study, researchers used the instrument in the form of vocabulary test. Which aims to determine the ability of mastering vocabulary of fifth grade students at SDN 3 Pinyuh River. In practice, vocabulary test contains questions such as multiple choice and essays that represent each of the materials that have been submitted at the time of the 2nd half of the 4th grade.

The instrument contains questions of 40 questions about the vocabulary test with a reference based on the material grade 4 semester 2. Which consists of 30 multiple choice questions and essays 20 matter. The total value of the whole is 100, each item about rated 2.5 so if any multiple choice questions correctly means the value of $30 \times 2.5 = 75$, and the correct value for the essay question is $10 \times 2.5 = 25$. All test questions this is based on material that has been previously studied in class.

E. Data analysis technique

Data analysis technique used is by using mean (X) to describe the vocabulary mastery 5th graders of SDN 3 Rivers Pinyuh the academic year 2016/2017. According Sugiyono (2010: 49) Mean obtained by summing the data of all individuals in the group, and then divided by the number of individuals in the group. The formula for calculating the mean is:

$$M = \frac{\sum X}{N}$$

Where :

M = Mean (average)

X = Total value

N = number of samples

It also displays the data from the analysis of test results through tables, calculation of the mean, mode, median, standard deviation calculation, the maximum and minimum values. Then from the value of the average value, classified into several categories. The conversion value is classified into five categories can be seen in Table 1 below:

No	Range Score	Category
1	85 - 100	Very Good
2	70 - 84	Good
3	60 - 69	Enough
4	40 - 59	Less
5	< 40	Very Less

III. RESULT AND DISCUSSION

This study sought to find out about the mastery of vocabulary Traffic 5th graders of SDN 3 Rivers Pinyuh the academic year 2016/2017. Description The specified form of the results of the test vocabulary that has been done, in which matter-because based on the material that they've got at the moment 4th grade 2nd semester.

Based on the data collected, the next step to do an analysis of these data to address the issues that have been formulated. Description of the data presented using descriptive techniques with the aim to get an overview of the data that has been obtained. Description of the data include: the price of the average (mean) (M), median (Me), mode (Mo), measures of dispersion / standard deviation (SD), maximum score and minimum score.

Based on the data that has been obtained, it can be seen as follows:

Table 2. Frequency Distribution Data Value Test Vocabulary 41 Students

No	Score	Frekuensi	Prosentase (%)
1	85 - 100	1	2,44%
2	70 - 84	3	7,32%
3	60 - 69	10	24,39%
4	40 - 59	22	53,66%
5	<40	5	12,20%
TOTAL			100%

The above results indicate that there are 22 students who scored 40-59, or by 53.66%. This means that there is still a lack of mastery of vocabulary 5th graders of SDN 3 Rivers Pinyuh the academic year 2016/2017.

Based on the results of the descriptive analysis processed with SPSS 17:00 for windows, are presented in the following table:

Table 3. Summary of Results Description Vocabulary Test Values

No	Analysis	Student Score
1	Maximum	87,55
2	Minimum	35
3	Mean	53,60
4	Median	50
5	Modus	45
6	Standar deviasi	12,20

The results of the above analysis, showed that the value of the average (mean) is 53.60. Based grouping of categories, it can be concluded that the mastery of vocabulary for 5th graders of SDN 3 Rivers Pinyuh the academic year 2016/2017 in the category less.

IV. CONCLUSIONS AND SUGGESTIONS

A. CONCLUSION

Based on the research that has been discussed, it can be concluded as follows: based on the results of statistical analysis showed that the overall mastery of vocabulary 5th graders of SDN 3 Rivers Pinyuh the academic year 2016/2017 in the category less with an average value of 53.60. Then as many as 22 students with a percentage of 53.66% scored 40-59, it also shows that more than 50% percent of fifth grade students at SDN 3 Rivers Pinyuh 2016/2017 school year scored below 60.

B. SUGGESTION

- 1) Method of teaching teachers is not only using conventional methods, teachers are expected to develop a method of teaching more attractive. Using the media and also games like pictures, puzzles, blackboard, etc.
- 2) The teacher gives students the chance to be more active in learning and during the learning process takes place.
- 3) Teachers are more frequently introduce new vocabulary words to the students and asked them to memorize, and often remind them with words that have been memorized.

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THE STUDY OF LOCAL WISDOM VALUES IN NAIK DANGO CEREMONY AS CIVIC CULTURE IN KANAYATN DAYAKNESE SOCIETY IN SAHAM VILLAGE

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Abstract. This article, entitled Study of Values of Local Wisdom in Naik Dango Ceremony As *Civic Culture* in Kanayatn Dayaknese in Saham Village. The purpose of writing this article is to find out how the values of local wisdom were studied or exercised in Naik Dango Ceremony as *civic culture* at Kanayatn Dayaknese in Saham Village. Meanwhile, another conclusions that can be drawn from this study is the values of local wisdom Naik Dango ceremony as civic at Kanayatn Dayaknese in Saham Village, Sengah Temila District, were the value of divinity is the value of human relationship with God, that men always try to search for God and to do His will, respect and glorify Him, also man will always make supplication and give thanks to God. God is the source of human life. Family values are the elements that should be maintained in order to strengthen family harmony with each other. Family values can be seen in Mutual Cooperation, respecting people, and sharing and helping each other. On the other hand, being harmony with nature can be done by appreciating the surrounding environment, preserving it and make use of it with good ways. Harnessing nature properly and in accordance with the principles in nature and doing rituals in asking for permission when opening certain piece of land. The role of stakeholders in preserving values of local wisdom Naik Dango Ceremony as *civic culture* at Kanayatn Dayaknese people in Saham Village, is the role of all elements of society plays an important role to maintain and preserve the ceremony of Naik Dango as the people culture, cultural resiliency depends on society interest or love for the surrounding culture, because the people came to know religion, Naik Dango ceremony had been considered the way to communicate with God.

Keywords: Value, Local Wisdom, Civic Culture

I. INTRODUCTION

The cultures that develop in the society are something expected and should be well maintained by the local people. Especially these cultures can be used to show the identity of certain ethnic or race in certain communities. The relationship between culture and human is an inseparable element in the society, for culture and society is united aspect in socio-cultural life. According to Grand Indonesian Dictionary (2008) says that culture is the result of activities and the creation of the mind (intellect) of man such as trust, arts, and customs, as well as overall knowledge of humans as social beings who are used to understand the environment as well as experience and that guide behavior [1].

The cultural values that are considered as ruling values and therefore become the source of collective life-guiding principles, these values change overtime. Therefore, if cultures and human relationship were brought to a higher level, cultures then could not be separated from the society. According to Evigo Jermia (2015) Culture is everything that concerns human life, including the rules and laws that apply in the community, the results are man-made, as a communication tool and unifying [2]. Culture is reflected in the social reality of what their community "Community life can not be separated from values, norms and morals, these three elements are related to each other [3].

Advances in technology lead to cultural interaction walk semangkin open, so the impact on the occurrence of a fundamental culture change. Globalization of culture led to changes in lifestyle patterns, even the values and order of human life. Rapid flow of information eventually led to the

erosion of affection of the people, especially the younger generation against the traditional culture as cultural heritage. social change is a phenomenon inherent in society. Are changes that occur in society will lead to a discrepancy between the social elements in society, thus generating an income that does not match function for the communities concerned.

The cultures that were passed on to the generations in certain society were called the cultural heritage of the indigenous people. Cultural heritage is the culture that is passed on from generation to generation, from parents to their children. The customary culture that exists in the society always has connection with moral and norms that are also contained in National Five Principles (Pancasila) and social culture. The social reality in the society has strong correlation with the values, norms and moral as civic cultures as the identity or character building of our citizens. Winataputra stated that the identity of citizens who originated from civic culture needs to be developed through Civic Education in various forms and backgrounds [4]. Winataputra (2006) As for the elements of the culture of citizenship (civic culture) is "civic virtue or citizenship manner that includes active involvement of citizens, the mutual relationship / egalitarian, trust and tolerance, cooperative life, solidarity and sense of togetherness in the community [4].

Naik Dango is one of the local wisdom of Kanayatn Dayaknese tribes that contain cultural elements and customs that apply a set of values, culture and moral in the society life. Local wisdom is knowledge, understanding and habits that direct people in the context of community life in ecological communities [5]. Naik dango itself is conducted by Kanayatn

Dayaknese tribes (Dayaknese in general) and this starts from the assumption that rice has a living spirit [6]. Naik dango is the cultural heritage from Kanayatn Dayaknese customs, and this custom was passed on from generation to generation, and this custom also belongs to the people of Saham Village, Sengah Temila district, Landak regency, as the source of moral guidance in the local society. Naik Dango has great values in the eyes of Kanayatn Dayaknese community. Naik Dango as a ritual is usually held around the period of harvesting and it is held annually by the Kanayatn Dayaknese community [6].

Naik dango is commonly assumed as customary ritual as way of showing thanksgiving to God for good harvest such as rice, etc by Kanayatn Dayaknese community. This ritual is usually held on 27 April every year and most Dayaknese tribes everywhere will perform this ritual. The elements of local wisdom that exist in Naik Dango ritual is the *civic culture* in Kanayatn Dayaknese people of Saham Village, Sengah Temila district, Landak regency.

II. METHOD

This research was conducted in Saham Village, Sengah Temila district, Landak regency with qualitative research method to explore deeper the social signs in the society. The data gathering were done by observation and in depth interview. Depth interviews were conducted with a purposive sampling technique and this research involved the participants such as the Village Head, Local Custom Figures (the elders in Kanayatn tribes), Religious Leaders, Temenggung (chief) and academics in Dayaknese cultures. To obtain complete data, the researcher asked each participant to give the researcher reference of who can be another source of information, and this process continue by using snowball sampling techniques. This method was chosen in order to obtain full information until certain extent there are no more new data.

III. RESULT

A. The Origin of Naik Dango

Naik Dango is based on the myth of the origin of the rice, it becomes very popular among the Dayaknese in West Kalimantan, that is the story "Ne Baruankng Kulup" (Grandpa Baruankng). He is called Yang Kulup because he is not circumcised. The story starts from the origin of rice that comes from a rice stalk belongs to Jubata (gods) in Gunung Bawang (literally mean Mount Onions), this rice stalk was later stolen by a sparrow and the rice fell into the hands Ne Jaek (Jaek grandmother) who was doing kayau (literally means headhunting). When Ne Jaek returned home and only brought a Jubata's rice stalk instead of human heads, she was mocked by her people. And her (Ne Jaek) desire to cultivate the rice caused a conflict between her and her people, and eventually led to her banished from her village. In her journeys, she met Jubata (god). In brief, they got married and the result of this marriage was Ne Baruankng Kulup. Ne Baruankng Kulup was the one who responsible for bringing the rice to "Talino" (human), because he was fond of going down to the human world to play "Gasing" (top spinning).

These actions also caused him to be expelled from Gunung Bawang and he ended up mating with humans. Ne Baruankng Kulup later on introduced rice as staple food to humans. This food later replaced "kulat" (mushroom). It was told that before humans come to know rice, mushroom was their staple food. However, to obtain the rice, sometimes there were conflict among humans such as banishment, etc, but still Jubata is considered as the source of kindness in the people mind.

The meaning of Naik Dango Ceremony for Kanayatn Dayaknese are: as a sense of gratitude for the gift from Jubata to man, for that he has given rice as food for humans, the second: a prayer to Jubata to use rice that has been stored in dango (rice barn), so that the rice that is eaten is a blessing for man and will last long, third: as a sign of the farming closing years, and the fourth as a means to strengthen the brotherhood or solidarity among Dayaknese tribes. Also, Naik Dango Ceremony is always accompanied by various forms of traditional events, traditional art, and exhibitions of various traditional crafts. This causes Naik Dango to be more popular as festival than a ritual. But if it is seen from the tradition aspect, Naik Dango remain a traditional ceremony. The common arts that are displayed is the Jubata dance and Pamompo dance. The dances tell the journey of the rice until it falls into human hands (Talino) while Panompo dance depicts the process of growing up to storing it into the barn.

B. Values of Local Wisdom in Naik Dango ceremony as Civic Culture in Kanayatn Dayaknese Community

The sacredness of Naik Dango ceremony can be seen at ceremony procession such as *panyangahan* (purifying) session and before the feast begins, there should be a procession called *disangahan* (purified), this action was done to ask for blessing from the gods (Jubata). The beginning ritual of Naik Dango starts from the story about Nek Baruang Kulup and Nek Balongkor which at that time the rice is not very fertile. So Nek Baruang had the idea she had to ask the ruler of the universe to bless the rice that it would be fertile again and producing abundant harvests. After sharing the thoughts, Nek Baruang Kulup and Nek Balongkor prepared everything needed ranging from: altar, baras banyu (rice mixed with coconut oil), tapung tawar (flour), rangkang manok (roasted chicken) and loneng jalu, pahar, poek, roas, topong papinangan, pabayo, dali and jadu, tumpi parajejan, fertilizers, tabang ai, rubber poek, bontong, tobacco leaves, angkawang fruit. The meaning of these symbols in Naik Dango ceremony are as follows :

1. Swine, symbolizes the customary laws that should be implemented in the society and since it uses swines, meaning the ritual has been fulfilled.
2. Rice, it symbolizes the complement for customary laws that should be implemented for the unity of families and to refresh the environment,
3. Sticky rice, it symbolizes unity and brotherhood because when it was cooked, the rice will become sticky and difficult to be separated,
4. Rooster, it symbolizes prosperity, because rooster always flies freely and it can feed itself.

5. Tumpi (sticky cakes), it symbolizes the spirit of unity in all citizens,
6. Boiled eggs, it symbolize unity and hard to be separated so that it can be used to reject all threats from within and from outside ,
7. Gambir (sour plant) it taste bitter and it symbolizes firmness. This meaning is derived from the color of the leaves which is yellowish that represents persistence and patience in achieving our targets,
8. Pinang (palm fruit) it symbolizes good descendants with good character, such as honest and hardworking. Willing to a job with an open heart and persistence. This is based on the nature of palm fruit, which grows straight and has a bunch of fruits,
9. Shell powder, it comes from shells or limestone, it is white and symbolizes cleanliness and hospitality,
10. Betel leaf, it symbolizes humility, generosity, and glorifying friendship. This meaning is based on from how betel leaf grows that is to climb at certain trees without damaging them,
11. Gong, this can mean by loud voice, it can scared off everything that disturb communication among people,
12. A portion of betel leaf mixed with shell powder, this symbolizes the hospitality or as the starting point of a ceremony,
13. Flour, that is the spell to summon Jubata from where he lives, to clean humans and households from every dangers,
14. Beliukng (cutting tools), a cutting tool that is commonly used the complement thing in offering, the meaning is to deter dangers,
15. Tobacco leaf, it is taken from nature and made for Jubata,
16. Bontong (plain rice), this rice is wrapped in small banana leaf and it functions as complement in the offering, s
17. Jاده (rice storage), it is a symbolize thing for storing rice. It symbolize the human efforts to grow rice.

The Naik Dango ceremony contains a lot of mysteries that cannot be understood by the people in any rational ways, but Naik Dango ceremony can be understood through spiritual ways which comes from the heart. The elements in the ceremony, as explained above represent all the foods that are consumed by the people in daily life, it looks simple but it has its own meaning and functions.

C. *The role of academics in preserving the local wisdom values as civic cultures in Naik Dango ceremony in Kanayasn Dayaknese community*

The whole society and the indigenous leaders play an important role in preserving Naik Dango ceremony, especially about the sacred values that should be kept by the people. Apart from the local people, education practitioners also have role by selecting which element of this ceremony that can be implemented as additional school subject taught at school (muatan lokal).

The world of education is one of the effective instruments to introduce the local cultures which in return can be the standard for the citizen identity. The role of education in maintaining and introducing regional cultures are very effective, for example, this can be done by applying the local

cultures are into a curriculum on additional subjects and they made compulsory school subjects by the government.

Meanwhile, the results of the interview that the researcher did with the participants that come from the government elements, customary figures, temenggung, and academics, the main points were as follows:

1. The role of society in preserving the traditional ceremony of Naik Dango is by maintaining the sanctity of the ritual without omitting or adding the elements of the ceremony, it is done so that people can understand that the sacred ceremonial of Naik Dango is in the elements or things that are used during the ceremony to honor Jubata. In addition to maintaining the sanctity of the ceremony of Naik Dango can be done by providing an understanding through activities carried out on the Panompo dance that tells about the dance from start to farm until Naik Dango.
2. Maintaining the preservation of Naik Dango ceremony by to explaining to the younger generation through the activities carried out during the Naik Dango ceremony. These activities are such as the craft arts and the art of playing, because through it the younger generation can understand it better because the these values are explained to them in an interesting way.
3. The preservation of Naik Dango ceremony is more at the emphasis to the things that are considered important to know as, for example ponompo dance (ngantar dango rice), nyangahan (people entrusted to say the prayer), in addition, the village apparatus and to introduce local culture to the people around.
4. The values of local wisdom of Naik Dango ceremony as civic culture are to preserve customary cultures by implementing these values into additional subjects at school. And the lesson material can range from the musical instruments, folk songs, traditional dresses and Naik Dango ceremony. The focus is to learn deeper the values contained in Naik Dango ceremony.

D. *Factors that influence the development of local wisdom values in Naik Dango ceremony*

The local wisdom values in Naik Dango ceremony as civic culture on Kanayasn Dayaknese community, these values have become less popular because most of the people are turning from farming to palm planting (sawit). Other factors that influence is that many people do not really believe in supernatural things. And some people perceived it as idolatry which contradicts with their religious beliefs. Here are the results of interviews conducted with the participants from the community leaders, traditional leaders and temenggung about the matters affecting the underdevelopment of the values of local wisdom in Naik Dango ceremony, they are:

1. Factors affecting the development of Naik Dango ceremony in the society is mainly influenced by two factors, internal and external. The internal factors are such as the fading role of village elders, insensitivity of the younger generation about the importance of local culture. While the external factors are such as the influence of television and bands. The external influence caused the interest towards local cultures to

change and nowadays people understand more about foreign cultures compares to local ones.

2. The influence of various religious teachings make the people have negative perception towards this culture (Naik Dango), especially the thanksgiving ritual that are seen as contradictory to their current faiths.
3. Changes in nature, the function of the environment , and education in the society
4. Many people from Kanayatn Dayaknese in Saham Village, Sengah Temila District, admitted that they did not perform Naik Dango ceremony because they did not have farm or rice field.

IV. CONCLUSIONS

The values of Naik Dango ceremony include family values, common values, religious values, and the value of solidarity. These values are related to each other that is contained in the values of Pancasila that as good citizens helping each other, respect and compassionate; (2) The role of stakeholders in the conservation Naik Dango values is very important role because culture is the state assets as well as the cultural identity in Indonesia. (3) Factors affecting the development of Naik Dango ceremony in the society is the internal factors such as changes in the environment, culture considers contrary to the values of religious, cultural transition from farming into the palm gardening, and other changes in population composition. While the factors that come from outside, namely, technology, education, and religion.

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- [1] Amri Fauzul dkk. (2013). Kearifan Lokal Lubuk Larangan Sebagai Upaya Pelestarian Sumberdaya Perairan di Desa Pangkalan Indarung Kabupaten Kuantan Singingi. *Jurnal Pusat Penelitian Lingkungan Hidup* , Tidak diterbitkan.
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THE APPLIANCE OF GENDER ANALYSIS MODEL SARA H. LONGWEE STUDY ON THE PROBLEM OF FEMALE LECTURERIN FUNCTIONAL POSITION IN HIGH EDUCATION

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Abstract. The focus of research is concerned with the study of the issue of female lecturer position in the highest functional post, it focused on the factors that influence the position of women in college. Results of preliminary observations made in Mulawarman University indicate quantity educator profession is in great demand these women and be authorized for women to develop a career in college. But in reality the potential of female teachers was not always utilized and considered in a career at the highest functional post. Data collection techniques used in this research is purposive sampling with the snowball method. With this technique the researchers hoped that it would get adequate key informants that female lecturer who have experience of Tri Dharma College and educational S3. Data collection techniques used in this research is purposive sampling with the snowball method. With this technique the researchers hoped that it would get adequate key informants that female lecturer who have experience of Tri Dharma College and educational S3. The results showed there were three categories of female lecturers: (a) Type of female lecturers with all the problems of women who have the achievements of female lecturers in the Tri Dharma College smoothly so that the position of highest functional office as a proffesor is reached, (b) Type of female lecturers with the issue of female lecturers managed finishing S3 with functional post Lector head, (c) type of female lecturers with the issue of female lecturers S3 yet, is already in the position of the head Lector. Classification of the top three categories of female lecturers cannot be separated from the issue of women that could hamper the achievement of fully functional in the office. The elements that hinder women's careers lecturers include internal and external factors. Internal factors that hinder women's careers lecturer in functional positions were low aspirations and motivation of female teachers so that female teachers tend to quickly satisfied with the condition that has been achieved today and bustle of teaching which led not have time to do research and community service. External factors that hinder women's careers lecturer in functional position are a) employment regulations governing promotion requirements, making it difficult to meet the requirements of the promotion, b) environmental work, and c) culture.

Keywords: Factor inhibitors, career female lecturers, functional post

I. INTRODUCTION

In general terms the issue of female lecturers study means any study that focused attention on female lecturers. For example the study of women's history to gain / position himself as a career woman in functional positions in universities so it can be said that the relationship between men and women is manifested in various forms and patterns of behavior that reflects the acceptance of the male or female of the position of each gender. This process is reinforced by the reality in many cultures that the position of men are structurally higher than women. This proves that the interaction that exists requires one sex is superior to the others. The man was a winner, has more power and more decisive role in various social processes compared to women, even in the circle of such broader social community groups. The decision making process in a family, do not spin out of control male power is considered to be more competent.

This condition occurs and as if legalized by the construction of the local culture. This process is repeated many eventually and it is formed a negative view of women, which included the functions, roles, and their place in society. One of them is the stereotype that women are the weak, while men are strong. Based on this, women have a strong tendency to rely on men. In contrast, men have the power to control women in various ways.

When discussing the problems of women, an important concept that should not be forgotten is that the concept of gender. This is a crucial problem because stereotypes formed by gender in their applications have a tendency to favor specific gender ie male. The advantage appears in various forms of social order and the prevailing culture in the community that embraces the culture of patriarchy. Women are depicted with images of female inferiority in particular was impressive, both in the social structure as in a structural position in college.

Observing the problems of women in a career in higher education can be observed by looking at the women in the following quantitative data. Globally, the population data of East Kalimantan Province in 2015 from the Central Bureau of Statistics, the number of productive people in East Kalimantan is 17 253 men and 18 448 women aged (40-45 years) are the majority are women. This data is the basis for the seat of women as an important part of human resources. The number of women strengthen the argument about the importance of thinking about and find solutions for the problems faced by more than 50% of the population of East Kalimantan Province are female.

There is an imbalance in your career functional positions for female teachers to be the reason for researchers to raise the object of this study, as stated in the introduction to the problems that arise is encapsulated in the following questions: "How is achievement, participation, and representation career female lecturers in the career functional post? ". These problems are further detailed more specifically in the questions we wanted to answer, particularly with regard to:

1. How is the issues of women lecturers in career functional position.
2. Internal factors that hinder the achievement, participation and representation of women in lecturers careers of functional position.
3. External factors that hinder achievement, participation and representation of women in lecturers careers of functional position.

A. Ideology of Gender and Career Development

The history of the development of the life of women in employment through different socialization process against the introduction of labor between men and women. The socialization process of division of labor seen in boys and girls in the family that continues in the community (culture) (Sunarty, 2001: 45).

The development of gender ideology on society then creates the gender roles of men and women who are oppositional (Saptari&Holzner, 1995). In the division of gender roles of a girl is always directed at roles that are domestic, reproductive, feminine, and if women work rather than as the main breadwinner, but when the boys were directed at the roles that are productive, the public, masculine, and the main breadwinner, while women are only as a secondary earner (Fakih, 1997).

In some literature described that women as a group are more concentrated in lower status jobs, low salaries, and are not taken into account or not considered as work profession. Women have always been associated as a housewife watchman home, children and husband. Or more specifically, women are socialized mainly for working household or household roles or roles that are considered secondary (second priorities).

The women work outside the home, then the work intended for women are always associated with the household, which has a characteristic not require complex thinking and the kind of work that demands practical skills for example as a teacher, secretary, nurse (Brown & Brooks, 1987).

There is a difference between the process of career planning of women and men that takes into account differences in perspective between men and women. Women in job or career plan based on the consideration associated with family and career. This means that women in completing the tasks are always inseparable from the role of domestic-reproductive causing many women lose job opportunities to pursue professional duties. Unlike the men in planning for a career based on the roles that are independent (free) is not bound by anything, so men can freely develop his career

B. Patriarchal Decisions in Organizational Culture

Robbins (1990) says that the bureaucracy often lead to concentration of power in a few people. As a result, if a decision will not reflect the interests of all employees, including women as a minority group. It is even possible to prevent deviation of the organization, from the organization's goals into personal goals. If we reflect on the data before opening insights, the concentration of power that exist in men who make up the majority in the organizational structure.

C. Women and Leadership

All humans (male and female) have a number of potential, one of them becomes the leader. But because of the traditional gender bias as men play the main breadwinner, while women as secondary wage earner the share leadership always held by men. Similarly, the influence of culture on formal education, because the main breadwinner man then more men be counted in education ..

II. METHOD

The focus of the study with regard to the issue of female lecturers in functional positions in universities addresses problems of female lecturers in positioning itself as an educator in a functional position. Setting research was in Samarinda and Balikpapan. The determination of the Samarinda and Balikpapan as the research setting to the consideration of Samarinda as the provincial capital is a city that has public universities and Balikpapan is a transit city that has pretty much college facilities.

With regard to the purpose of providing the data, the data was captured through the main respondents (key informants), the lecturer who has become achieving professor and served as strategic in college and who have not become a professor but she has met the requirements to be promoted to hold strategic positions in universities. In the provision of this data used several techniques, namely:

- a. In-depth interviews (interview guides) and observation, is used to capture cases related to lecturer careers hampered by applicable legislation.
- b. Questionnaires, investigators spread out a questionnaire regarding the condition of the lecturer.
- c. The focus group discussions, after the data have been selected and sorted then discussed where the data is essentially used as materials analysis.

Presentation of data is an organizational assembly of information that allows the conclusion that research can be done. In this case the data presentation includes various types of matrices, drawings or schematics, networking,

linkages of activities and tables. Concluding is organizing data that has been collected so that it can be made a conclusion.

In addition to interactive analysis is also used gender analysis models of Sara H. Longwee with "Women empowerment framework" which was based on the importance of development for women (Muttalib, 1993). The empowerment of women include three things: (1) capacity building means building the capacity of women; (2) cultural change is a cultural change in favor of the women; (3) structural adjustment is the structural adjustment in favor of women. Empowerment efforts aimed at the achievement of public welfare through gender equality. The criteria used in the analysis of this method consists of 5 (five) criteria, namely: (1) well-being; (2) access; (3) awareness; (4) participation; and (5) control

III. RESULT AND DISCUSSION

In this discussion shelled female lecturers problems when applying file promotion fungsional.Hala especially in positions that affect the careers of functional positions are classified into three categories of lecturers, namely: (a) Type of female lecturers with all the problems of women who have the achievements of female lecturers in Tri Dharma College smoothly so that the position of highest functional post as a professor is reached, (b) type of female lecturers with the issue of female lecturers successfully study S3 with functional Lector head, (c) type of female lecturers with the issue of female lecturers have not S3, already on the position of lector head.

Overview issue of female lecturers in functional positions include all related elements in the overall internal factors may be an inhibiting factor and a contributing factor in career dalma functional positions in college: Limitations of female teachers in using information technology generally experienced by female lecturers aged over 50 years. (A) Type of female lecturers with all the problems of women who have the achievements of female lecturers in the Tri Dharma College smoothly so that the position of highest functional post as a professor is reached, (b) Type of female lecturers with the issue of female lecturers successfully study S3 with functional positions Lector head , (c) type of female lecturers with the issue of female lecturers S3 yet, is already in the position of lector head

1. Ignorance about the status of female lecturers reputable journals national / international and terindeksopus.
2. There are rules that impose penalties in the form of cuts in benefits when lecturers should collect data outside the area and follow activities outside the area.
3. There are rules that limit the nomination of the rank of at least one year after completing the graduate program
4. There are rules that restrict the research theme should be the same as the name of the courses listed in the Decree of Functional post
5. Financial Limitations female lecturers as a single parent when it must pay research, seminars, community service, the cost of entering scientific

articles into a journal that is indexed skopus reputed and national / international.

6. Problems household mainly on female lecturers who still have children under five.
7. The number of teaching hours that are charged to lectures so did not have time to do research.
8. Limited understanding lecturer in calculating the credit rate.

Internal factors which support the career development of female lecturers in a functional position are education, employment, activity and motivation of female lecturers in the Tri Dharma College makes female lecturers in the functional position, but the main capital is not / underutilized female lecturers to immediately achieve the highest functional post at University . This condition is supported by low aspirations and motivation of female lecturers because it has been involved in the work of domestic realm that female teachers tend to quickly satisfied with the condition that has been achieved today. When achievement and involvement of female lecturers in the Tri Dharma College used carefully due to the support of children and husbands: (a) In general, children have a sense of pleasure and pride to have a mother who works as a lecturer. The attitude of other children as a form of child support to the mother is willing to be left at home while the mother was out of town duty. Children also want to help some homework for mothers on duty outside the house. These forms of support are greatly needed by the lecturer women because it can be a positive influence for the improvement of performance as a lecturer.

External factors are factors that influence from the outside, the study covers (a) even if the rules governing the process of proposing the increase of functional positions does not distinguish between male professors and female professors, but the responses given between female lecturers and professors of different men. This is because the burden of the task that more women are having to engage in domestic realm this could be a limiting factor when female teachers can not manage the well, (b) Surrounding communities, people's views about the women who work outside the home still sound , this condition can be a limiting factor when female lecturers then stop an activity (demands Tri Dharma PT) are not met. In addition, the limiting factor when generally respond positively to women who work as teachers so are not required to carry out civic duties if it is not possible because of busy work. (C) The working environment does not distinguish lecturers men and women because in carrying out the task more priority fields skills of teaching courses without gender. Support the work environment on women seen from the good cooperation among lecturers and between lecturers and study program coordinator. Thus the work environment has not the potential to hinder women in developing his career .

IV. CONCLUSIONS

Overview issue of female lecturers in the functional position, is covering all related elements in the overall internal factors may be inhibiting factors and supporting factors in pursuing a career in the functional positions in college:

1. Internal factors that support the career development of female lecturers in a functional position are education,

employment, activity and motivation of female teachers in the Tri Dharma College makes female lecturers in functional positions, but the main capital is underutilized female lecturers to immediately reach the office highest functional in college. This condition is supported by low aspirations and motivation of female lecturers because it has been involved in the work of domestic realm that female lecturers tend to quickly satisfied with the condition that has been achieved today. When achievement and involvement of female lecturers in the Tri Dharma College used carefully due to the support of children and husbands: (a) In general, children have a sense of pleasure and pride to have a mother who works as a lecturer. The attitude of other children as a form of child support to the mother is willing to be left at home while the mother was out of town duty. Children also want to help some homework for mothers on duty outside the house. These forms of support are greatly needed by the female lecturer because it can be a positive influence for the improvement of performance as a lecturer.

2. External factors are factors that influence from the outside, the study covers (1) even if the rules governing the process of proposing the increase of functional positions does not distinguish between male lecturers and female lecturers, but the responses given between female lecturers and male lecturers of different. This is because the burden of the task that more women are having to engage in domestic realm this could be a limiting factor when female lecturers cannot manage well, (2) Communities around, people's views about the women who work outside the home still sound, this condition can be a limiting factor when female lecturers then stop an activity (demands Tri Dharma PT) are not fulfilled. In addition, the limiting factor when generally respond positively to women who work as lecturer so are not required to carry out civic duties if it is not possible because of busy work. (3) The working environment does not distinguish lecturers men and women because in carrying out the task more priority fields skills of teaching courses without gender. Supporting the work environment on women seen from the good cooperation among lecturers and between lecturers and study program coordinator. Thus the work environment has the potential to hinder women in developing his career.

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The Development of Biology Practicum Learning based on Vee Diagram for Reducing Student Cognitive Load

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Abstract. Practicum is a process to gain meaningful knowledge through hands on and minds on activity, thus plan is needed in practicum to connect the conceptual side and methodological side. Vee diagram-based Biology practicum learning was arranged to lower cognitive load of student in designing experiment so the practicum activity become meaningful because the students can see the interesting side in both conceptual side and methodological side. The design that being used in this study was educational study and development. Based on the result of this study, it can be informed that there is lowering of student cognitive load, both in extraneous load and germane load, in designing experiment based on vee diagram

Keywords: practicum, vee diagram, cognitive load.

I. Introduction

Theoretically, practicum is conducted to develop student's potential in comprehending cognitive skill, psychomotor skill and affective skill, but in the practice, practicum experience in most schools cannot provide any meaningful experience for the student, that is because the practicums that commonly done are more into clarifying the concept learned by student. The statement is supported by Supriatno (2013) who stated that the practicum activity generally done deductively with expository model, commonly known as verification or confirmatory. Furthermore, supriatno explained that procedure aspect, generally are guided like activity in cookbook, there is almost no space for student to design or manipulate the variables.

Based on result of the field study conducted by Biology Education post-graduate students at Universitas Kuningan (Kuningan University), it is found that the practice of practicum in schools is only done to complete the theoretic learning in classroom activity, without following the suggestion of curriculum, this means the concept that being developed is not aiming to get essential comprehending of the lesson. This case is proven because no one has ever analyzed the syllabi in designing practicum activity, resulted that most practicums do not match the competence stated in curriculum. Almost all the teachers have not developed student worksheet that corresponding with the concept, they commonly use worksheet that was provided in text books.

II. Theory

The heuristic vee learning can be used to help student in doing practicum, especially in designing experiment. The components of vee diagram help student in constructing and comprehending knowledge so that they understand what is they learn and what it is about after conducting practicum (Alvarez & Risko, 2007) Those components, based on Novak and Gowin (1985) are divided into two. Conceptual side and methodological side. Conceptual side includes concepts, principles, theory, and philosophy. Meanwhile methodological side includes record, transformation, interpretation, and knowledge claim.

Cognitive load is defined as the mental load in doing certain task which effects on cognitive processing system. The mental load from the task and the mental effort that are needed to measure task is important dimension of cognitive load, that can be used to measure cognitive load (Pass & Van Merriënboer, 1993 ; Van Gog & Pass, 2008). Total cognitive load from working memory consist of three catagories; intrinsic, germane and extraneous (Sweller, 2005; Sweller *et al.*, 1998). Marcus *et al.* (1996) stated that cognitive load from learning material is affected by the prior knowledge, the teaching process and organization of learning material.

Biology practicum is a course that provides student to design laboratory experiment and also field study. The experiment designed by the student should be able to connect conceptual aspect learned in classroom with methodological aspect learned in laboratory or on field. Experiment is a method where the scientist test natural phenomenon in hope to get new knowledge (Nuryani, 2005). The good experiment design should follow logic design to accurately isolate and test specific variable. By learning about fundamental principle behind experiment design, you will be able to apply

this principle to your own experiment. No matter what scoop it is, all good experiment operate corresponds with logic principle and deductive from science method. All scientist design experiment to answer questions or to solve problems. The next step is writing hypothesis. Hypothesis is potentially right answer for a question or explanation that will be tested. During the experiment, student have to write all the observation that been done. The result of observation is data that you have. Data interpretation means explaining the data itself. Student can do simple comparison or search for tendency of pattern to do data interpretation. In taking conclusion student have to compare the result of data interpretation with the hypothesis they made in the beginning of experiment. Based on the former explanation, the next step is they can decide whether the hypothesis is correct or wrong. The step is called deduce the conclusion.

III. Method

This study developed vee diagram-based biology practicum learning based in designing experiment to lower cognitive load of biology teachers. This study used educational research and development model (Borg & Gall, 2001)

The study of practicum learning based on vee diagram was done at Biology Education Study Program, on post-graduate school in private university in Kuningan, that have good mark in accreditation system. The subject that were involved in trial stage are 20 students who were on the third semester in academic year of 2012-2013. Whereas for implementation stage, involving 36 students who were on third semester in 2014-2015 academic year that were taking biology practicum course.

The Biology Practicum Learning based on Vee diagram that was developed has six stages of learning, which are (a) Information presentation aimed to develop content skill in designing practicum activity in lab or on the field. The presentation of information is conducted by discussing the importance of comprehending the relation between conceptual aspect and methodological aspect in designing experiment, and the development of experiment design should match the the nature of science in learning science. (b) Syllabi analysis, aimed to analyze basic competence to elaborate the practice for developing knowledge aspect, procedure or method and also score from the concept that been learned. (c) Experiment design, aimed to implement the result of syllabi analysis into laboratory activity. Vee diagram was used to ease the implementation of syllabi analysis. (d) Experiment design presentation, aimed to present the result of experiment design and get advice from other students. The presentation of design marked as good if it already develop concept based on the nature of science value. (e) Practicum worksheet creation, aimed to develop worksheet that match the real condition. (f) Worksheet practice test, aims to test the practice of the worksheet in laboratory or on the field. In this stage, students had to effectively and efficiently use the time, tools, and material.

The measurement of cognitive load and data analysis is conducted in quantitative and qualitative. All analysis data process, in correlation, use SPSS 20 for windows.

IV. Result and Discussion

Based on the implementation result of biology practicum learning based on vee diagram in lowering student cognitive load generally use strategy that can develop student positive perception in relating conceptual side and methodological side. The result of implementation gave information as mentioned below:

A. Information presentation stage.

In this stage student were given the explanation about how to relate conceptual side to methodological side and the importance of the match between conceptual side and methodological side in conducting practicum at schools. In this stage also, the student were asked to analyze the match of concept and method on worksheet that commonly used in schools. The result of student analysis on the worksheet that commonly used by schools showed that there were many mismatch between basic competence in syllabi both from KTSP curriculum and 2013 curriculum with the practice of curriculum. The next strategy was after students analyzed the worksheet, they were asked to reconstruct the worksheet based on basic competence and science value. In this stage, students started to be keen for mistakes in worksheet that commonly used in schools, for example there was a worksheet about cell that aimed to do practicum that differentiate prokaryote cell and eukaryote cell, but in observation session the observation only differentiate the animal cell and plant cell. This is clearly showed that worksheet has not able to facilitate student to differentiate the two types of cells, because the observation only covered the observation of eukaryote cell.

B. Syllabi analysis stage

In this stage the lectures gave instruction to identify the match of basic competence with the nature of science that would be developed during the practicum. Students did discussion about what basic competence they going to choose and what skill will be improved during the practicum., that later will be formulated into operational verb that will be derived into three components of science value; cognitive, psychomotor, and affective that will be develop during the practicum. The need to emphasize on the nature of science while analyzing syllabi is because almost all worksheet used in school never touch the science value. This reality make the practicum activity meaningless. The result of practicum only about theory confirmation and tend to strengthening just the cognitive side. Student were never expected to use their science process skill during the practicum. The students only asked to collect data but the process of collecting data is not being noticed, for example how the student do the process of observation, data interpretation, classification etc. The affective aspect also rarely noticed during the practicum, thus the knowledge gained by students could not give any experience to apply the practicum result in their daily lives. By analyzing syllabi, the

student will comprehend how to lower the basic competence on the nature of science that can be done during the practicum.

C. Experiment design stage

In this stage the lecturer gave instruction on how to designing experiment using vee diagram, where the experiment design should match with the nature of science they had made beforehand. The students decide: 1) conceptual side that will be formulated into questions, theories, principles, concept, hypothesis, variables and conduction. 2) Methodological side that will be decided are the record, data transformation knowledge claim and value claim.

While designing the experiment, student can relate conceptual side and methodology side that will be developed during the practicum. The conceptual side was formulated when designing the experiment has enabled student to do the practicum and observe or identified the practicum result, thus student can collect the result data from practicum to be transformed afterwards. Data transformation was designed in vee diagram has been able to facilitate student to interpret the result data from practicum, thus the student can evaluate whether the practicum has matched the objective of practicum and theory got by students.

D. Experiment Design Presentation Stage

In this stage students are asked to present their vee diagram-based experiment design. Based on the presentation it can be informed that the students were 1) facing hardship in differentiating between theory, concept and principle that have to be formulated in vee diagram, this would impede the variable decision for practicum, 2) facing hardship in recording to ease interpretation of practicum result data, most of students had not inputted the quality of observation result and standard indicator for quality and quantity of practicum result., 3) facing hardship in claiming the score, especially the ones that related to daily lives. Those hardships can be overcome by brain storming method, thus the students could get advises from lecturers and their friends.

E. Practicum Worksheet making process stage

In this stage students made worksheet based on the arrangement standard developed by depdiknas (2013) (ministry of cultures and education). The developed worksheet should contain the name of schools, subject name, class, semester, learning material, basic competence, indicator, objective of practicum, tools and material needed, procedure, observation result and data analysis.

F. Worksheet conduction test stage

In this stage students tried to apply their worksheets in laboratory, where the practicums were conducted by peer teaching, based on the analysis, 90% of worksheets could be conducted within the planned time, which was 60 minutes.

Integration between the conceptual side and methodological side in designing experiment using vee diagram gave positive feedback for student thinking process. Especially in their effort to comprehend the conceptual side that have to be connected to methodological side. The positive feedback depended to the learning strategy used in

the biology practicum learning based on vee diagram, which are (a) The learning process was conducted contextually, thus the students were easier to comprehend the concept that was learned, because it always related to the problem happened in the practicums at their own schools. (b) Contextual learning enable the positive behavior and perception on the students, this showed the involve of student in discussion and giving argumentation in analyze methodological side and conceptual side when designing the experiment. (c) Identification on the focus of the question that match with the phenomenon or object that was going to be observed helped student in formulating theory, and basic concept. (d) Ability to formulate basic concept affected on the increase of skill in deciding the treatment that will be observed. (e) Syllabi analysis related to the nature of science helped students in deciding the knowledge and value that will be developed during the practicum, therefore the conduction of practicum related to the demand of curriculum that emphasized on the balance between hard skill and soft skill.

Measurement of Experiment Designing Skill.

Learning strategy that was developed in biology practicum course was proven could lowering germane load in designing experiment. The result can be observed based on the experiment designing skill presented on the table 1.

Table 1. Experiment designing skill

Indicator of Experiment designing skill	Score
Focus of questions	3.2
Theory/concept/principle	3.4
Conduction	3.4
Recording process	3.3
Knowledge claim	3.1
Score claim	2.8
Average	3.17

Based on 1 Table, it can be explained that the skill of students in designing experiment has been good because they got 3.7 from the scale of 4. The highest students' skills lie on formulating theory/basic concept and deciding activity in practicum. This shows that students are able to relate the conceptual side and methodological side in designing experiment. The lowest student's skill lies on the score claiming from the result of the practicum. The low score on the score claiming indicators shows that the students are not familiar with relating practicum score with development of attitude in making decision that is beneficial in daily basis.

In designing experiment student has able to (a) Formulating the focus of question which is related to basic concept in practicum. (b) Formulating theory and basic concept that relevant with the proposed method, hypothesis and variable. (c) Deciding activity that will be done by students and consistent with the focus of the question and the record of observation. (d) Formulating questions related to the gain of knowledge based on the result of practicum, thus

student are expected to get facts from the object or phenomenon to strengthen the understanding of concept they learned.

Measurement of mental effort in designing experiment

The measurement of student cognitive load when receiving information (extraneous load) in this study aims to know the student cognitive load from the application of vee diagram-based biology practicum learning. Student cognitive activity on the application of vee diagram – based biology practicum learning is the student mental effort in constructing cognitive scheme to comprehend experiment design. In this study, students’ mental effort is categorized as low if the student feel at ease in formulating the focus of question, deciding theory and basic concept, deciding the conduction of practicum, recording the result of practicum, deciding the knowledge claim, and deciding score claim that should be gained by the students in designing experiment. Low mental effort show the decreasing of extraneous load.

Learning strategy that is developed in biology practicum learning was proven can lowering extraneous load in designing experiment, this is result of mental effort in designing experiment is presented on the table 2.

Table 2. The mental effort in designing experiment

Experiment designing skill indicators	Score
Focus of questions	2.75
Theory/concept/principle	2.8
Conduction	2.8
Recording process	2.6
Knowledge claim	2.6
Score claim	3.2
Average	2.76

Based on table 2 it can be described that students’ mental effort in designing experiment has been easy enough, this is shown by the average of students’ mental effort that is 2.76 out of scale of 5. The lowest students’ mental efforts lie on the indicator of recording practicum result and claiming knowledge. This shows that students found it easier to understanding the methodological side in designing experiment, but the mental effort was supported by the students’ skill in formulating focus of the question, theory and basic concept thus it can be informed that the lowest mental effort in deciding the methodological side was supported by the skill in deciding conceptual side. The highest students’ mental effort lied on claiming score indicator or the score gained from the result of practicum. This high effort of students in score claiming showed that they found it hard to relate the result of practicum with the development of attitude that beneficial in daily basis.

The Relation between Mental Effort and Experiment Designing Skill.

Students’ extraneous load in designing experiment in this study shows how vee diagram-based biology practicum learning can facilitate student in designing experiment, while the designing experiment skill (germane load) in this study shows students’ skill in transferring knowledge from long term memory as the result of vee diagram-based biology practicum learning. The two cognitive load are related to each other. To figure out the relation between the two cognitive loads. The analysis using correlational test was done.

Base on the relation between two cognitive load showed significant correlation $p=0.00* < 0.01$. negative correlation between extraneous load and germane load showed that the lower students’ mental effort in understanding information for integrating conceptual side and methodological side, the higher students’ skill in designing experiment. Coefficient determinant between extraneous load on germane load is 0.83. This showed that 83% of experiment designing skill was effected by students’ mental effort caused by biology practicum that was being developed. Students who got low experiment designing score had high mental effort, whereas the students who get high experiment designing score had low mental effort.

Mental effort in designing experiment in this study was used to measure extraneous load, which is the load cause by learning design and organization of learning material. Vee diagram-based biology practicum learning in this study used constructivism approach using several strategies in delivering learning material. The strategies used in this study were emphasizing on. *First*, the importance of learning condition, *second*, the importance of prior knowledge in learning process, *third*, help understanding information and how the information were used.

Students’ extraneous load in this study showed score of 2.76. this showed that the strategies that were being used in vee diagram – based biology curriculum learning put student at ease in processing information about relation between conceptual side and methodological side in working memory and construct the cognitive scheme.

The lowering mental skill could be retained on the next learning stage, because those three stages use strategy that facilitate student to assimilate information on knowledge that already have cognitive structure. By assimilating the information, student could widen and modify the relation between concept, thus can ease students in analyzing information. The lowering in mental effort was also proven by responds from students. Students tended to state strongly agree on the learning process because they already had positive perspective on the learning process. This can be proven when they were assigned to design experiment, students tested their designs as material for presentation and did the worksheet that has been designed well.

V. CONCLUSION

Based on the study about development of vee-diagram based biology practicum learning, it can be conclude that the

learning has six stages of learning, there are information presentation, syllabi analyze, experiment designing, practicum worksheet making process, and worksheet conduction test have been alternative to relate conceptual side and methodological side in designing experiment with low cognitive load. The low cognitive load of students when relate conceptual side with methodological side in designing experiment is because of the learning process emphasized on the creation of conducive learning condition, develop thinking potential, contextual information packaging, and conduct cooperative learning.

The result of this study showed that experiment designing skill is categorized as good with average score 3.17. Students mental effort in designing experiment is categorized low (2.76). students' mental effort in designing experiment has proven to effect experiment designing skill. The correlation between intrinsic germane load on germane load was negative correlated. This study result showed that low mental effort ease student in designing experiment. Thus, the application of learning that was developed could increase thinking skill, facilitate student to construct cognitive scheme that enable them to gain holistic knowledge through the relation between conceptual material that being learned with relevant study field, and also facilitate the use of several cognitive process that emphasize on thinking skill, and overcome the hardship of cognitive task faced by students caused by cognitive capacity that different for each students.

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THE IMPORTANCE OF SERVICE PLACEMENT AND CHANNELLING TO PREPARE HUMAN RESOURCES FOR STUDENTS TO MEET THE CAREERS OF THE FUTURE

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Abstract. Placement and distribution Service aimed at helping put and passing students in accordance with the potential, interests, and talents. Placement and distribution services, namely continuous process to facilitate learners achieve success the process and results of the study as well as optimal development in order to achieve the goals of national education. Guidance and counselling Services in the form of peminatan provide ample opportunity for learners to channel and put yourself on the path to a more appropriate in the framework of the completion of the studies are focused, successful, educated and clear in next. The purpose of the service placement and channelling instill interest subjects, confirming the interest of subjects, as well as select and establish an interest group of subjects, the cross-subjects and study subjects who followed in the education unit, which was being pursued, career choice and/or advanced course options up to the College

Keywords : Service placement and Distribution, school

I. INTRODUCTION

A series of activities guidance in helping students to transmit or place themselves in a variety of school programs. Placement and distribution Service is a service that allow the learners acquire the placement and channelling in classrooms, study groups, departments/courses, training programs, internships, extracurricular activities in accordance with their potential, talents, interests and the attached conditions, with the goal of keeping learners can develop all your talents, interests and all the other potential. Service placement and distribution functions for the development. Peminatan is a curricular programs provided to accommodate the choice of interests, talents and/or ability learners/konseli with the orientation of the centralizing, expansion, and/or the study subjects and/or vocational charge. Peminatan learners in the 2013 meaning Curriculum: (1) an interest-based learning students appropriate learning opportunities exist in education; (2) a process of selection and determination of peminatan learning offered by educational units; (3) a process of retrieval options and decisions by learners of peminatan learning based on understanding self and potential options available on units of education as well as the prospect of peminatannya; (4) is a continuous process to facilitate learners achieve success the process and results of the study as well as optimal development in order to achieve the goals of national education; and (5) service peminatan learners is arable area of profession guidance and counselling, which is covered on individual planning service.

Since the implementation of the 1975 curriculum, guidance and counseling is expressed as an integral part of the overall system of education in schools. The position is strengthened by the enactment of Laws – laws of the RI Numbers 20 in 2003 about the system of national education,

National Education Minister Regulation Number 27 in 2008 about the standards of academic qualification and competence of counselors, and Peraturan of the Minister of education and culture Number 111 2014 of guidance and counselling in primary and secondary education.

Based on the prevailing regulations, guidance and counselling has a strategic position in participation helps learners to achieve the optimal level of development. In other words, the role of guidance and counselling as one element in the educational system, it is very urgent that is manifested in the Organization of the Ministry of guidance and counselling memandirikan learners as the nation's future cadres who have high competitiveness in the globalization community (Department of national education, 2007).

One of the field of guidance and counselling is a service of peminatan learners are guidance and counselling is a very important and decisive success in learning, development and future of each learner. To that end, pelaksanaanya BK. teachers or counsellors require a competent and professional in carrying out tasks, functions and professional role helping learners in choosing and determining the proper peminatan for success in terms of learning. This corresponds directly in invalid constructs and content Curriculum by 2013 that can produce decent productive Indonesia, creative, innovative, affective through the strengthening of attitudes, skills and knowledge.

II. DISCUSSIONS

The sense of Placement and distribution Service

Service placement and channelling efforts are helping students plan for the future was in school/Madrasah and after graduating, choose advanced courses as a preparation to assume an Office. (Winkel, 1991).

Service placement and distribution according to Mulyadi (2006) guidance and counselling is a service which allows

clients obtain placement and distribution that suits your talents, interests, and abilities that are owned by the individual

Service placement and channelling attempted to reduce the mismatch condition (mismatch) on the individual so that the individual can develop itself optimally, so that individuals can get a suitable place for him to develop all the potential of the individual.

The implementation of guidance and counseling in the curriculum of 2013 for primary and secondary education level are marked with peminatan learners, is part inseparable and integrated in the program of the Ministry of the education unit at BK complete and intact should contain activities peminatan learners. This service is an attempt to help learners in the vote, determine and live programs or activities to achieve the needs in accordance with the desires of the heart or a strong desire associated with learning program that depends on the units of education. In the service of these learners are expected to understand the potential and conditions yourself, understand and choose the direction of your career and prepare ourselves as well as choose further education and careers to high keperguruan. This is where the role of the teacher or Counsellor BK has an important role to help learners with the service peminatan the learners, in order to select and determine the proper selection of a group of subjects peminatan, choice group choice groups, cross-cross-peminatan and/or deepening the interest will follow. (Kemendikbud, 2001).

Through guidance and counselling service, teacher or Counsellor BK help in fulfilling the direction peminatan in accordance with the basic abilities, talents, interests and inclinations of each public private learners. Guidance and counselling services in the form of peminatan provide ample opportunity for learners to channel and put yourself on the path to a more appropriate in the framework of the completion of the studies are focused, successful, educated and clear in next.

The purpose of the placement and Service Penyaluran Adapun the purpose of the placement and distribution services are as follows:

General purpose, according to Prayitno (2004) the general objective of service placement and channelling is the 63rd place in accordance with the development potential of the individual to himself. Conformity with the place of self development that is related to the school environment, organizations, and places of work.

Special purpose, according to Prayitno (2004) special purpose of placement and distribution service is to help students reach maturity in mastering the development of science, technology and arts in accordance with program curriculum and career through persipan plans the continuation of education to higher education, as well as play a role in public life.

From the explanation above can we understand that services peminatan aims to give learners the opportunity to develop the competencies of the students attitudes, competencies, knowledge, skills and competence of learners in accordance with the interests, talents and/or academic ability in a group of academic subjects, as well as capabilities in areas of expertise, skills, and expertise.

Meningat this will be the basis for subsequent life and career journey, setting the option must be followed by the service learning that educate, aksesibilitas wide and terdiferensi development, and preparation of development environment that supports learning. In this context the guidance and counselling role and function collaboratively, in the following points.

1. Strengthen educational Learning

The atmosphere and the learning process that facilitates the development of educating potential learners. The atmosphere of the learning process is, at hakiakatnya is the advocate and facilitate the process of the development of the learners in its application requires the application of the principles of guidance and counseling. To realize the intended learning environment, the teacher should be; (1) understand the readiness in pembelajaran, (2) conduct assessment of potential learners, (3) conducting diagnostic difficulty progression and learn learners, (4) encourages the occurrence of internalization of values as the process of individuation as learners. The fourth manifestation of this principle can be developed collaborative learning with melalui guidance and counseling.

2. Facilitating advocacy and Aksesibilitas

In the curriculum requires the existence of diversified services to 2013, namely the peminatan service. Guidance and counselling role advocate, accessibility, and facilitation in the differentiation and diversification of educational services for the development of personal, social, career learning and learners.

3. Organizing Outreach Function

The curriculum emphasizes learning as a process of 2013 empowerment and kebudayaan. To support the principle referred to counseling then perform outreach (expansion) oriented at strengthening power support environment development as a learning environment. In this context the BK teacher/Counselors collaborate with teachers subjects in larger spaces, namely: (1) collaboration with parents, (2) collaborate with the world of work and educational institutions, (3) an institution associated with the purpose of helping the development of learners.

Step Principal Peminatan

Peminatan group of subjects was started as early as possible, i.e., since learners realise that her chance to choose the type of school and/or subjects and/or career direction and/or further study. Steps-steps tailored to the level of a certain peminatan.

1. First Steps: Data Collection

This step is performed to collect data about:

- a. Personal Data of general basic ability learners (intellect), talent and interest as well as the tendency of potential.
- b. Keluaraga
- c. Environmental conditions
- d. Subjects
- e. Learning System
- f. Job/career Information

- g. Career information Materials
- h. Advanced educational information Material
- i. Data learning activities
- j. Learning outcome Data
- k. Special Data about learners

2. Step two: information Peminatan

This step is performed at the beginning of entering the school at the time of orientation of study, enter the new class, and towards the end of the study, learners are given full information in accordance with the type and level of unit education learners, i.e. information about:

- a. The school or the program that they follow and after they finish school.
- b. Curriculum and subjects that they would travel
- c. Information about the career or the type of work that needs to be understood and/or which can be reached by a graduate education is being pursued now, especially with regard to vocational peminatan.
- d. Information about further study setamat education that are being taken now.

3. Third step: identification and determination of Peminatan

This step is focused on identifying potential, interests and peminatan group of subjects, the cross-subjects, and deepening the existing subjects in the educational unit that entered the order. In 2013, this curriculum at least 2 (two) things into consideration the determination of peminatan learners, that choice and the ability of the learners. The choice of students against peminatan subjects, the cross-subjects, and subjects dijaring deepening through the now. In the elections to the peminatan, learners are required to consider potential, learning achievement and accomplishment of non academic who has been obtained, the ideals, the learning interest and attention to the elderly. In pemilihan peminatan assignment, learners should discuss with parents. In case of difficulty or incompatibility between selection of learners with the parents, then the students and/or parents can consult a BK Teacher/Counselor. As for knowing the capabilities of the learners performed by BK/Counselor by analyzing the value of report cards the classes VII, VIII and IX, the value of the UN in junior high, and achievements of non academic. The analysis of the trend of peminatan learners in a choice of peminatan group of subjects, the choice of cross-subject, peminatan and peminatan options for study subjects. When available data such as the detection of potential learners and Teacher recommendation BK/JUNIOR Counselors/MTs can also be used as a consideration.

4. Step four: Adjustment

The next step is the adjustment against the peminatan peminatan group of subjects, the cross-subjects, and peminatan deepening the subjects selected and designated learner. When learners are still wavering, hesitation or worry with peminatannya, then it can consult a BK Teacher/Counselor. If the decision of the selection of peminatan learners right but school/madrasah was or will be followed by the desired option is not available, then the learners in question can be encouraged to take that option in

another school. Further, if the right decisions and choices and facilities in schools/madrasah is available, but the moral and financial support of a parent does not exist, then it needs to be done with individual counseling with students and discussions with parents of learners to find a solution which is advantageous for learners. If the choice and decision is not appropriate, then the learners in question can change the choice of peminatan group lessons, peminatan cross peminatan subjects and other subjects for study and the necessary adaptations on learners and of related parties.

5. Step five: Monitoring and follow-up

BK teacher/Counselors, teachers, Subjects and teachers collaborate in Homeroom performs monitoring activities the students overall educational program through which depends, in particular with regard to the selection of groups of subjects, peminatan peminatan cross peminatan, and subjects for study subjects. Developments and issues in the student education program in school/madrasah anticipated, evaluated and followed up through the Ministry of guidance and counseling.

III. CONCLUSIONS

Effort choice peminatan groups of subjects, peminatan cross-subjects, and peminatan deepening subjects is an important part of the quality improvement efforts so that graduates have an impact on the preparation of the next generation. Peminatan is intended to cater for the interests of students in the framework of the development and success of them optimally, in accordance with the common basic abilities (intelligence), talents, interests and inclinations of each selection of learners, particularly with regard to academic peminatan, Commissioner, and further study. To that end, all parties need to find the best way for the attainment of educational objectives by putting the interests of the learners as the most dominant. Remember this will be the basis for subsequent career journey of life. In this regard, the role of Teachers as Counsellor/BK executing main central positions and in carrying out its work should, in cooperation with the leadership of the unit education, teachers of subjects, teachers Class, along with the elderly learners. The setting of the option must be followed by the service learning that educate, aksesibilitas an extensive development and differentiate, and preparation of a development environment that supports learning.

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THE EFFECT OF ARIAS LEARNING MODEL AND STUDENT'S CREATIVITIES TO THE LEARNING OUTCOMES ON CONTINENTAL FOOD PROCESSING AND PRESENTING SUBJECT AT STATE VOCATIONAL SENIOR HIGH SCHOOL 3 BOGOR

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Abstract. One of teacher responsibilities is to create learning model in order to make students be able to learn actively, innovatively, creatively, and favorably. By that kind of learning environment, the student learning intensity will definitely be increased, and student learning outcomes will come to its optimum level according to their potential. This study was conducted to determine the effect of ARIAS learning model and student creativities to the learning outcomes on continental food processing and presenting subject at State Vocational Senior High School 3 Bogor. This study aims to: (1) obtain information on the differences of learning outcomes between students taught using ARIAS learning model and students taught using direct learning; (2) obtain information on the differences of learning outcomes between high creativity students and low creativity students; (3) obtain information on the relationship between learning model and creativities and the students' learning outcomes on continental food processing and presenting school's subject. This experimental study applied 2 x 2 factorial design, using moderator variable of student creativity. In the experiment, separating level on students' creativities was not significantly performed between high creativity students and low creativity students. Students considered as high creativity students, if they had score better than or equal to the median (\geq median) group, while students considered as low creativity students, if they had score less than or below the median ($<$ median) group. The study was performed into two classes, Class XI Hospitality 1 implementing ARIAS learning model, and class XI Hospitality 2 implementing direct learning model. The study found that: (1) students taught using ARIAS learning model obtained an average score of learning outcomes in cognitive, affective and psychomotor domains respectively at 85.13, 83.46 and 83.29 which indicates significantly better than students taught using direct learning model who obtained an average score respectively at 75.77, 78.92 and 78.56; (2) high creativity students obtained an average score of learning outcomes in the cognitive, affective and psychomotor domains respectively at 82.69, 82.44, and 81.92 which indicates significantly better than low creativity students who obtained an average score respectively at 77.77, 79.44 and 79.94; and (3) there was relationship between the use of learning models and student creativity and the learning outcomes on continental food processing and presenting school subjects.

Keywords: ARIAS learning Model, Creativity, and Learning Outcomes.

I. INTRODUCTION

A. Background of the Study

Schools as formal education implementing is responsible for learning activities both intra and extracurricular. Teachers practice classroom teaching authority is obliged to create an active, innovative, creative, and fun learning environment. To support the learning process, teachers need to apply specific learning strategies, so that students can learn effectively, and achieve optimum learning. Based on the results of surveys carried out that during the learning process of processing and presentation of continental food at SMK Negeri 3 Bogor, presented in a way teachers deliver definition, mentioning the tools and materials used in the technique of processing, through the use of models of conventional learning, so that students' activity in learning less than optimal, resulting in low yields of their

learning. To overcome these problems, we need an appropriate learning models so that students can learn intensively, so that the results of their study reached the optimum point is expected. Thus the question arises: what is the proper learning model to teach subjects continental food processing and presentation? Is learning model Assurance, Relevance, Interest, Assessment, Satisfaction (ARIAS) or direct instructional model? The main characteristic learning model ARIAS is a learning model that spurs students to have the confidence and attitude of confidence to succeed in learning (Assurance), learning must relate to real life students either present experience or future (Relevance), success in learning for their interest in the study (interest), in studying the need for the evaluation process, either during the learning process or at the end of the study (Assessment), during the learning students must have a sense of pride in the success achieved (Satisfaction).

Since the processing and presentation continental food subject takes some creativity in terms of processing and presentation, the development of skills learning takes place among students. On learning ARIAS instilling confidence that must be shared by all the students, so it is expected that ARIAS learning model can improve students' creativity. Creativity is a talent that is potentially owned by any person who can be identified and developed through proper education. In connection with the scope of the research conducted at the vocational school, where every student is required to experts in a particular field, then the creativity of students need to be developed in the study, so it can be seen the influence of creativity on student learning outcomes. Students who have the creativity, tend to have a goal to become the educated, knowledgeable, and an expert in a particular field. Creativity is a condition, attitude, ability, and the process of changing a person's behavior to produce products or ideas, find solutions to problems that are more efficient and unique in the learning process.

Based on some of the reasons as described above, it is necessary to research on: Effects of learning model ARIAS and creativity towards student of SMK Negeri 3 Bogor learning outcomes on continental food processing and presentation subjects.

B. Research Question

Based on the background of the research that has been described above, the researcher made formulation of the problem as follows: (1) Are there any differences in learning outcomes between students learning by using ARIAS model and by using directly model on the subjects of processing and presentation of continental food SMK Negeri 3 Bogor?; (2) Are there any differences between the learning outcomes of students who have high creativity and students who have low creativity on the subjects of processing and presentation of continental food at SMK Negeri 3 Bogor?; (3) Is there an interaction between the use of models of learning and creativity toward student learning outcomes in subjects continental food processing and presentation at SMK Negeri 3 Bogor?

C. Limitation of the Study

The scope of research on Effect of ARIAS Model of Learning and Creativity against Learning Outcomes at Continental Food Processing and Presenting Subject at SMK Negeri 3 Bogor, are as follows: (1) subjects were students of XI grade of Food Program SMK Negeri 3 Bogor; and (2) research conducted only on subjects continental food processing and presentation.

D. Hypothesis

Based on the study of theory and relevant research results proposed hypothesis as follows: (1) there are differences in learning outcomes between students learning by using model ARIAS and students learn by using directly model on the processing and presentation of continental food Subject at SMK Negeri 3 Bogor; (2) there are differences in learning outcomes between students who have high creativity and students who have

low creativity on the subjects of processing and presentation of continental food at SMK Negeri 3 Bogor; and (3) there is interaction between the use of models of learning and creativity toward student learning outcomes in subjects continental food processing and presentation at SMK Negeri 3 Bogor.

II. RESEARCH METHODOLOGY

The study design used in this study is a 2x2 factorial design with creativity moderator variables, as shown in Figure 1 below:

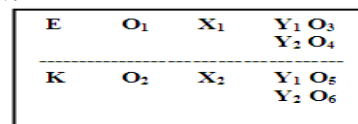


Figure 1. 2 x 2 factorial design

The research was conducted on the first semester students on the subjects of processing and presentation of continental food at SMK Negeri 3 Bogor,. As research subjects, is a class XI student of Catering and Hospitality 1 & 2. In the course of research, the separation of the level of creativity of students is false, that is to say in the activities of the experiment, the students are not separated in reality, between students who have a high degree of creativity and students who have low creativity. Based on the draft factorial analysis, the study subjects took two classes, namely: (1) class XI Hospitality 1 taught using learning model ARIAS; and (2) class XI Hospitality 2 taught using direct learning model.

III. RESULTS AND DISCUSSION

A. First Hypothesis Testing

There are differences in learning outcomes (cognitive, affective and psychomotor) among students who studied using ARIAS learning model and student learning by using direct learning model in the subject of processing and presentation of continental food at SMK Negeri 3 Bogor.

Table 1. Test Results Anava 2 Paths to Learning Outcome Domains Cognitive upon impact learning model

Tests of Between-Subjects Effects					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2260.169 ^a	3	753.390	13.719	.000
Intercept	386140.898	1	386140.898	7.032E3	.000
Kelas	320.208	1	320.208	5.831	.019
Kreativitas	1444.898	1	1444.898	26.312	.000
Kelas * Kreativitas	444.708	1	444.708	8.098	.006
Error	3294.831	60	54.914		
Total	396180.000	64			
Corrected Total	5555.000	63			

a. R Squared = .407 (Adjusted R Squared = .377)

In Table 1 it appears that Fsum for cognitive learning results on the effect of learning models amounted to 5,831 with level of significance is 0019. Because significance level of <0.05, then H_0 is rejected and H_a is accepted. Thus, it can be concluded that there are significant differences on the use ARIAS learning model and learning model directly against cognitive learning outcomes of the students on the subjects of processing and presentation of continental food. Furthermore, as shown in Table 2, that Fsum for learning outcomes on the influence of the affective learning model amounted to 11 889 with significance level of 0001. Because the extent significance < 0.05, then H_0 rejected and H_a accepted. It can be concluded that there is significant influence on the use of the learning model ARIAS and direct instructional model to affective learning outcomes of the students on the subjects of processing and presentation of continental food.

Table 2. Test result 2 Path Anava to Affective Learning Outcome towards the effect of learning models

Tests of Between-Subjects Effects					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	599.828 ^a	3	199.943	23.901	.000
Intercept	409721.813	1	409721.813	4.898E4	.000
Kelas	99.453	1	99.453	11.889	.001
Kreativitas	337.813	1	337.813	40.382	.000
Kelas * Kreativitas	146.453	1	146.453	17.507	.000
Error	501.922	60	8.365		
Corrected Total	1101.750	63			

a. R Squared = .544 (Adjusted R Squared = .522)

In Table 3 it appears that Fsum for psychomotor learning outcomes on the influence of the learning model is of 6497 with significance level of 0.013. Because the significance extent <0.05, then H_0 rejected and H_a accepted. It can be concluded that there is significant influence over the use ARIAS learning model and learning model directly against psychomotor learning outcomes of the students on the subjects of processing and presentation of continental food.

Table 3. Test result 2 Path Anava to psychomotor Learning Outcome towards the effect of learning models

Tests of Between-Subjects Effects					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	570.898 ^a	3	190.299	19.820	.000
Intercept	406311.7	1	406311.750	4.232E	.000
Kelas	62.382	1	62.382	6.47	.013
Kreativitas	367.500	1	367.500	38.276	.000
Kelas * Kreativitas	129.0	1	129.007	13.436	.001
Error	576.086	60	9.601		
Total	410587.000	64			
Corrected Total	1146.984	63			

Tests of Between-Subjects Effects					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	570.898 ^a	3	190.299	19.820	.000
Intercept	406311.7	1	406311.750	4.232E	.000
Kelas	62.382	1	62.382	6.47	.013
Kreativitas	367.500	1	367.500	38.276	.000
Kelas * Kreativitas	129.0	1	129.007	13.436	.001
Error	576.086	60	9.601		
Total	410587.000	64			

a. R Squared = .498 (Adjusted R Squared = .473)

B. Second Hypothesis Testing

There are differences in learning outcomes (cognitive, affective and psychomotor) among students who have high creativity and students who have low creativity on the subjects of processing and presentation of continental food at SMK Negeri 3 Bogor. Statistical tests performed using Anova 2 lines as shown in Table 4, Table 5 and Table 6 below.

Table 4. Results Anava 2 Paths to Learning Outcomes Cognitive realm on Effect of Creativity

Tests of Between-Subjects Effects					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2260.169 ^a	3	753.390	13.719	.000
Intercept	386140.898	1	386140.898	7.032E3	.000
Kreativitas	1444.898	1	1444.898	26.312	.000
Kelas	320.208	1	320.208	5.831	.019
Kreativitas * Kelas	444.708	1	444.708	8.098	.006
Error	3294.831	60	54.914		
Total	396180.000	64			
Corrected Total	5555.000	63			

a. R Squared = .407 (Adjusted R Squared = .377)

In Table 4 it appears that Fsum for cognitive learning outcomes influence of creativity amounted to 26 312 by 0000 significance level, which means that H_0 rejected and H_a accepted. It can be concluded that there is a significant relationship between low high creativity and creativity on the results of cognitive learning on the subjects of processing and presentation of continental food.

Table 5. Test Results Anava 2 Paths to Learning Outcomes Affective domain on Effect of Creativity

Tests of Between-Subjects Effects					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	599.828 ^a	3	199.943	23.901	.000
Intercept	409721.813	1	409721.813	4.898E	.000
Kreativitas	337.813	1	337.813	40.382	.000
Kelas	99.453	1	99.453	11.889	.001
Kreativitas * Kelas	146.453	1	146.453	17.507	.000
Error	501.922	60	8.365		

Total	413908.000	64		
Corrected Total	1101.750	63		
a. R Squared = .544 (Adjusted R Squared = .522)				

In Table 5 it appears that Fsum for affective learning outcomes on the influence of creativity amounted to 40.382 with significance level of 0000, which means that H₀ rejected and H_a accepted. It can be concluded there is significant influence between high creativity and creativity lower against the affective learning outcomes in subjects continental food processing and presentation.

Furthermore, in Table 6 appears that Fsum for psychomotor learning outcomes to the effects of creativity amounted to 38.276 with significance level of 0000, which means that H₀ rejected and H_a accepted. It can be concluded there is significant influence between low high creativity and creativity to the learning outcomes on subjects psychomotor processing and presentation of continental food.

Table 6. Test Results Anava 2 Overpass Effect of Creativity Against the Psychomotor Domain Learning Outcomes

Tests of Between-Subjects Effects					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	570.898 ^a	3	190.299	19.820	.000
Intercept	406311.750	1	406311.750	4.232E4	.000
Kreativitas	367.500	1	367.500	38.276	.000
Kelas	62.382	1	62.382	6.497	.013
Kreativitas * Kelas	129.007	1	129.007	13.436	.001
Error	576.086	60	9.601		
Total	410587.000	64			
Corrected Total	1146.984	63			
a. R Squared = .498 (Adjusted R Squared = .473)					

C. Third Hypothesis Testing

There is interaction between the use of models of learning and creativity toward student learning outcomes in subjects continental food processing and presentation at SMK Negeri 3 Bogor. Hypothesis testing is done by using statistical tests Anova 2 Line.

Table 7. Results of Tests on Average Value of Learning Outcomes Domains on Influence Cognitive Learning Model and Creativity

Dependent Variable: Hasil_Belajar Kognitif					
Kreativitas	Kelas	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
RENDAH	ARIAS	72.667	1.913	68.839	76.494
	LANGSUNG	73.467	1.913	69.639	77.294
TINGGI	ARIAS	87.471	1.797	83.875	91.066

Dependent Variable: Hasil_Belajar Kognitif					
Kreativitas	Kelas	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
RENDAH	ARIAS	72.667	1.913	68.839	76.494
	LANGSUNG	73.467	1.913	69.639	77.294
TINGGI	ARIAS	87.471	1.797	83.875	91.066
	LANGSUNG	77.706	1.797	74.111	81.301

In Table 7 above it appears that the average value of the results of cognitive learning for students who have high creativity taught using learning model ARIAS amounted to 87.471 and the average value of the results of cognitive learning for students who have high creativity taught using direct instructional model amounted to 77.706. While the average value of cognitive learning outcomes for students who have a low creativity using model ARIAS amounted to 72.667 and the average value of cognitive learning outcomes for students who have low creativity that using direct learning model amounted to 73.467.

To determine the pattern of interaction between the use of learning model ARIAS and direct instructional model as well as the creativity of students on the results of cognitive learning on the subjects of processing and presentation of continental food at SMK Negeri 3 Bogor can be seen in Figure 2 as follows:

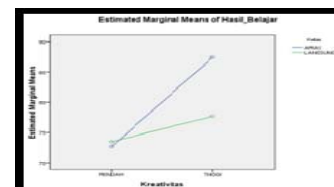


Figure 2

Interaction Using Patterns Line Graph (ARIAS Learning Model and Direct learning model) and Creativity Against Cognitive Domain of Learning Outcomes

It dominates the distribution of the results of cognitive learning taught by learning model ARIAS and creativity, and student learning outcomes cognitive taught by direct instructional model and creativity, so as to see Figure 2 illustrated the existence of a significant interaction between the use (learning model ARIAS and learning models direct) and creativity of students' cognitive learning outcomes in subjects continental food processing and presentation at SMK Negeri 3 Bogor. Furthermore, consider Table 8 below.

Table 8
Results of Tests on Average Value of Learning Outcomes Affective Domains on Effect Model of Learning and Creativity

Dependent Variable: Hasil_Belajar

Kreativitas	Kelas	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
RENDAH	ARIAS	77.600	.747	76.106	79.094
	LANGSUNG	78.133	.747	76.640	79.627
TINGGI	ARIAS	85.235	.701	83.832	86.638
	LANGSUNG	79.706	.701	78.303	81.109

In Table 8 above appears, that the average value of learning outcomes affective for students who have high creativity taught using learning model ARIAS amounted to 85.235 and the average value of learning outcomes affective for students who have high creativity taught by using direct learning model is amounted to 79.706. While the average value of learning outcomes affective for students who have the creativity lower taught using learning model ARIAS amounted to 77.600 and the average value of learning outcomes affective for students who have the creativity lower taught using direct instructional model amounted to 78.133 ,

To determine the pattern of interaction between the use of learning model ARIAS and direct instructional model as well as the creativity of students to the learning outcomes in the affective domain subjects continental food processing and presentation at SMK Negeri 3 Bogor can be seen in Figure 3 as follows:

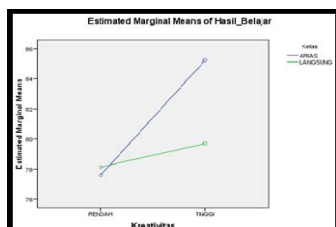


Figure 3.

Interaction Using Patterns Line Graph (ARIAS Learning Model and Direct learning model) and Creativity Against the Learning Outcomes Affective Domain

It dominates the distribution of learning outcomes affective for students who are taught by learning model ARIAS and creativity, and student learning outcomes cognitive taught by direct instructional model and creativity, seemed illustrated the significant interaction between use (learning model ARIAS and direct instructional model) and creativity of students to the learning outcomes in the affective domain subjects continental food processing and presentation at SMK Negeri 3 Bogor. Furthermore, consider Table 9.

Table 9. Results of Tests on Average Value of Learning Outcomes Psychomotor domain on Influence Learning Model and Creativity

Dependent Variable: Hasil_Belajar					
Kreativitas	Kelas	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
RENDAH	ARIAS	77.000	.800	75.400	78.600
	LANGSUNG	77.867	.800	76.266	79.467
TINGGI	ARIAS	84.647	.752	83.144	86.150
	LANGSUNG	79.824	.752	78.320	81.327

In Table 9 it appears that the average value of learning outcomes psychomotor for students who have high creativity taught using learning model ARIAS amounted to 84.647 and the average value of learning outcomes psychomotor for students who have high creativity taught using learning model direct amounted to 79.824. While the average value of learning outcomes psychomotor for students who have the creativity lower taught using learning model ARIAS was 77.000 and the average value of learning outcomes psychomotor for students who have the creativity lower taught using direct instructional model amounted to 77.867 ,

To determine the pattern of interaction between the use of learning model ARIAS and direct instructional model as well as the creativity of students' learning outcomes psychomotor on the subjects of processing and presentation of continental food at SMK Negeri 3 Bogor can be seen in Figure 4.13 as follows: To determine the pattern of interaction between the use of models ARIAS learning and direct instructional model as well as the creativity of students to the learning outcomes on subjects psychomotor processing and presentation of continental food at SMK Negeri 3 Bogor can be seen in Figure 4.13 as follows:

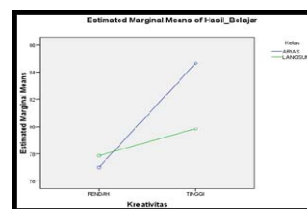


Figure 4

Interaction Using Patterns Line Graph (ARIAS Learning Model and Direct learning model) and Creativity Against Psychomotor Domain of Learning Outcomes

Shown in Figure 4, the line distribution of learning outcomes psychomotor for students who are taught by learning model ARIAS and creativity, and learning outcomes psychomotor for students who are taught by direct instructional model and creativity, so that portrayed their significant interaction between use (learning model ARIAS and direct instructional model) and the creativity of the students to the learning outcomes on subjects psychomotor processing and presentation of continental food at SMK Negeri 3 Bogor.

IV. DISCUSSION OF RESEARCH

In this section will be a discussion of the results of research associated with the theories and the results of relevant research on the influence of the learning model ARIAS and creativity to the learning outcomes on the subjects of processing and presentation of continental food. Results of study is comprised of three domains, namely: (1) the results of cognitive learning; (2) the affective learning outcomes; and (3) psychomotor learning outcomes.

1. Results of learning for students using model ARIAS, significantly higher than students who learn using direct learning model in the subject of processing and presentation of continental food at SMK Negeri 3 Bogor

The results of this study are consistent with the results of research Sopah [2] which found that the learning model ARIAS improve learning outcomes, better learning outcomes affective, cognitive and psychomotor. The findings of this study, similar to the findings Ning [3], that the learning model ARIAS positive effect on mastery of concepts students, on the subjects of biology.

The results are consistent with the study of the theory that learning model ARIAS is a learning model that seeks to instill a sense of confidence of students, trying to attract and maintain the interest and attention of students, which in turn foster a sense of pride in the students, so as to provide reinforcement in learning. On these conditions, it's normal cognitive learning outcomes for students taught using learning model ARIAS, significantly higher than the cognitive learning outcomes for students taught using direct learning model.

This study found that the affective learning outcomes for students who are taught by learning model ARIAS, significantly higher than the results of cognitive learning for students who are taught by direct learning model on the subjects of food processing and presentation kontinental in SMK Negeri 3 Bogor.

The results are consistent with research findings Praptinasari, et al [4] that the learning model ARIAS significantly affect the results of study subjects biology for the students of class XI IPA SMA Al Islam 1 Surakarta, both in the cognitive, affective and psychomotor. Likewise, the results of this study are consistent with the results of White and Smerdon [5], which found that the attitude of collaboration can be developed through group discussions in ARIAS learning model. According to Muslim [6], that the group discussion requires an attitude in cooperation, sharing of tasks and responsibilities in the completion of the task.

This study found that psychomotor learning outcomes for students who are taught by learning model ARIAS, significantly higher than the results of cognitive learning for students who are taught by direct learning model on the subjects of food processing and presentation kontinental in SMK Negeri 3 Bogor.

The results of this study are consistent with the results of association studies [7], which found that the learning model ARIAS support students to be more active in learning, so the ability psikomotornya better. Related to

the research findings Yasa [8], the results of this study are also consistent, that learning ARIAS has proven to be better than the application of conventional learning.

2. Student learning outcomes that have high creativity, significantly higher than the students who have low creativity, on the subjects of processing and presentation of continental food at SMK Negeri 3 Bogor

Creativity is a condition, attitude, ability, and the process of changing a person's behavior to produce products or ideas, find solutions to problems that are more efficient and unique in the learning process [9]. This study found that the results of cognitive learning, affective, and psychomotor for students who have high creativity, significantly higher compared with the results of cognitive learning for students who have the creativity lower in subjects processing and presentation of continental food at SMK Negeri 3 Bogor.

The success rate is a reflection of the personality of students who have the creativity, the initiative fosters curiosity, believe in yourself and have high imagination. Personality is proven to be significant in achieving success in learning. The importance of knowing the effect of creativity on learning outcomes is how an applied learning strategies can improve student learning outcomes that have low creativity, also increases the success rate or form a successful personality. Therefore creativity as a mirror of the personality of a successful, needs to be fostered, both in the family and in the school environment. With the application of appropriate learning, the teacher is easy to upgrade creativity in students.

3. There was a significant interaction between the use of learning model ARIAS and direct learning model as well as the creativity of the learning outcomes in subjects continental food processing and presentation at SMK Negeri 3 Bogor

This study found that the average cognitive learning outcomes for students who have high creativity taught using learning model ARIAS, higher than the cognitive learning outcomes for students who have high creativity taught using direct learning model. Instead cognitive learning outcomes for students who have low creativity taught using learning model ARIAS lower than cognitive learning outcomes for students who have low creativity taught using direct learning model. Both of these conditions, describes the interaction interplay between models of learning and creativity on the results of cognitive learning. Thus, it can be concluded that there is interaction between the use of learning model ARIAS and creativity on the results of cognitive learning on the subjects of processing and presentation of continental food at SMK Negeri 3 Bogor.

The study also found that an average of affective learning outcomes for students who have high creativity taught using learning model ARIAS, higher than the affective learning outcomes for students who have high

creativity taught using direct learning model. Instead affective learning outcomes for students who have low creativity taught using learning model ARIAS lower than affective learning outcomes for students who have low creativity taught using direct learning model. Both of these conditions describe their interaction interplay between models of learning and creativity to the learning outcomes affective domain. Thus it can be concluded that there is interaction between the use of models of learning and creativity to the learning outcomes in the affective domain subjects kontinental food processing and presentation at SMK Negeri 3 Bogor.

The study also found that the average value of learning outcomes psychomotor for students who have high creativity taught using learning model ARIAS, higher than the average value of learning outcomes psychomotor for students who have high creativity taught using learning model directly. Instead psychomotor learning outcomes for students who have low creativity taught using learning model ARIAS, lower than the psychomotor learning outcomes for students who have low creativity taught using direct learning model. From both the above conditions describe their interaction interplay between models of learning and creativity on psychomotor learning outcomes. It can be concluded, that there is interaction between the use of models of learning and creativity to the learning outcomes on subjects psychomotor processing and presentation of continental food at SMK Negeri 3 Bogor.

The interaction between the learning model ARIAS, and creativity, the learning outcomes in learning and serving continental food processing shows that the model of learning and creativity should be a reference in the improvement of learning outcomes cognitive, affective and psychomotor. Because the learning process ARIAS have learning steps as follows: (1) the stage of assurance (confidence); (2) the stage of relevance (relevance); (3) the stage of interest (interest); (4) the stage of assessment (evaluation); and (5) the stage of satisfaction (reinforcement), where such measures are superior to direct learning model with step - learning steps as follows: (1) prepare and motivate students; (2) explain or demonstrate; (3) guided exercises; (4) feedback; and (5) further training. In the direct learning model, the teacher's role is more dominant than the role of the student, so for students who have high creativity taught by ARIAS learning models, learning results significantly higher than students taught by direct learning model. However, for students who have low creativity taught by ARIAS learning models, learning results lower than students taught by direct learning model.

Interaction is important as a sign that there is a two-way relationship that is going to determine anything of interest or causal. The interaction between the learning model and the creativity of the learning outcomes describe the relationship between the model of learning and creativity as factors that influence each other in the achievement of learning outcomes. The main effect is the effect that is directly caused by the independent variable without taking into account the presence of other independent variables. While the interaction effect is the

effect caused by the interaction between the independent variable and the other independent variables. The interaction effects in this study is an effect, because of the variable model of learning by taking into account the variables of creativity. This suggests that the learning model ARIAS can help facilitate students to understand the teaching materials, as well as to evoke the creativity of students in the learning process. It can be concluded, there is a significant positive interaction between the use of models of learning and creativity to the learning outcomes on the subjects of processing and presentation of continental food.

V. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

- a. Learning outcomes for students taught using learning model ARIAS, significantly higher than the results of learning for students who learn by direct learning model in the subject of processing and presentation of continental food at SMK Negeri 3 Bogor;
- b. Learning outcomes for students who have high creativity, significantly higher than the learning outcomes of students who have low creativity, on the subjects of processing and presentation of continental food at SMK Negeri 3 Bogor; and
- c. There was a significant interaction between the learning model and the creativity of the student learning outcomes in subjects continental food processing and presentation at SMK Negeri 3 Bogor.

B. Recommendations

Based on the above conclusion can be suggested:

- a. Material processing and presentation of continental food can be taught using learning model ARIAS.
- b. Teachers should be able to master the learning model ARIAS strategy that each lesson, students can be controlled; and
- c. The availability of facilities and infrastructure have an important influence in the learning process. Schools should strive to provide infrastructure services needed students for the learning process can proceed smoothly.

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THE EFFECTIVENESS OF THE COLLABORATIVE LEARNING MODEL ON TRIGONOMETRY TOPIC OF SENIOR HIGH SCHOOL STUDENT GRADUATE X USING OPEN-ENDED APPROACH

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Abstract. This study aimed to describe the effectiveness of collaborative learning using open-ended approach and open-ended approach in terms of problem solving skills students. This study is a quasi-experimental research with the entire population of ten graduate science students of SMA Negeri 2 Ngaglik, Sleman, Yogyakarta which consists of four classes. The research samples were randomly selected from the four existing classes, in order to obtain class X MIPA 3 to be given collaborative learning model using open-ended approach and class X MIPA 1 to be given open-ended approach. Data analysis technique consists of one sample t-test used to investigate the effectiveness of collaborative learning model using open-ended approach and open-ended approach. The results show that collaborative learning model using open-ended approach is effective in terms of student's problem solving skills of SMA Negeri 2 Ngaglik, Sleman, Yogyakarta. But, open-ended approach isn't effective in terms of student's problem solving skills of SMA Negeri 2 Ngaglik, Sleman, Yogyakarta.

Keywords: collaborative, open-ended

I. INTRODUCTION

In Indonesia Education, there are a variety of learning objectives to be achieved. Learning objectives to be achieved are set forth in the regulations of government. In Permendikbud No. 103 Tahun 2014 on Education in Primary and Secondary Education, stated that there are a wide variety of learning principles. Some of the principles formulated learning that learners are facilitated to find out, learning that emphasizes the divergent answers that have a multi-dimensional truth and competency-based learning [1]. As for some of the competencies that should be owned by the students of class X based Permendikbud No. 64 Tahun 2013 on the Content Standards for Primary and Secondary Education, namely: (1) have a curiosity, confidence and interest in mathematics; and (2) shows the attitude logical, critical, analytical, creative, meticulous, responsible, responsive and does not easily give in solving the problem [2].

In general, student achievement are used to measure the achievement of a learning objective. According to Collins & O'Brien [3], student achievement can help teachers determine the extent of their knowledge of a student or know the extent of achievement of learning goals that have been formulated. Based on the learning objectives have been disclosed previously, the learning geared to empower all learners be expected competencies, one of which is the problem solving skills of students.

Lesh & Doerr [4] states that the activity is defined as the skill of solving a problem that promote the improvement of the thinking of students included in the resolution. The process of thinking in solving this problem it is important to be imparted to the students so that the students get used to resolve problems that occur in their life.

But in fact, the condition happens on the pitch is not in accordance with the desired conditions. Learning in school is focused on a single answer. This is in line with that expressed by Becker & Shimada [5], namely learning problems in school mathematics is dominated by the answer to one procedure or one correct answer. Moreover, learning in school is also still apply the students were told, this is in line with research conducted by Bjork [6] who get the result that Indonesia still apply learning in teacher centered.

Field data also shows that the ability of the settlement of the problem is not in accordance with the conditions expected. In addition, based on interviews with one of the teachers at SMAN 2 Ngaglik, Sleman, Yogyakarta which was held on October 30th, 2015 showed that the model of collaborative learning with open-ended approach and open-ended approach was never done by the teacher. Then, problem solving skills is also observed by the teacher. Teachers do not pay attention to problem solving skills of students during the learning takes place.

If the reality on the ground is not addressed, then the learning objectives have been formulated can not be achieved. Therefore, so that the learning objectives can be achieved, performed a variety of solutions. One solution offered by the researchers are using a collaborative learning model with an open-ended approach.

According to Laal & Laal [7], collaborative learning is learning which involves grouping students to work together to solve a problem, task or manufacture of a product. Students in the group to decide and look for themselves how they are in solving the problem, a task or a product without direct referrals from teachers. Therefore, the freedom given in collaborative learning really emphasize contribution from student in completing a common task. According to Jones, Rasmussen, & Moffitt [8] interactions toward peers, teachers, friends groups and experts can develop communication and problem solving skills. Mourtos, Okamoto, and Rhee [9] states that the first step in developing the problem solving skills is to adopt the methodology of the open-ended approach. Correspondingly, according to the results of research conducted by several researchers get the result that the open-ended approach is effective in terms of problem-solving skills of students (e.g. [10]–[11]). As for Becker & Shimada [5] expressing opinion about the open-ended approach. According to them open-ended approach is a way of learning with the settlement of a problem given that the truth answer emphasized the multi-dimensional, providing experience in getting something new in the process of resolving a given problem. Learning with open-ended approach will work well if done in a group. This is due to the characteristics of this approach is the need of construction of various types of ideas, so it would be more effective if students learn in groups.

Based on the description that has been said, we can conclude that there is a gap between what is desired with what is happening in the field. Some of the learning principles stated in Permendikbud No. 103 Tahun 2014 was facilitated learners to find out, learning that emphasizes the divergent answers that have a multi-dimensional truth and competency-based learning. However, based on research conducted by some experts to get the results of that learning in school is still using teacher centered and still emphasize single answer, besides teaching in schools also has not noticed the problem solving skills of the students. This is not a direct impact on student achievement, problem solving skills and confidence of students. Therefore, researchers feel the need to conduct research on "The Effectiveness Of The Collaborative Learning Model On Trigonometry Topic Of Senior High School Students Graduate X Using Open-Ended Approach In Terms from Problem solving skills Students".

II. METHOD

This research is a quasi-experimental research with a pretest-posttest design nonequivalent group design. This research was conducted at SMAN 2 Ngaglik, Sleman, Yogyakarta. When the study took place from February 2th, 2016 until March 26th, 2016. The population in this study were all students of class X MIPA SMAN 2 Ngaglik, Sleman, Yogyakarta, academic year 2015/2016 consisting of four parallel classes. The study sample was randomly selected from four classes, in order to obtain class X MIPA 3 applied a model of collaborative learning with open-ended approach and X MIPA 1 applied open-ended approach.

There are two variables in this study, namely the independent variable is learning, which consists of two levels are collaborative learning model with open-ended

approach and open-ended approach; and one dependent variable is the skills of the student problem solving. There are four stages in a collaborative learning model with open-ended approach that formulate, share, listen and create. Then, there are two periods in the open-ended approach, namely the first period and the second period. There are five indicators on aspects of problem solving skills, are understanding the problems, plan solutions, propose solutions, evaluate solutions and implementation of solutions. The research instrument used is the test instrument in the form of problem solving skills test and observation sheet form lesson observation sheet. As for the problem solving skills test that consists of 3 problems descriptions used to measure problem solving skills of students. While lesson observation sheets made up of several indicators that show the student activity and teacher activity in the learning process is used to determine the percentage of learning collaborative learning model approach open-ended and open-ended approach.

The validity of this research is to test the validity of the contents of students' problem-solving skills. Then, to estimate the reliability of the instrument is done by finding the coefficient of reliability by using the formula coefficient alpha (α) to test problem solving skills (pre-test and post-test).

The analysis was performed using SPSS 21. The results show that the reliability coefficient (coefficient alpha) to pre-test the skills of problem solving and post-test students' problem solving skills are respectively 0.737 and 0.697. SEM calculation is done with the help of Microsoft Office Excel 2013. The calculation results for the pre-test problem solving skills and post-test students' problem solving skills are respectively 8.546 and 8.423.

Data collection techniques starts with the provision of problem solving skills test (pre-test) prior to treatment of both classes were selected as sample. The next stage is the provision of treatment which is the application of collaborative learning model with an open-ended approach to the experimental class (class X MIPA 3) and open-ended approach to the control group (X MIPA 1). The next stage is the provision of problem solving skills test (post-test) students after the treatment of the two classes. Data analysis techniques in this study is a description of the data and inferential analysis. Description of the data is made to all the variables by analyzing the size of the centralization of data aimed at finding the average deployment size while analysis was conducted in order to find the minimum score and maximum score, both for the data before and after treatment. Meanwhile inferential analysis is performed with assumption test, test and test the effectiveness of the effectiveness differences.

To test the effectiveness of collaborative learning model with open-ended approach and open-ended approach in terms of the skills of students to use problem-solving test one sample t-test with the following formula [12]:

$$t = \frac{\bar{x} - \mu_0}{\frac{s}{\sqrt{n}}} \quad (1)$$

\bar{x} is the average value obtained, μ is the average value of the hypothetical, S is the sample standard deviation and n is the many members of the sample. The criteria for the

effectiveness of problem solving abilities seen from the average score of the class that has been set is 60, which the collaborative learning model with open-ended approach and open-ended approach is said to be effective when the value of the average grade obtained by students over 60.

In the inferential analysis, prior to the ANOVA test, first tested the assumption that the test for normality and homogeneity test. Normality test is performed to determine whether the sample data comes from a normal distributed population, both for the data before and after treatment includes data problem solving skills of students from both classes. The normality test is meant is univariate normality.

For univariate normality test was done using the Kolmogorov-Smirnov test to the data after treatment with SPSS 21 and at a significance level of 5%, the data is said to be distributed univariate normality if the significance value greater than 0.05. Based on the calculation, Kolmogorov-Smirnov significant value to the data problem solving skills in classes that implement collaborative learning model with the open-ended approach is 0.654. While in the class that implements the open-ended approach significance value to the data capability for problem solving is 0.802. Based on these results, it can be said that the normality assumption for univariate data after treatment, the class that implements the model of collaborative learning approach to open-ended and open-ended approach has been to meet the assumptions of normality in univariate.

Furthermore, the homogeneity test in this study aimed to see whether the two experimental groups homogeneous or not. This test is performed through Lavene Statistic test using SPSS 21. The decision criterion used is the data is said to meet the assumption of homogeneity univariate if the significance value that is greater than 0.05. Based on the calculations, Lavene Statistic significance values for the data before and after treatment were greater than 0.05 is 0.855 to 0.541 data before treatment and after treatment for the data. This means that the problem solving skills of students in both classes, before and after the treatment is the same or homogeneous.

After the test assumptions are met, then the subsequent analysis is hypothesis testing to answer the problem formulation. The data analyzed in this section are the data before and after treatment. Analysis of the data before the treatment was intended to see whether there are differences between the two classes before the treatment and analysis of data after the treatment was intended to see whether there are differences in effectiveness between the two classes after being given treatment.

It is said there is a difference between the effectiveness of collaborative learning model with open-ended approach and open-ended approach in terms of problem-solving skills of students to data before treatment and after treatment of data if the significance value less than 0.05.

Furthermore, after finding out that there is a difference between the two classes (classes that implement collaborative learning model with open-ended approach and the class that implements the open-ended approach), then tested as to which is more effective learning. Statistical tests were used to test the three hypotheses above are univariate (t) using Bonferroni criteria or t-Bonferroni. The formula for the test statistic is [13]:

$$t = \frac{\bar{y}_1 - \bar{y}_2}{\sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2} \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}} \quad (2)$$

dengan:

\bar{y}_1 = average value of sample I

\bar{y}_2 = average value of sample II

S_1^2 = variance sample I

S_2^2 = variance sample II

n_1 = many members of the sample I

n_2 = many members of the sample II

p = number of variable dependent

Criterion statistical testing for the above test is H_0 if

$$t_{hit} \geq t_{\frac{\alpha}{p}; n_1 + n_2 - 2}.$$

III. RESULT AND DISCUSSION

A. Results

The data described in this study is the test data problem solving skills of students in both classes, for both data before and after treatment. Data described for problem solving skills include a data problem solving skills test scores before and after treatment consisting of the average, maximum theoretical value, the theoretical minimum value, maximum value and minimum value, standard deviation and variance. Brief description of good data for classes that implement of collaborative learning model with open-ended approach and open-ended approach before and after treatment can be seen in TABLE I.

TABLE I. Data Description Problem Solving Skills Before and After Treatment

Description	Collaborative Open-Ended Class		Open-Ended Class	
	Before	After	Before	After
Average	7,23	65,29	9,79	61,62
Max Theoretical	100	100	100	100
Min Theoretical	0	0	0	0
Max Value	36,36	90,9	33	87,88
Min Value	0	42,4	0	33,33
St. Dev	11,36	11,965	10,67	12,94
Variance	128,97	143,15	113,79	167,4

Based on TABLE I, can be obtained information that the average value of problem solving skills before treatment has not reached the average value of 60 is 7.23 for the class that implements of collaborative learning model with open-ended approach and 9.79 for classes that implement open-ended approach. Meanwhile, after being treated well in classes that implement collaborative learning model with open-ended approach and the class that implements the open-ended approach has reached an average value above 60 is 65.29 and 61.62.

Test the effectiveness of collaborative learning model with open-ended approach and open-ended approach aims to determine the effectiveness of collaborative learning model with open-ended approach and open-ended approach in terms of problem-solving skill of students. After calculation

by using SPSS 21 problem-solving skills to the data obtained t value and significance as in TABLE II.

TABLE II. Test Results One Sample t-test

Aspect	Collaborative Open-Ended Class		Open-Ended Class	
	t	Sig.	t	Sig.
Problem Solving Skills	2,466	0,020	0,684	0,499

Based on TABLE II, there was information that the significant value of t for second grade if halved in value less than 0.05. In addition, information was obtained that t is positive for collaborative open-ended class. This means that the model of collaborative learning with open-ended approach is effective in terms of problem-solving skills of students. Then, there was information that t is positive for the open-ended class. This resulted in H0, which means that the open-ended approach is not effective in terms of problem-solving skills of students. Hypothesis test done next is to test whether there are differences between the effectiveness of collaborative learning model with open-ended approach and open-ended approach to the data before and after treatment. After calculation by using SPSS 21 to the data problem solving skills before and after treatment, the result as shown in TABLE III.

TABLE III. Results of ANOVA Test Before and After Treatment

	F	Sig.
Data before treatment	0,825	0,367
Data after treatment	1,333	0,253

Based on TABLE 3 shows that the significant value of F obtained for the data before and after treatment, respectively, are 0.367 and 0.253 that is greater than 0.05 to data before treatment and after treatment of data. This means that before treatment and after treatment there was no difference between the students problem solving skills of the two classes.

B. Discussion

In this study, there are three research hypothesis, based on the results of hypothesis testing, there is a hypothesis in this study were met and that the model of collaborative learning with open-ended approach is effective in terms of problem-solving skills of students. There are two hypotheses are not met in this study are (1) approaches the open-ended ineffective in terms of the skill to solve the problem and (2) collaborative learning model with open-ended approach more effective than the open-ended approach in terms of student's problem solving skills. To facilitate discussion, in this section will be described one by one third related hypotheses in this study. The detailed discussion is as follows.

1) Effectiveness Collaborative Learning Model With Open-Ended Approach

The results of this study indicate that collaborative learning model with open-ended approach is effective in terms of problem-solving skills of students. Based on the hypothesis test result obtained information that the value of one sample t-test for the hypothesis of the effectiveness of collaborative learning model with open-ended approach in terms of problem-solving skills (TABLE 2) amounted to 2.466 with significance of 0.010. This means that collaborative learning model with open-ended approach is effective in terms of problem-solving skills.

The effectiveness of collaborative learning model with open-ended approach is effective in terms of problem-solving skills of students due to student collaboration in solving the problem of finding the conclusion is of considerable concern. Student collaboration that has resulted in the incorporation of ideas, possible answers and solutions provided by each student in the group to resolve the issue. This means, the group's work obtained an amalgamation of thinking of each member of the group. As a result, it is much easier for students to provide solutions to questions or instructions on students' worksheets. This is in line with that expressed by Clifford [14], which revealed that the "Mixed groups that include a range of talents, backgrounds, learning styles, ideas, and experiences are best. Studies have found that mixed groups growing niche aptitude to learn more from each other and increase of the achievement of low performers. "Heterogeneous group composed of the different levels of abilities, backgrounds, learning styles, ideas, and experience is the best. Students studying in heterogeneous groups can improve students' mathematics learning achievement results. In addition, activity in collaborative learning model with open-ended approach also shows that the students are involved from the beginning until the end of the lesson learning. This is the reason why collaborative learning model with open-ended approach is effective in terms of problem-solving skill of students.

2) The Effectiveness of the Open-Ended Approach

The results of this study indicate that the open-ended approach is not effective in terms of problem-solving skills of students. Based on the hypothesis test result obtained information that the value of one sample t-test for the hypothesis of the effectiveness of open-ended approach in terms of problem-solving skills (TABLE 2) is equal to 0.684 with a significance of 0.2495. This means that the open-ended approach is not effective in terms of problem-solving skill.

Ineffectiveness of open-ended approach is not effective in terms of problem-solving skills is due to the problem-solving process open-ended approach does not involve the incorporation of students' thinking. The group was formed in the open-ended approach does not consist of a heterogeneous student. The formation of the group carried out solely by the student. Students in the group tend to have the same thought. So little thought differences occur in solving problems given to students' worksheets. This resulted in less students construct knowledge in depth so the impact on mathematics

achievement. This is the reason why the open-ended approach is not effective from the aspect of problem solving skills of students.

IV. CONCLUSIONS AND SUGESTION

A. Conclusions

Based on the findings and discussions that have been described, it can be concluded several things: collaborative learning model with open-ended approach is effective in terms of problem-solving skills of students and open-ended approach is not effective in terms of problem-solving skills of students.

B. Suggestion

Based on the conclusions obtained then there are some suggestions that can researchers provide model-related learning and learning approach used in this study, namely: holding overhaul of the group based on the level of cognitive and sex of the student, give rewards to students to be motivated to produce creative ideas good in asking questions or solutions or settlement. Then for the next researcher is advised to carry out studies that tested the effectiveness of collaborative learning model with open-ended approach on a review of the different aspects and more, which is not limited to the skills of solving problems of students so that they can provide more information related to the effectiveness of the collaborative learning model with open-ended approach.

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THE IMPLEMENTATION OF ICLOUD SYSTEM BASED ON KNOWLEDGE SHARING AT THE UNIVERSITY OF MAARIF HASYIM LATIH SIDOARJO

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Abstract. This article presents the results of the analysis on the development of knowledge sharing processes and absorbs knowledge sharing activity, it is to increase the ability of the head of Departement at the University of Maarif Hasyim Latif and in innovating and in managing the Departement. Role of Information Technology in accommodating the knowledge sharing process is the development of the activities of managing and absorbing science courses to improve performance and provide added value and a competitive advantage in improving the quality performance of the head of Departement. Design research is to find out how the problems that arises in the process of knowledge sharing and absorbing. Data collected by the identification of issues related to knowledge management based on Information Technology at the University of Maarif Hasyim Latif through observation, interviews and documentation. Results of this study was to prove that iCloud system model developed at the University of Maarif has been contributing to: 1) the implementation of the knowledge sharing process of the development activity of sharing and absorbing knowledge at the University Maarif Hasyim Latif to improve the innovation of ability. 2) Information technology has a major role in supporting the process of knowledge sharing on the development and absorbs knowledge sharing activities

Keywords: Implementation iCloud System, Knowledge Sharing, Management of University

I. INTRODUCTION

University's problem in Indonesia is the low level of strategic suitability. This problem comes from the gap between the demands of the environment and global competition with internal resources. Competitiveness of university tends to decline, threatening the position of excellence and sustainability Universities concerned. Thus, recognizing the increasingly severe competition in the era of globalization, it is necessary to change the paradigm of Higher Education which is based on the analysis of specific areas of science such as a tree industry, packaging knowledge, metadatabase, data mining, and the development of human resources.

The existence of human resource management's college became a challenge and the needs of the college and its stakeholders. Human resource management's college is absolutely more focused job in terms of managing the entire potential of lecturers and minimized various its deficiency, so in the end human resource management's university is able to present professional of lecture profile in accordance with the mandate of assuming and Tri Dharma College. Performance of human resource management's college is successfulness in developing the potential of lecturers, it means that the human resource management is able to empower the human resources component of higher education through optimal action of the factors forming the personal productivity of professors, lecturers and functional groups. This is consistent with the opinion of Castetter states that development of management should be viewed as

activities to enhance the ability of individuals and groups to make them more accountable in a shape system.

Parameter development of lecturers in carrying out their duties and functions were not only viewed from the productivity of the implementation of tri dharma college, education and teaching, research and community service. In the way that three factors can also be seen from; a) education, b) functional position. To look it as objectively, the needs of human resource management of higher education becomes something that cannot be denied. Human Resource Management colleges must understand, how a lecturer runs academic activities and develops themselves in accordance with the nature of their duties and functions in implementing Tridharma college.

University as an organization, but they have different characteristics with other organization. [1] showed that there are at least four the concept of the nature of the college is the organization as producing qualified manpower (qualified manpower). In this sense, the higher education is a process and students are regarded as the output (output) that has a value or price (value) in the labor market, and successfulness is measured by the level of absorption of graduates in the community (employment rate) and is sometimes measured also by the level of the income they earn in his career. College is one of the educational institutions that are formally given the task and responsibility to prepare students to be formed in accordance with the objectives of the national education community will be available to fill the needs of experts and skilled personnel with the level and types of capabilities are very diverse.

Implementation of knowledge management in higher education becomes very urgent because college is a producer

and dissemination science. As stated by Ramirez that the University is essentially as a producer of knowledge. The most important output of a university is knowledge that obtained through research, publications and students' competent and productive in the application of what was gained to its stakeholders.

A university is an organization in which knowledge is created and is used continuously and sustainably. Managing knowledge is actually how it is managing the staff, so that knowledge management is how people from different places started to talk to each other, which is now popular with the label learning organization. It is expected with the implementation of knowledge management system will be able to improve the performance of Higher Education so that it has a competitive advantage in the face of global competition.

The development of knowledge within an organization is achieved through an understanding of the relationship process to change existing tacit knowledge into knowledge that is easily communicated and easily documented, as well as through the design of social processes by transferring tacit knowledge into explicit knowledge is to create a new knowledge. One of the knowledge that needs to be owned by the college is how (how to) properly manage existing academic information system, so as to support other activities related. As their routine activities in each semester is making of report as the annual report to Coordinator of College (*Kopertis*) by any private college that is in the form submission Based Studies Program Evaluation Self Evaluation (EPSBED).

Based on that idea, how is to apply the knowledge management in the management of higher education, especially in transferring tacit knowledge into explicit knowledge. This article will discuss about the implementation of information systems (cloud system) to divert tacit knowledge into explicit knowledge for academic management at universities.

A. Knowledge Management

Knowledge management is a business process to acquire, manage, and communicate tacit knowledge or explicit knowledge so as other people are allowed to use them more effectively and productively. According to Gilbert Probst in his book *Managing Knowledge Building Blocks for Success* argued that knowledge is the whole part of the existing knowledge and skills of individuals who are used to solve the problem. Knowledge is divided into theory and practices are generally in the form of rules and instructions for taking a decision. Knowledge relies on data and information held by a personal reflecting on an opinion. [2] wrote of knowledge management is a discipline that treats intellectual capital as assets under management. Management knowledge changes the experience and information into results. Knowledge management is not a centralized database that contains all the information that is known by all the employees, but it is an idea to obtain a business inspiration from various sources. These sources include databases, websites, employees, business partners, and explore information wherever they may be. Meanwhile, according to Garner Group, knowledge management is a discipline that promotes an integrated approach to the

identification, management and distribution of all information assets of an organization. It was also stated that the information in question includes databases, documents, policies, and procedures as well as the expertise and experience previously articulated contained on individual workers.

Intense competition in the global era, organizations need to be more effective and flexible in carrying out its functions. The Role of Knowledge Management is necessary to remember, Knowledge Management can help organizations to identify, to select, to organize, to distribute, and to transfer important information and expertise that is part of the organizational memory that normally live in the organization in an unstructured [3]. In addition, Knowledge Management is able to carry out the process of identifying, obtaining, organizing, and disseminating of intellectual assets that are important for long-term performance of an organization [4], all were done with integration of knowledge that separates the organization into an application. This is in accordance with the opinion [5] which states that knowledge management extensively in the sense of managing knowledge as "... management of organizational knowledge for creating business value and generating a competitive advantage." KM provides the ability to create, communicate and apply knowledge necessary and useful for the achievement of all kinds of business objectives. [5] "Knowledge management is the ability to create and retain greater value from core business competencies." Knowledge management resolve business problems particular includes the creation and dissemination of goods or services, innovative, manage and improve relationships with customers, partners and suppliers; also administer as well as improving work practices and processes.

Managing organizational with knowledge management can improve an organization's ability to learn from their environment and incorporate knowledge into business processes Because, knowledge management is a set of processes that are developed in an organization to create, collect, preserve and disseminate knowledge of the organization.

[3] knowledge management is as the basic for setting of the company's knowledge and intellectual assets to improve the performance characteristics of the organization and adds value to act intelligently. [6] A knowledge management requires linkage of information with information, information with activities and information with humans to realize the sharing of knowledge.

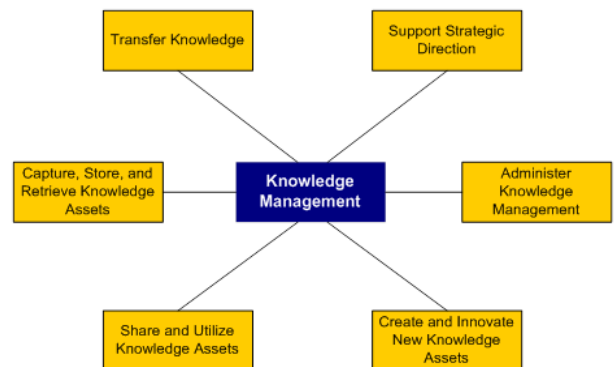


Fig. 1 The Keys of Knowledge Management

The basic of thought that pushes the development of the concept of Knowledge Management (KM) is the Data and Information is the fifth of important resource after Money, Material, Methods / Machine and Men that must be managed properly at the moment. The principle is born out of the theory which shows that the data and information is a basic source or raw material of Knowledge or the knowledge that is one of the key advantages of a college competitive in globalization era.

Therefore, its application is the utilization of Information and Communication Technology to locate, establish and deploy a variety of ideas, ideas, knowledge and experience of one or a group of people or group of people more unity within the institution. The technology in question must allow two or multidirectional interaction between different human beings who are interested in exchanging knowledge and experience that he has, so that day by day the process of collection or enhancement of knowledge for each individual involved. Examples the application of information technology related to the concept is the Internet, Email / Mailing List, Corporate Portal, Web Collaboration, Teleconference, Chats and others.

In Knowledge Management are two kinds of knowledge, namely Tacit and Explicit (Explicit). Explicit Knowledge is knowledge that is stored in a data storage medium or information such as: Document, Records, Report, Proof of Payment, photographs and drawings.

Tacit Knowledge is knowledge that is not clear because of its presence spreaded and Embedded in various forms, such as a person's experience, dialogue, formal discussion, the process for taking decisions and thought.

B. Knowledge Management Phase

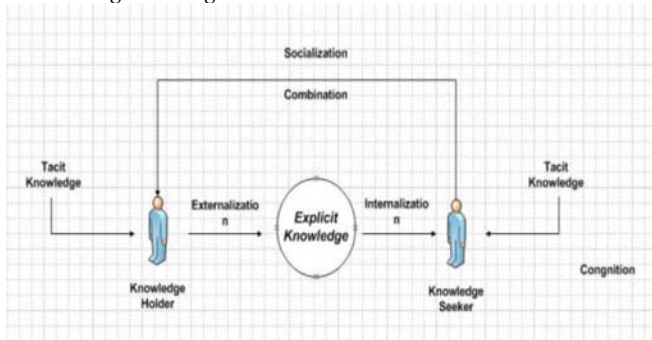


Fig 2. Management Phase

Information society technologies (2002) defines knowledge management is as a systematic and organized effort to use the knowledge in an organization. Knowledge management aims to transform the organization's ability to generate, store, and use knowledge in order to improve organizational performance through innovation ability and value creation. In short, organizational knowledge management aims to improve access and use again of knowledge to improve the competitive ability of an organization. From the various definitions of the above can be taken the red line in knowledge management as follows:

- a. intellectual capital is an asset
- b. how the information could be something useful

- c. how to realize the sharing of knowledge
- d. how to improve the cooperation of learning resources to accelerate the flow of knowledge.

Based on the study above, an organization that refers to universities is in applying knowledge management in this study emphasized on how to realize the sharing of information.

C. Knowledge Sharing

Knowledge management process is a process in which contains the process gain (discovering), the process of capturing knowledge (capturing), the process of knowledge sharing (sharing), and the process of applying knowledge (applying). There are four knowledge management process is supported by a Knowledge Management System.

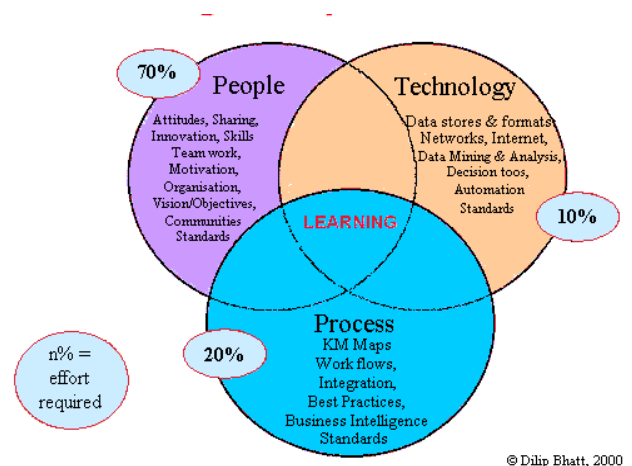


Fig 3. Knowledge Management Components and sub-elements

On the Knowledge Management component, the human factor is an important factor because there is to move management, especially on university management. The learning process is a management process that uses Knowledge Management

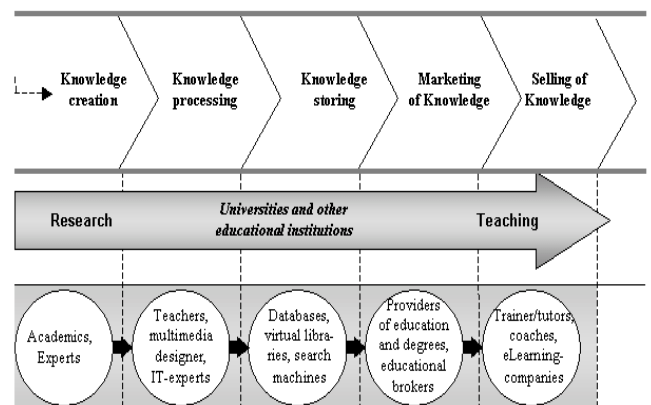


Fig 4. Value chain of knowledge management [7]

Knowledge Sharing is a process in which the explicit or tacit knowledge is communicated and shared with others.

There are three important things to note in knowledge sharing. First, the sharing of knowledge means effectively transfer knowledge so that the recipient can understand it pretty well.

The second, what is shared that is knowledge and not recommendations based on knowledge; it had involved the receiver gain mutual knowledge and have the ability to take action based on such knowledge, while the latter only involves the utilization of knowledge without receiver internalization of knowledge together.

The third, knowledge sharing can occur across individuals and groups, departments, or organizations. Knowledge sharing has two aspects contained in it, namely the aspect of exchange and socialization aspect. Aspects exchange is more focused on the explicit knowledge, whereas the socialization aspect is more likely to tacit knowledge.

Knowledge sharing according to Raskov as cited in [8], knowledge sharing between individuals within a community, where individuals interact and share the knowledge with other individuals via cyberspace or face to face.

According [9] "knowledge sharing (knowledge transfer) requires that an individual or a group cooperate with others to share knowledge and Achieve mutual benefit".

Knowledge Sharing is essentially an act of providing the knowledge needed by an individual or an organization [10]. Knowledge Sharing between individuals is the process whereby knowledge possessed by a person processed into a form that can be understood, absorbed and used by other individuals. In addition, knowledge sharing is an activity where knowledge (information, skills and expertise) is exchanged for other people, friends, or even family members, and the community in an organization [11].

Knowledge sharing is not just giving something to someone else or gets something from them as a result of reciprocity. However, knowledge sharing happens when people are naturally drawn to help each other to build new competence and capacity to act. Thus, knowledge sharing is not something imposed or set up formally, but flow naturally and there is an element of willingness to help others for the sake of progress or achieve certain goals. Knowledge sharing is also mentioned the creation process of learning (lessons learned) [12]. It was intended through knowledge sharing, then the person will gain understanding, new insight to something, and the increase is one form of their learning.

II. METHOD

This research is an analysis on the development of knowledge sharing processes and absorbs knowledge sharing activity, Design research is to find out how the problems that arises in the process of knowledge sharing and absorbing. Data collected by the identification of issues related to knowledge management based on Information Technology at the University of Maarif Hasyim Latif through observation, interviews and documentation.

The LANGITAN System Knowledge Sharing

University of Maarif Hasyim Latif Sidoarjo has developed a system knowledge sharing that called Langitan. Langitan used cloud technology system with e-learning model. University of Maarif Hasyim Latif (Umaha) implements the idea of e-learning is able to be something more simple and accessible for people without seeing that if users need to know a lot of creating web pages, even by someone who does not have programming knowledge though. The concept of e-learning that developed is cheap and easy without programming background knowledge as it was not implemented by creating a CMS (Content Management System) but it designs like as gmail or yahoo mail service. Namely of creating an e-learning which behave as a SaaS (Software as a Service) which is an application that is placed in the cloud, in terms of cloud computing. That is the scenario laid on infrastructure SaaS IaaS (Infrastructure as a Service).

In the concept of e-learning based on these clouds, millions of people can create a classroom that is personal, inviting anyone to join in it, and implement learning activities, discussions, and so forth therein. SaaS e-learning can be established the mechanism by utilizing frameworks available in the Cloud, so that it is further enrich the freedom to connect with a variety of other SaaS applications in the Cloud world.

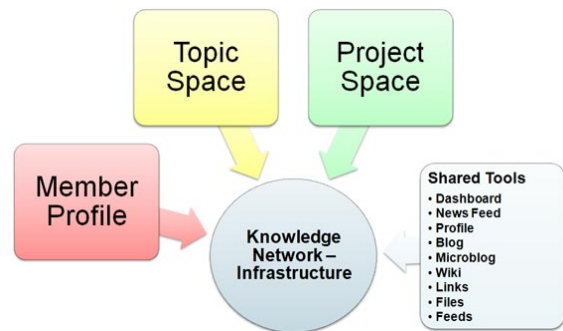


Fig 5. Knowledge Network Infrastructure

e-Learning is a type of teaching learning process that allows to transfer teaching materials for students using media Internet, Intranet or other computer network media. Elearning developed in Langitan system can access through various existing social media. Elearning modules are developed not only to learn but learning resources that can be utilized by students, faculty, and leadership.

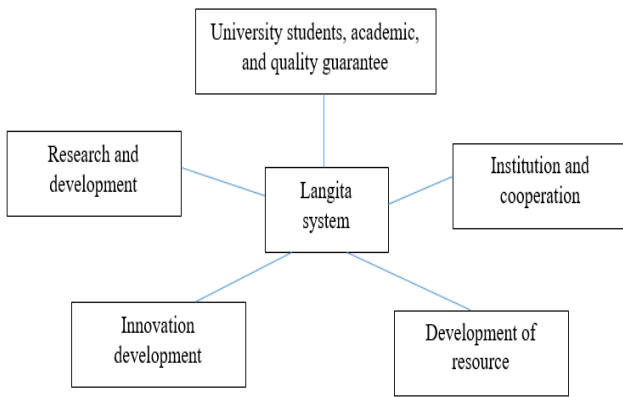


Fig 6. Area Mapping

Networks are built using various ways, there is linked between data sources, data management and lecturers and students. Models of knowledge sharing networks that exist on the system langitan as shown below.

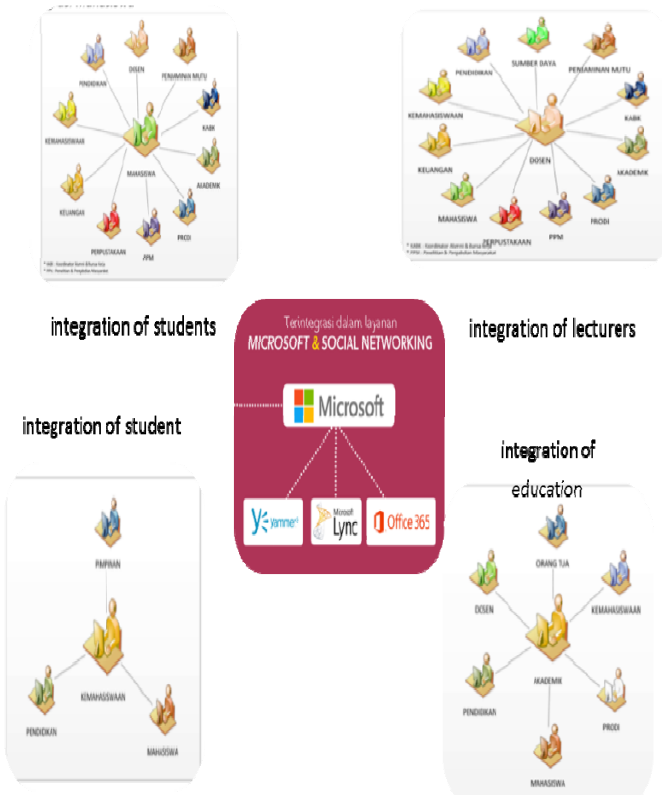


Fig 7. Langitan System

Langitan system developed by UMAHA using Cloud system. Cloud Computing used essentially Internet-based services to support the business process. The word "cloud" itself refers to a cloud symbol in the IT world is used to describe the Internet (Internet cloud). Cloud computing is the combined using of computer technology ("computing") and the development of Internet-based ("cloud"). Cloud Computing is simply the "information technology services

that can be used or accessed by customers through the Internet". Cloud computing is a general concept that includes SaaS, Web 2.0 and other recent technology trends is known with the common theme is reliance on the Internet to provide computing needs of users. For example, Google Apps provides common business applications are sharing that is accessed through a web browser with the software and data stored on the server. Approach of software is as services or SaaS, enabling integration and interoperability between the software, which is in the implementation will be in a grid or clustering concept, where the actual utilization of the grid running on virtualized infrastructure will take a lot of resources.

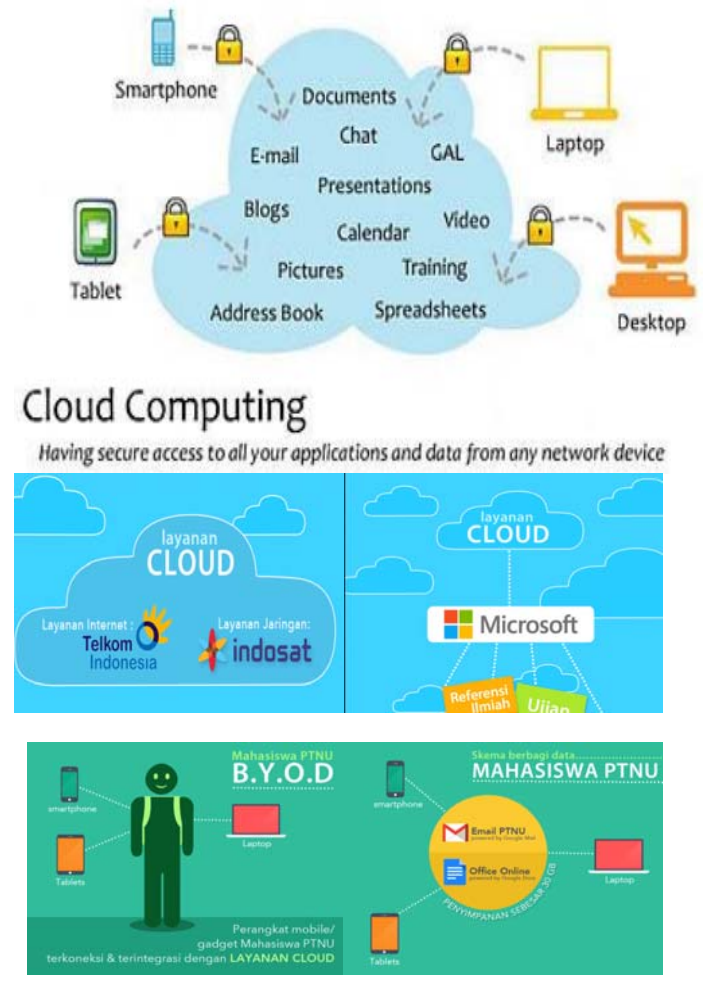


Fig 8. Cloud Computing visual diagram [13]

Knowledge sharing happens in education as a smaller scope that is on learning. This is according to [14] states that knowledge sharing consists of two processes, namely:

- Knowledge Donating: communicating to others about the knowledge possessed by an individual.
- Knowledge collecting: consulting with colleagues is to gain knowledge from them.

Application of information technology in education can be used in various forms, among others:

1. Application of information technology is used as an Information Systems course. Field work that can be integrated with information systems is a syllabus of lectures, course materials, management of lectures, assignments, rubrics, and scoring and so forth. This function is often termed as a form of Library Automation.
 2. Application of information technology is as media to save, obtain and disseminate scientific information in a digital format. The application of IT in the form of lectures is often known as e-learning.
- Knowledge sharing is developed in this study is an open and integrated Data Base (PDITT).

IV. CONCLUSIONS

Based on the above discussion, it can be concluded that:

- (1) E-learning has been widely applied in famous universities and campuses in Indonesia. The adoption of cloud computing is expected to assist the learning more efficient and flexible and it is able to be ICT-based campus in the future.
- (2) The result of this research is expected that there are many campuses again to utilize the cloud in the learning process. Besides that, it is able to improve the learning process and the quality assurance campus.
- (3) The e-learning applications that are designed to be multi-user can be used as a SaaS application, so that everyone can create their own class and invite anyone to become a lecturer or student.

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THE INFLUENCE OF IMPLEMENTATION OF COOPERATION LEARNING MODEL TYPE NUMBER HEADS TOGETHER AND THINK-PAIR-SHARE TO THE CONCEPT COMPREHENSION OF ECONOMY

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Abstract. The purpose of the research was to describe and analyze the influence of cooperative learning model Type Numbered-Heads-Together and Think-Pair-Share to Concept Comprehension of economy. Population in this research is students of the 7th semester of the academic year 2013/2014. The problem in this research are: (1) Is there a difference in the ability of the concept comprehension of economy in the initial measurement (*pre-test*) and the last measurement (*post-test*) in the classes using cooperative learning model Type NHT? (2) Are there differences in the ability of the concept comprehension of economy in the initial measurement (*pre-test*) and the last measurement (*post-test*) in the class using cooperative learning model type TPS? (3) Is there an increasing in the ability of the concept comprehension of economy using cooperative learning model type NHT higher compared to using cooperative learning model TPS at the end of the measurement? The technique of sample taking in this research is done with cluster random sampling technique, sample total are 68 persons. This research was done to some students of Economic Education Departement Faculty of Teacher Training and Educational Science Kuningan University, Material: Economic Policy & International Trade in Semester 7. This study used a quantitative approach by using experimental study. The research result concludes the followings: *First*, There was a difference of concept comprehension of economy in early measurement (*pre-test*) and the last measurement (*post-test*) in the class of cooperative learning model Type Number Head Together (NHT). *Second*, There was a difference in ability of concept comprehension of economy between early measurement (*pre-test*) and the last measurement (*post-test*) in the class of cooperative learning model Type Think-Pair-Share (TPS). *Third*, There was an increasing in the ability of concept comprehension of economy using cooperative learning model Type Number Head Together (NHT) higher than be compared with cooperative learning model Type Team Pair Share (TPS) in the last measurement (*post-test*).

Keywords: Cooperative Learning Model, concept comprehension, Number Head Together (NHT), Team Pair Share (TPS).

I. INTRODUCTION

There are some problems were found in Economic Education Departement, some lecturers during the learning process took place that causes low learning outcomes. The problems include the level of students' ability to analyze a problem remains low, there was still a lack of ability to interact between students during the learning, there was still a lack of attention of students to the delivery of content from the teacher when learning took place, the lack of courage of students in asking questions, learning and curiosity out low. In the learning process there were difficult for teachers to engage students actively. This is due to the methods or models used by teachers is very monotonous. Most teachers just use the lecture method, but various models have been developed such as cooperative learning, PBL, and the others that can be used are varied. In addition, most students of Economic Education departement considers that the Economy subjects are difficult to understand and memorized. Such problems can be solved either by cooperative learning model. This model can be used for all levels of education in various fields of science. Cooperative learning model is a model of learning in which students learn in small groups

that have different levels of ability. In completing the task group, each member of the mutual cooperation and help to understand the learning materials. Cooperative learning model is very different from direct teaching. In addition to the cooperative learning model was developed to achieve academic learning, cooperative learning model is also effective to develop the social skills of students that can not be found in conventional methods.

Cooperative learning can be benefit students to work together completing academic assignments with peers, that requires thinking more deeply about the relationship of the ideas contained in a particular material. Cooperative learning has some variations among types that should be a part of a collection of strategies teachers in implementing cooperative learning model, namely STAD, jigsaw, Team Games Tournaments (TGT), Think Pair Share (TPS), and Numbered Head Together (NHT) [1].

Economic Learning requires active participation of students. Due to economic subjects requires reasoning and logical way of thinking based on the factors that support and cooperative way of thinking to solve problems in learning. Based on the above, then in the learning economy needs to implement cooperative learning model.

Research Problem

Based on the background of the problem above, this study focused on:

- 1) Is there a difference in the ability of the concept comprehension of economy in the initial measurement (pre-test) and the last measurement (post-test) in the classes using cooperative learning model Type NHT?
- 2) Are there differences in the ability of the concept comprehension of economy in the initial measurement (*pre-test*) and the last measurement (*post-test*) in the class using cooperative learning model type TPS?
- 3) Is there an increasing in the ability of the concept comprehension of economy using cooperative learning model type NHT higher compared to using cooperative learning model TPS at the end of the measurement?

Based on the problem above the purpose of this research is to determine:

- 1) The difference in the ability of understanding the concept of the initial measurement (pre-test) and the final measurement (post-test) in the class using cooperative learning model NHT.
- 2) Differences in the ability of understanding the concept of the initial measurement (pre-test) and the final measurement (post-test) in the class using cooperative learning model TPS.
- 3) Enhancing the capability of understanding the concept of using cooperative learning model NHT higher compared to using cooperative learning model TPS at the end of the measurement.

Basis Theory

Cooperative learning

Cooperative learning is a teaching strategy that involves a group of students worked in collaboration to achieve a common goal. Cooperative learning is an educational approach which aims to organize classroom activities into academic and social learning experiences. There is much more to cooperative learning than merely arranging students into groups, and it has been described as "structuring positive interdependence. Students must work in groups to complete tasks collectively toward academic goals. Unlike individual learning, which can be competitive in nature, students learning cooperatively can capitalize on one another's resources and skills (asking one another for information, evaluating one another's ideas, monitoring one another's work, etc.

Cooperative learning is arranged in an effort to increase student participation, to facilitate students to experience leadership attitudes and make decisions within the group, as well as provide an opportunity for students to interact and learn together students of diverse backgrounds. So in cooperative learning, students yiatu dual role as a student or as a teacher. By working collaboratively to achieve a common goal, the students will develop skills associated with their fellow human beings that will be very useful for life outside of school.

Cooperative learning is ruled by the constructivist theory. This learning comes from the concept that students will more easily find and understand difficult concepts when they

discuss with friends. Students regularly work in groups to help each other to solve complex problems. Thus, the social nature and the use of peer groups become a major aspect of cooperative learning. In the classroom students learn together cooperatively in small groups consisting of 4-6 students are equal, but heterogeneous ability, gender, ethnicity or race each other and help each other. Purpose of the establishment of the group is to provide opportunities for all students to be actively involved in the process of thinking and learning. During his work in the group, task group members is to achieve mastery of the material presented by the teacher, and each group of their friends help to achieve mastery learning.

During the cooperative learning students remain in the group for a few meetings. They are taught specific skills to be able to work well together in the group, such as being an active listener, explaining to the group of their friends well, discussions and so on. To be done well, students are given an activity sheet with questions or tasks that are planned to be taught. During his work in the group, task group members is to achieve mastery of the material presented teachers and mutual help among friends group to achieve mastery of the material. Learning not finished if one of the group members there who have not mastered the subject matter.

Cooperative Learning, sometimes called small-group learning, is an instructional strategy in which small groups of students work together on a common task. The task can be as simple as solving a multi-step math problem together, or as complex as developing a design for a new kind of school. In some cases, each group member is individually accountable for part of the task; in other cases, group members work together without formal role assignments.

there are five basic elements that allow successful small-group learning:

- Positive interdependence: Students feel responsible for their own and the group's effort.
- Face-to-face interaction: Students encourage and support one another; the environment encourages discussion and eye contact.
- Individual and group accountability: Each student is responsible for doing their part; the group is accountable for meeting its goal.
- Group behaviors: Group members gain direct instruction in the interpersonal, social, and collaborative skills needed to work with others occurs.
- Group processing: Group members analyze their own and the group's ability to work together. [2]

Cooperative learning changes students' and teachers' roles in classrooms. The ownership of teaching and learning is shared by groups of students, and is no longer the sole responsibility of the teacher. The authority of setting goals, assessing learning, and facilitating learning is shared by all. Students have more opportunities to actively participate in their learning, question and challenge each other, share and discuss their ideas, and internalize their learning. Along with improving academic learning, cooperative learning helps students engage in thoughtful discourse and examine different perspectives, and it has been

proven to increase students' self-esteem, motivation, and empathy.

Some challenges of using cooperative learning include releasing the control of learning, managing noise levels, resolving conflicts, and assessing student learning. Carefully structured activities can help students learn the skills to work together successfully, and structured discussion and reflection on group process can help avoid some problems.

The description above is similar [3] who argued that cooperative learning more emphasis on goals and success of the group, which can only be achieved if all members of the group reaches the destination or the mastery of the material. Besides states that the main objective is to maximize the learning cooperative learning for the students' academic achievement and understanding both individually and in groups. Because students work in a team, then by itself can improve the relationship between students of various ethnic backgrounds and abilities, develop skills and problem-solving process group [1].

the cooperative learning there are five essential elements, namely: (1) interdependence that will make positive among students; (2) the interaction between students mutually increase; (3) individual responsibility; (4) interpersonal skills and small groups; and (5) the group [1]. In addition Slavin (1995) says the main concept of cooperative learning are as follows: (1) the award of the group, which will be given if the group reaches the specified criteria; (2) the responsibility of the individual, meaning that the success of the group depends on the individual learning of all group members. These responsibilities are focused in an effort to help others and make sure every member of the group was ready for evaluation without the help of others; (3) the same opportunity for success, means that students have helped the group by improving their own learning. This ensures that students are capable of high, medium and low equally challenged to do their best and that the contribution of all members of the group are very valuable [3].

When observed closely, cooperative learning has certain characteristics compared to other models. Arends (1997) states that the use of cooperative learning lessons that can be characterized as follows: (1) students work in cooperative groups to complete the study materials; group of students formed with high ability, medium and low; (2) if possible, the group members are from racial, cultural, ethnic, gender diverse; and (3) the award is more oriented to groups rather than individuals [4].

From the description of this cooperative learning, it can be concluded that the cooperative learning requires cooperation among students and interdependence in the structure of task achievement, goals, and rewards. The success of this study depends on the success of each individual in the group, where success is very meaningful to achieve a positive goal in the study group.

Although the basic principles of cooperative learning has not changed, there are several variations of this model, there are at least four approaches that should be part of a collection of teachers in implementing the strategy of cooperative learning model. The fourth approach is STAD, Jigsaw, Investigation Group (Team Games Tournament or TGT) and structural approach. The structural approach

covering Numbered Heads Together (NHT) and Think Pair Share (TPS).

Numbered Heads Together (NHT)

Numbered Heads Together (NHT) or numbering thinking together is a kind of learning cooperative designed to affect the pattern of interaction a student and as an alternative to the traditional class structure. Numbered Heads Together (NHT) was first developed by Spenser Kagen (1993) to involve more students in reviewing the material covered in the lesson and check their understanding of the content.

In a question to the whole class, the teacher uses four phases as a syntactic structure NHT. The four phases are:

a) Phase 1: Numbering

In this phase, the teacher divides the students into groups by the number of 3-5 people in each group. Each member of the group is given a number between 1 and 5.

b) Phase 2: Asking Questions

The teacher asks a question to the students. Questions can vary. Questions can be very specific and in a question form. For example, "What is the number of adult teeth?" Or referral form, such as "Make sure everyone knows 5 pieces provincial capital located on the island of Sumatra."

c) Phase 3: Thinking Together

Students unite its opinion on the answers to these questions and convince each member of the team knows that answer.

d) Phase 4: Answering

Teachers call a specific number, then the appropriate number of students who brandished tangnnya and try to answer the question for the whole class.

This technique provides the opportunity for students to share ideas and consider the most appropriate answer. In addition, this technique encourages students to enhance their spirit of cooperation. This technique is used for all subjects and for all levels of students aged students [5].

Think Pair Share (TPS)

Strategy Think Pair Share (TPS) or think in pairs sharing is a type of cooperative learning that is designed to affect the pattern of student interaction. Think pair share strategies developed from the study of cooperative learning and waiting time. First developed by Frang Lyman and colleagues at the University of Maryland in accordance quoted [4], which states that think pair share is an effective way to create an atmosphere of variation patterns of a class discussion. Assuming that all of recitation or discussion needs settings for controlling the overall sear classes, and procedures used in think pair share can give students more time to think, to respond and help each other. Teachers estimate just complete a short presentation or a student read the task, or situation that a question mark. Now teachers want students to consider more of what has been described and experienced. Teachers using steps (phases) below.

a) Step 1: Think (Thinking)

Teachers ask a question or problem that is associated with the lesson and have students use a few minutes to memiikarkan own answer or the

problem. Students in need of explanation that talk or do not the thinking part.

- b) Step 2: Pairing (Pair)
The teacher asked the students to pair up and discuss what they have acquired. Interaction during the time provided unite answer questions if a unifying idea or if a particular problem is identified. Normally teachers give no more than 4 or 5 minutes for pairs.
- c) Step 3: Share (Share)
In the final step the teacher asks the pairs to share with the whole class that they are talking about. It is effective to go around the room from partner to partner and continued until about most couples have the opportunity to report.

Think pair share (TPS) is a strategy that is designed to allow students to formulate ideas individually on a topic given by the teacher and share ideas with other students. The benefits of this method are:

- 1) students are given time to think through their own answers to a question before it is answered by other students and discussed;
- 2) students have the opportunity to think a lot with other friends about their opinion before asked to comment generally on the front of the class;
- 3) provide an opportunity for all students to share their ideas with at least one friend;
- 4) involves a sense of involvement of students in the classroom;
- 5) as the reception area students in a classroom environment;
- 6) to help friends;
- 7) academic achievement;
- 8) self-esteem;
- 9) increasing interest in other students and the school.

The advantage of this TPS is:

- 1) gives students opportunity to work independently and in collaboration with others;
- 2) optimizing the participation of Shiva;
- 3) allow eight times more students to recognize and show participation to others;
- 4) can be used on all subjects and all levels of students aged students [5].

there are three aspects of learning outcomes assessed in economic The third aspect of it is the understanding of concepts, reasoning and communication, as well as troubleshooting. These three aspects can be assessed by using written assessment, performance assessment, product appraisal, appraisal, and portfolio assessment. The criteria of these three aspects are:

1. Understanding the Concept
 - a. Applying the concepts and problem-solving algorithms
 - b. Re-state a concept.
 - c. Mengklasifikasian objects according to certain properties.
 - d. Giving examples and non-examples of the concept.

- e. Presenting the concept in various forms of mathematical representation.
 - f. Developing the requirements necessary or sufficient condition of a concept.
 - g. Use, utilize, and choose the procedure or specific operations.
2. Reasoning and Communication
 - a. Presents a mathematical statement, either orally, in writing, drawings, and diagrams.
 - b. Asking allegations.
 - c. Perform mathematical manipulations.
 - d. Draw conclusions, compile evidence, reasoning or evidence of the truth of the solution.
 - e. Drawing conclusions from the statement.
 - f. Checking the validity of the argument.
 - g. Finding the pattern or nature of symptoms mathematical generalization.
 3. Troubleshooting
 - a. Demonstrate understanding of the problem
 - b. Organize data and select relevant information in problem solving.
 - c. Presenting mathematical problems in a variety of forms.
 - d. Selecting the approach and method of solving the problem appropriately.
 - e. Develop problem-solving strategies.
 - f. Create and interpret mathematical model of a problem that is not routine

Comprehension is the understanding that the translation of the term is defined as meaning the absorption of a material being studied. Comprehension means true understanding, while the concept means a draft. While in mathematics, the concept is an abstract idea that allows one to classify an object or event. So Comprehension of the concept is a true understanding of a design or an abstract idea. Nasution (2006) reveals "The concept is very important for humans, because it is used in communication with others, in thinking, learning, reading, and others. Without concepts, learning will be greatly hampered. Only with the help of the concept can be executed formal education" [6].

The ability of mathematical comprehension is one of the important goals in estab-lesing, gives the sense that the mterial taught to students not only as rote, but more than that. By students understanding can better understand the concept of the subject matter itself. Mathematical understanding is also one of the goals of any material submitted by the teachers or lecturers, because they are the guide of students to achieve the expected concept. This is in accordance with Hudoyo (in Herdian, 2010) which states the purpose of teaching is to be delivered knowledge can be understood learners.

II. METHOD

The method in this research used experimental study. The experimental group was divided among other treated cooperative learning namely type Numbered Heads Together (NHT) and the type of Think Pair Share (TPS). Both groups are assumed to be similar in some ways and different only giving treatment. Giving different treatment, but both are balanced treatment. Achievement two groups were

compared to see which is better and more precise than the second lesson. The population in this study were students of the 7th semester Prodi Economic Education Academic Year 2013/2014 which amounted to two classes. Of the two classes were selected by random cluster sampling method and test matching the pairs of sample group.

III. RESULT

- 1) The difference in the ability of comprehension concept of the initial measurement (pre-test) and the final measurement (post-test) in the class using cooperative learning model NHT.

Results of testing the first hypothesis by using Paired Samples Test acquired a significance of $\alpha = 0.000$ it means that $\alpha < 0,05$ hence H_0 (there are differences in the ability of comprehension the concept of the initial measurement (pre-test) and the final measurement (post-test) in class using cooperative learning model NHT) is accepted, therefore H_1 (there are no differences in the ability of understanding the concept of the initial measurement (pre-test) and the final measurement (post-test) in the class using cooperative learning model NHT) was rejected. Meanwhile, based on the average between the measurement pre test and post test experimental class by using Number Heads To Gather (NHT) the difference is very significant.

- 2) Cooperative learning model type Number Heads together (NHT) is a learning model that is characterized by the formation of a group of between 4 or 5 members of the group. In group discussions must occur that essentially giving and receiving knowledge among members of the group. But when members of the group who have specific numbers presented the results of their discussion should actualize the capabilities and knowledge own without the help of other members of the group. This is possible as they are implemented this model learning process with each student in the group will portray themselves seriously in exploring knowledge that must be mastered. Thus it could be that all the members of each group about the material he taught well and almost evenly. This is evident from the results of the final measurement of learning outcomes post-test gain understanding of the concept in the management of material increased from the comparison of their mean, when compared with the average time of the initial measurement (*pre-test*).

The learning method Number Heads Together (NHT) is method that perfectly seen from the number of members in the group so that the discussion can be productive as many opinions so that there will be enrichment of knowledge, then of the responsibilities of each member must construct pengetahuannya completely and in conclude knowledge gained ground by members who have the same number to the same topic from the other groups.

- 3) The difference in ability of the concept comprehension at the first measurement (pre test) and the final measurement (post test) on the classroom using cooperative learning model TPS.

The results of testing the second hypothesis by using Paired Samples Test acquired a significance of $\alpha = 0.000$ this means $\alpha < 0.05$ thus H_0 (there are differences in the ability of the concept comprehension at the first measurement (pre test) and the last measurement (post test) on the classroom using cooperative learning model is received, thus H_1 (there are no differences in the ability of the concept comprehension the first measurement (pre-test) and last measurement (post test) on the class using cooperative learning model type TPS) was rejected. Furthermore, based on the average test apparently the result of measurement pre test (class control) and post test (class experiments) Think Pair Share (TPS) the difference is quite significant.

Cooperative learning model type Think Pair Share (TPS) is characterized by the occurrence of knowledge sharing activities between partners in one group. So that the integrity and quality of the knowledge acquired by the group members is dependent upon understanding and knowledge possessed by each partner group. It is possible to be an impact on the acquisition of teaching materials by members of the group is less than perfect because of the limited ability and knowledge among couples group. This is evident from the results of the final measurement of the acquisition of learning through post test results on material the concept comprehension of management even though there are differences between the mean cumulative but has not shown significant results.

The learning model Think Pair Share (TPS) allows each couple to explore each other's knowledge, thus it could be between the couple did not experience feeling awkward in speech. Besides, it is highly recommended to share with another couple to convince the truth of the opinion. Thus, if the model is managed through intensive coaching by the teachers and it is possible to be productive in learning.

- 4) Increasing the capability of the concept comprehension of using cooperative learning model type NHT higher compared to using cooperative learning model TPS at the last of the measurement.

The third hypothesis testing results by using Independent Sample T Test acquired a significance of $\alpha = 0.002$ this means $\alpha < 0.05$ hence H_0 (increased ability of understanding the concept of using cooperative learning model NHT higher compared to using cooperative learning model TPS the final measurement) is received, thus H_1 (there is no increase in the ability of understanding the concept of using cooperative learning model NHT higher compared to using cooperative learning model TPS at the end of the measurement) is rejected. Furthermore, based on the average test turns post test measurement results for an experimental class Number Heads Together (NHT) and post test (experimen class) of Think Pair Share (TPS) there is an increasing and improving referred to NHT higher than at polling stations.

As outlined in the discussion of the first and second hypothesis, that cooperative learning model type Number Heads Together (NHT) has opportunities for sharing knowledge among many members of the group

so it is possible that the interaction of giving and taking that is more intense and complete. Meanwhile cooperative learning model Think Pair Share (TPS) process of knowledge shared only among couples group. Thus the absorption of comprehension and knowledge of the teaching materials presented limited comprehension and knowledge possessed by a fellow lover. Within this context, there are basic things that made the difference in the application of both the cooperative learning model. More information from various sources it is possible more complete study is also the knowledge possessed by the learner. It is evident that the acquisition mean for the experimen classroom learning model type Number Heads Together (NHT) is higher than cooperative learning model type Think Pair Share (TPS).

Actually, the results of post test for cooperative learning model type Number Heads Together (NHT) is higher than the cooperative learning model type Think Pair Share (TPS) is logical because in the interaction and cooperation of some groups in classroom, NHT more varied and a lot of resources, while class TPS is very limited in the pair. Later in the service of learning by teachers in classroom NHT can be guided well considering the class consists only of a few groups only, while for the TPS-class coaching by teachers less than optimal because of too many pairs of learning in the classroom. Furthermore, in a reflection of what the learning outcomes for NHT class focused because his opinion is almost ripe discussed by groups, while for class TPS still reconstructing its opinion on the various opinions of each partner. Of the various advantages and disadvantages of the NHT is more effective for learning materials

IV. CONCLUSIONS

1. Based on the research, concluded that there are differences in the ability of the concept comprehension in the first measurement (*pre-test*) and the last measurement (*post-test*) in the class using cooperative learning model type Number Heads Together (NHT). While the average test of concepts somprehension through the initial measurement (*pre-test*) and the final measurement (*post-test*) acquired the difference is very significant. It means that cooperative learning model type Number Heads Together (NHT) is very effective used in learning process for increasing the concept comprehension of the economic concept. Based on research findings, it was concluded that there are differences in the ability of the concept comprehension in the first measurement (*pre-test*) and the last measurement (*post-test*) in the classroom using cooperative learning model type Think Pair Share (TPS). While the average test of concepts comprehension through the first measurement (*pre-test*) and the last measurement (*post-test*) turned out that post test results have not shown significant results. It can be interpreted that cooperative learning model type Think Pair Share (TPS) is still not effective to be used in the learning economy, but they can be given the choice in

the learning economy still shows the results of study show improvement.

- 2) Based on the research findings, it was concluded that the increasing ability of the concept comprehension of the use of cooperative learning model type Number Heads Together (NHT) is higher if it compared with cooperative learning model type Think Pair Share (TPS) at the last measurement (*post-test*).

Referring to the conclusions outlined above as well as the implications of this research, the suggestions to the researcher as follows:

- 1) For official decision makers
 - a. The results of this study should be used as a reference and referral to adopt policies and decisions in the learning process
 - b. The head of Economic Education Departement should give priority to the achievement of student learning through the implementation of policy learning models that creatively and effectively.
- 2) To Economic Education Departement
 - a. Economic Education Departement should cultivate the implementation of cooperative learning models to all of the lecturer.
 - a. To improve the achievement of students, the head of departement should provide special training about cooperative learning models nto lecturer.
- 3) For Lecturers

All lecturers of Economic Education Departement should always implement cooperative learning models in teaching.

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THE INFLUENCE OF ADVERTISING LANGUAGE TOWARD THE USE OF BAHASA INDONESIA

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Abstract. This article is motivated by the Bahasa Indonesia's interference that occurs among children and adolescents. The language interference is influenced among others by ads that use slang or foreign language which occasionally do not heed the use of bahasa Indonesia which is good and grammatical correct. Bahasa Indonesia which is good and grammatical correct is a means of communication used by all levels of Bahasa Indonesia society. Bahasa Indonesia is used when communicating orally to adjust the situation, conditions, and opponents spoke. Bahasa Indonesia which was used in the written concept that needs to watched standard grammar and spelling improved. The use of Bahasa Indonesia society became a standard level of proficiency by public Indonesia as the national language. Advertising language ia a part of a language which the main purpose is to attract attention with the words or phrases that have an unusual style, concise, and easy to understand. In practice, the language used in the ad are sometimes less in line with the principle of bahasa Indonesia which is good and grammatical correct. The use of language too much, regardless of the logic of language, and the language interference are meant only to attract consumers. Meanwhile, advertising is a medium that is easily seen and heard, especially by children and adolescents who liked to imitate new things, including language. This thing can affect and damage the development of bahasa Indonesia which was also influenced by the existence of language users.

Keywords: *advertising language, Bahasa Indonesia language*

I. INTRODUCTION

Bahasa Indonesia is a communication tool used by the public either verbally or in writing. Bahasa Indonesia has a variety of diverse or variations. Language variation according to different use, according to the topic, speaker relationship, the other person, the person to whom, as well as the medium according to the speaker. Language is not only a form of the contents of the narrative, but also a tool or instrument of thought processes.

Therefore, as a means of communication, Bahasa Indonesia should get attention so that users can use it properly. The phenomenon that occurred in the era of electronic communication and this raises some interference in the use of the Bahasa Indonesia language. Through slang, pop language, the language hodgepodge of advertising language is also the younger generation so quick to forget and follow the trend of the language.

The younger generation so quickly affected languages are "unique" in their ears. Regardless of the standard language or not, whether or not they use in their daily lives. This occurs on the user's language to adult beginners. Electronic media, especially television has a considerable influence in the development of language for beginners, especially children and adolescents. Children and teenagers spend most of their time in front of the television. This of course affects the development of their thought, including with regard to the use of their language. From television, they get a lot of new vocabulary, but actually not all of the standard vocabulary. They are less able to sort out which vocabulary is right or not. Vocabulary This lack of regular common in advertising. Advertising language is part of a language whose main purpose is to attract attention with the words or phrases that have an unusual style, concise,

and easy to remember. The language used, sometimes too excessive and violate the rules of Bahasa Indonesia well and correctly. In fact, the ad is part of a television program that fills most of the slots so often watched by children and adolescents.

Childhood and adolescence is a time of self and easily imitate what he thinks is interesting. Something interesting though less true, would be more to their liking. Alai languages or slang they hear through advertisements, will be familiar and easy to remember because of the intensity of repetitive delivery. Of course this can also affect the development of their language.

The use of the Bahasa Indonesia language which is good and grammatical correct, a mastery of the language by community standards. The better the language used, showing the better the standard language by the user community. If the language is experiencing interference it will cause a decline in the standard language. The emergence of a bully who readily accepted language of children and adolescents may affect Bahasa Indonesia. It is of course disturbing the development of Bahasa Indonesia as the national language. Therefore, should the ad can be one of the tools to develop Bahasa Indonesia which is good and grammatical correct.

Scale then transformed into an interval scale using Making an ad should still heed the rules of language. Although the intent of making the ad to attract a buyer or a spectator, but the language used should be using good language. The language used should be able to keep watching good language rules so as to contribute positively to the development of language .. Based on this, the authors are interested to discuss the interference of advertising language toward the use of bahasa Indonesia.

II. DISCUSSION

According to our review evaluation of quality assurance was very important to improve quality assurance of higher educational institution. Quality assurance will determine reputation of higher educational institution. Some aspects which we found about reputation related quality assurance which are (1) It is built upon the competitive elements of quality, reliability, delivery, history and price. (2) Once a higher education institution acquires a poor reputation for quality, it takes a very long time to change it. (3) Higher education reputations can quickly become national reputations. And (4) the management of the competitive weapons, such as quality, can be learned like any other skill, and used to turn round a poor reputation, in time.

A. Bahasa Indonesia which is good and grammatical correct

Bahasa Indonesia language is not rigid. View that Bahasa Indonesia is a rigid language is wrong. This view appears in the majority among the users language. This then makes the lazy use of language users in both situations Bahasa Indonesia formal and casual situations. In fact, the Bahasa Indonesia language is a language that can be adapted to the circumstances speak. This is called the Bahasa Indonesia language which is good and grammatical correct. Bahasa Indonesia Good is the use of Bahasa Indonesia language is adapted to the situation. Speaking situations, for example where the process of talking and interlocutors. The use of good language and customize a speaking situation, for example the conversation that occurred in the market during the process of buying and selling between sellers and buyers, the talk at the break to students in schools, and others. Utilization of appropriate varieties and matching speakers according to the category and type of language use what is called a good language [2]

Ex. the use of Bahasa Indonesia well, the situation on the market:

Buyer : "Berapa ni Pak, bayamnya?"

Seller : "2, 5000. Dek."

While Bahasa Indonesia correct the use of Bahasa Indonesia customized with rules governing the rules of spelling or Enhanced. The correct language is generally used on state documents and formal situations. Commonly used in daily media, but is also used in oral media. Users should pay attention to the rules applicable writing. This is related to the existence of Bahasa Indonesia as the standard language Bahasa Indonesia society. The use of language that prescribed by standardized or considered standard that is a true language [2]

Ex. Bahasa Indonesia correct use, the situation at local government meetings:

chairman of the meeting : "Ibu-ibu dan Bapak-bapak, kami harap rapat ini dapat memberikan solusi yang baik bagi negara kita."

Based on the diversity of languages, can be distinguished:

1. Variety Frozen is a language used in situations wisdom.
Example: in spiritual activities, wedding ceremony, the court's decision
2. Variety Official (Formal) which is the language used in

official activities, therefore taking a more polite language is the right thing. Example: in the activities of official meetings, speeches and scientific journals

3. Variety Consultative that the language used in the transaction or exchange of information in a conversation that talks about something that is known by each speaker. Example: A Conversation at school and market, the conversation somewhere shopping.
4. Variety Casual which is the language used in informal situations and used in a conversation with friends, friends and people nearby.
Example: In association with friends
5. Variety familiar (Intimate), namely: the language used in a conversation that has a very close relationship and have a bond
Example: In speaking in the menage.

Based on the explanation, it is clear the difference between Bahasa Indonesia which is good and grammatical correct. Good language is a language that has a value a sense of right and appropriate to the situation of the wearer, while the correct language is a language that applying the rules consistently [1]. Therefore, the suggestion of the use of Bahasa Indonesia well and correctly can mean the use of a variety of language that is compatible with the targets, in addition to follows the rules of language are correct, this refers to the diversity of languages as well as meet the requirements of goodness and truth.

B. Advertising Language

Advertising is the promotion of an items, services, companies and ideas that must be paid by a sponsor. Rhenald Kasali stated ad is a message that offers products for the intended audience through the mass media. Whether it's print media, such as newspapers, magazines and electronic media, such as the internet, social media and so forth. Ads created to offer a product to the public through the media. Functions of advertising among others, as persuasion, information, and reminders with regard to certain products. Advertising is a media promotion for those who want to inform, among others, the idea of goods and services. To convey information or messages in advertising, use of language. The use of language in advertising aimed at influencing the reader or listener. Thus, the manufacturer as attractive as possible so that the objectives or persuasive function can be achieved. The ad itself can be found at any time and in any human being. The development of informatics media are increasingly making it become more varied. Almost every day, man served a variety of advertising be it in magazines, newspapers, television, radio, internet, and even all the way ads can be found. The ad itself is considered as the most effective media in conveying information to the general public.

The function of advertising in the four functions. The four functions will be described as follows:

1. Precipitation function
Ads serves to accelerate the change of a condition of the original state can not take a decision be able to take a decision. An example is the increasing demand, creating awareness and knowledge about a product.

2. function Persuasion
Ads serves to generate appropriate audience the advertised message. This includes emotional appeal, convey information about the characteristics of a product, and persuade consumers to buy
3. The function of Reinforcement (affirms)

III. CONCLUSIONS

In addition to the misuse of words or phrases, in the language of the ads are frequently encountered form of mixing languages, especially English. The use of English in the ad so memorable cool, but in the end there was interference languages are very disturbing language of origin. Examples are: ... „guru yang qualified“, „suasana belajar yang cozy“. In fact the word in the English language can be replaced with 'berkualitas' and 'nyaman'.

The influence of advertising language in the use of the Bahasa Indonesia language, can have a negative effect on the development of Bahasa Indonesia itself. Ad makers as part of Bahasa Indonesia society should help in fostering community as users of the language, rather than inhibit or interfere with language development in order to sell products to consumers. All segments of society should be preserving Bahasa Indonesia and introduces the use of Bahasa Indonesia well and correctly. This is for the conservation of Bahasa Indonesia as the national language and continue „Sumpah Pemuda“ who is claiming „...untuk berbahasa satu, bahasa Indonesia.“. So make ads interesting and creative as possible, while still making a good Bahasa Indonesia and grammatical correct as a medium.

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THE CORRELATION BETWEEN CARIOGENIC FOOD CONSUMPTION AND TOOTH BRUSHING HABITS WITH CARIES INCIDENCE AND DENTAL HYGIENE OF STUDENTS AT ELEMENTARY SCHOOL OF KAMPUNG OLO PADANG

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Abstract. The Caries is often happen on students of elementary school, because is over cariogenic food consuming include the type, consumption method, time, and the frequency. It also caused of low tooth brushing habit. Type of this research is survey with descriptive analytic approach and cross sectional design. The sample in this research is fourth grades and fifth grades class IV and V of students at elementary school 04 of Kampung Olo who are number is 108 of students. The result is analyzed by using chi-square test with trust level is 95% $\alpha = 0.05$. Bivariate analysis showed the correlation cariogenic food consuming with dental and oral hygenes caries incident is DMF-T ($p= 0.006$) def-t ($p=0.037$). cariogenic food consuming with oral hygiene ($p= 0.006$), tooth brushing habit with caries incident based on DMF-T ($p=0.003$) def-t ($p=0.001$), tooth brushing habit with dental and oral hygiene ($p=0.002$). The conclusion is there is correlation between cariogenic food consuming and tooth brushing habit with caries incident and dental and oral hygiene fourth grades and fifth grades class IV and V of students at elementary school 04 of Kampung Olo of Padang.

Keywords: Cariogenic Food, Tooth Brushing, Caries incident, denntal and Oral Hygiene.

I. INTRODUCTION

Dental caries excessively is to be the child's health problems. According to WHO states the caries problems of children are still at 60-90%. Based on Household Health Survey (SKRT) Indonesian population was affected by active caries around 63,5%.

Dental and mouth problems of Indonesia population in 2007 and 2013 was increased from 23.2% to 25.9%. The prevalence of dental caries in West Sumatra is 70.6% 2. Indeks caries of DMF-T 4.7 is the 15 rating to the highest position among the 33 provinces in Indonesia. Results of screening was conducted by West Sumatra provincial health department in 2012 found that the students of elementary school at Padang is the most experienced of dental caries by number 9107 of students. At the age around 9-12 year is susceptible to caries.

Foods that contain a lot of sugar is very liked by children is a source of the greatest diet can cause caries. The children also tend to be lazy rub their teeth so plaque can be easily formed, which eventually cause the caries.

Cariogenic food consumption systems, types, how to consume, timing, and frequency of cariogenic foods consume that was excessived and tooth brushing habits are not right for elementary school children may increase the risk of dental caries.

Based on the results of a survey that researchers do at SDN 04 Kampung Olo, many of vendors selling snacks cariogenic foods containing sugar, such as sweets, biscuits, chocolate, ice cream and other. The interviews result from 10 of students of SDN 04 Kampung Olo, that all of students said that they are like to consume the cariogenic foods. It is caused by the foods is containing with sugar and also due to factors not care for their teeth. this is evidenced by still many of students in Kampung Olo who do not brush their teeth in a day Olo. At SDN 04 has not been ever conducted the research about health of teeth and mouth. From these data, the authors are interested in taking the title "The relationship of cariogenic Food Consumption and Tooth brushingHabits with caries incidence and Dental Hygiene at Students of elementary school of Kampung Olo in Padang"

II. RESEARCH METHODS

This research is a survey with Descriptive Analytic Approach with study about the dynamics of the relationship between foods cariogenic consumed and brushing of teeth with the incidence of caries, and teeth and mouth hygiene of fourth and fifth grades students at SDN 04 Kampung Olo.

Design of this research is Cross Sectional where the data of independent variables and dependent variable is taken in time together with the aim to find the relationship between

two of variables. Population and sample in this research was the fourth and fifth of students at SDN 04 Kampung Olo. The totaling of population is 108 of people. The subjects were taken by using total sampling technique. This research was conducted at SDN 04 Kampung Olo on 26 to 29 February 2016. The data was collected manually by filling out the questionnaire and examination sheet provided as well as examine the oral cavity of students clinically.

III. RESULT OF THE RESEARCH

1. Univariate Analysis

Table 4.1 Frequency of Cariogenic Food Consumption of Students at SDN 04 Kampung Olo

Cariogenic food consumption	Frequency (f)	Percentage (%)
Never	6	7
Rarely	72	83,7
Often	8	9,3
Total	86	100

Table 4.2 Frequency of Tooth brushing Habits of Students at SDN 04 Kampung Olo.

Tooth brushing Habits	Frequency (f)	Percentage (%)
Routine	72	83,7
Irroutine	14	16,3
Total	86	100

Table 4.3 Frequency of incident Caries Based on DMF-T index of Students at SDN 04 Kampung Olo

INDEKS DMF-T	Frequency (f)	Percentage (%)
Very Low	74	86
Low	12	14
Medium	0	0
High	0	0
Very High	0	0
Total	86	100

Table 4.4 Frequency of incident Caries Based on Def-t index of Students at SDN 04 Kampung Olo

Def-t Indexes	Frequency (f)	Percentage (%)
Very Low	52	60,5
Low	18	20,9
Medium	9	10,5
High	4	4,7
Very High	3	3,5
Total	86	100

Table 4.5 Frequency of Dental and Oral Hygiene (OHI-S) of Students at SDN 04 Kampung Olo

Dental and Oral Hygiene (OHI-S)	Frequency (f)	Percentage (%)
Good	36	41,9
Moderate	49	57
Bad	1	1,2
Total	86	100

2. Bivariate Analysis

Table 4.6 The Relationship Cariogenic Food Consumption and caries incident based on DMF-T indexes of Students at SDN 04 Kampung Olo

Cariogenic food consumption	DMF-T Index						p value
	Very Low		Low		Total		
	F	%	f	%	f	%	
Never	6	100	0	0	6	100	0,006
Rarely	64	88,9	8	11,1	72	100	
Often	4	50	4	50	8	100	
Total	74	86	12	14	86	100	

The results of statistical test (chi square) value obtained 0.006 ($p < 0.05$), it can be concluded that there is significant correlation between the consumption of cariogenic foods with the incidence of caries by DMF-T with the relationships value is 10.115 (a).

Table 4.7 The relationship of cariogenic food consumption with caries incidence Based on def index-t of Students at SDN 04 Kampung Olo

Cariogenic food consumption	DMF-T Index						p value
	Very Low		Low		Total		
	F	%	f	%	f	%	
Never	6	100	0	0	6	100	0,006
Rarely	64	88,9	8	11,1	72	100	
Often	4	50	4	50	8	100	
Total	74	86	12	14	86	100	

Results of statistical test (chi-square) values obtained 0.037 ($p < 0.05$), it can be concluded that there is significant correlation between the cariogenic foods consumption with gig caries by def-t with the relationships value is 16.439 (a).

Table 4.8 The relationships of Cariogenic Food Consumption with Dental and Oral Hygiene (OHI-S) of Students at SDN 04 Kampung Olo

Cariogenic food consumption	Dental and mouth hygiene (OHI-S)								p value
	Good		Moderate		Bad		Total		
	f	%	f	%	f	%	f	%	
Never	2	33,3	3	50	1	16,7	6	100	0,006
Rarely	32	44,4	40	55,6	0	0	72	100	
Often	2	25	6	75	0	0	8	100	
Total	36	41,9	49	57	1	1,2	86	100	

Results of statistical test (chi-square) values obtained 0.006 ($p < 0.05$), it can be concluded that there is significant correlation between the cariogenic foods consumption with dental hygiene and mouth with the relationships value is 14.629 (a).

Table 4.9 Relationships of tooth brushing habit with caries incident based on DMF-T Index of Students at SDN 04 Kampung Olo

Tooth brushing habits	DMF-T Indexs						p value
	Very Low		Low		Total		
	F	%	f	%	f	%	
Routine	66	91,7	6	8,3	72	100	0,003
Irroutine	8	57,1	6	42,9	14	100	
Total	74	86	12	14	86	100	

Results of statistical test (chi-square) values obtained 0.003 ($p < 0.05$) it can be concluded that there is a significant relationship between tooth brushing habits with dental caries by DMF-T with the relationships value is 11.635 (b).

Table 4.10 The relationship of tooth brushing habits with caries incident based on def-t index on Students at SDN 04 Kampung Olo

Tooth brushing habits	Def-t Indexs										p value		
	SR		R		S		T		ST			Total	
	f	%	f	%	f	%	f	%	f	%		F	%
Routine	4	61,	1	20,8	9	12,5	4	5,6	0	0	72	100	0,001
Irroutine	8	57,	3	21,4	0	0	0	0	3	21,	14	100	
Total	5	60,	1	20,9	9	10,5	4	4,7	3	3,5	86	100	

Results of statistical test (chi-square) values obtained 0.001 ($p < 0.05$), it can be concluded that there is significant correlation between the cariogenic foods consumption with caries gig by def-t with the relationships value is 17.989 (a).

Table 4.11 The relationship of tooth brushing habits with Dental and oral Hygiene (OHI-S) of students at SDN 04 Kampung Olo

Tooth brushing habits	Dental and oral Hygiene (OHI-S)								p value
	Good		Moderate		Bad		Total		
	f	%	f	%	f	%	f	%	
Routine	35	48,6	37	51,4	0	0	72	100	0,002
Irroutine	1	7,1	12	85,7	1	7,1	14	100	
Total	36	41,9	49	57	1	1,2	86	100	

Results of statistical test (chi-square) values obtained is 0.002 ($p < 0.05$), it can be concluded that there is significant correlation between the cariogenic foods consumption with dental and oral hygiene with the the relationship of value is 12.382 (a).

IV. DISCUSSION

Based on results of the research about the relationship cariogenic food consumption with dental caries that was found out from 72 of people who rarely consume cariogenic foods, most of them suffer very low dental caries and there is a significant correlation between the cariogenic foods consumption with dental caries based on the index DMF-T. And based on food consumption cariogenic relationship with dental caries -def-t index of 72 people who rarely consume cariogenic foods, most of them experienced dental caries is very low at 59.7% and there is a significant correlation between the cariogenic foods consumption with dental caries based on def- t index.

This results of research is in line with the research that was conducted by Masriadi (2014) about the relationship cariogenic food consumption and toothbrushing habits on the dental caries at elementary school with the results there is correlation between cariogenic food consumption with the incidence of dental caries with $p = 0.0047$.

On the results of the research found that the consumption of butter at most with a frequency of daily consumption at 52.3%, the frequency of chocolate consumption at most 1-3 times a week that is 53.5%, the consumption of sweets with the most frequency in every day is 45.3 %, the consumption of ice cream with the frequency of consumption of most 1-3 times a week is 47.7%, the consumption of biscuits with the frequency of consumption of most is each day that is 60.5%, and consumption of donuts with frequency of most 1-3 times week is 45 , 3%.

The researchers' analysis of the research found at most dental caries are at very low category based on the DMF-T and def-t index. The cariogenic food that they most often consume with the frequency of consumption every day are bread, sweets and biscuits. This is due to the environmental factors, where at around of school is many of vendors which is selling the cariogenic foods. it make the students is easily buy the food with the frequency of consumption of each day. The form is attractive and the tastes is delicious and sweet because it contains of sugar favored by the students, it can increase dental caries because of all the foods was containing of sugar and it can cause dental caries.

Based on the results of the research about the relationship of cariogenic food consumption with dental and oral hygiene with sample is 72 people who rarely consume cariogenic foods, most experienced dental and oral hygiene is 55.6% and there is a significant relationship between the consumption of cariogenic foods with dental and oral hygiene ,

The results of the research is in line with research that was conducted by Disk (2012) about the description of oral hygiene and dental caries of children with Down syndrome in the State SDLB Patrang and SLB Bintoro Jember. The results obtained most of oral hygiene students in middle category is 60% 8 ,

The researchers' analysis of correlation of cariogenic food consumption with dental and oral hygiene. That means the frequency of cariogenic foods consumption that was often, but it is not accompanied by maintaining dental and oral hygiene will cause the growth of bacteria in the mouth so that the pH of the mouth is be sour in taste and if this problem is happens on a daily, so it will cause the erosion of teeth and mouth's smell is unpleasant

Based on results of the research with 72 of people who have tooth brushing habit in routine most experienced very low dental caries at 91.7% and 14 of people have unroutine in tooth brushing habits at very low dental caries at 57.1% and there is a relationship significantly between tooth brushing habit with dental caries by DMF-T. Based on the relationship of tooth brushing habits toward dental caries incidence by def-t from 72 of people who have routine of tooth brushing habits most experienced of dental caries is very low at 61.1% and 14 of people have unroutine tooth brushing habits at the most have a very low dental caries is 57.1% and the significant relationship between the cariogenic foods consumption with dental caries by def-t.

The results of this research is same with the research that have conducted by Fitri Diumayanti about the relationship between Tooth Brushing Habits and Dental Caries incident of Students at SDN 4 pasa gadang South Padang in a year 2011 which conducted that there is a relationship between teeth brushing habits and dental caries. The tooth Brushing habit is be apprehensive about. It is evidenced from the method in tooth brushing and the frequency of children's tooth brushing.

In this research, there are still 16.3% of students do not routine brush their teeth, it is evidenced from the answering of questionnaire, while 40.7% of students is never check the condition of their teeth and mouth to dental / health care workers. As much as 37.2 % of students brush the front of teeth is fault. that are brushing their teeth at outside, up and down with the movement of twisting section on the upper and lower teeth, while the correct brushing the front teeth are the brushing your teeth on the outside, up and down with move the toothbrush up and down repeatedly. Most of 36% of students did not know how to brush the backside of teeth, the correct way in brushing of the surface of the tooth is the movement repeatedly on the upper and lower teeth sides.

The researchers' analysis to the results of the research is there is a relationship between tooth brushing habits with dental caries incidence. The students who are not routine in brushing their teeth will cause dental caries and the other way, if the students is routine in brushing their teeth as the

rules will cause very low in dental caries incidence. Brushing of teeth is the removal of plaque mechanically, so that the students who routine in brushing of teeth in accordance with the rules then it will experience verylow dental caries than with the students who do not routine in brushing their teeth.

Based on results of the research from 72 of people who have routine in brushing of teeth at the most with dental and oral hygiene is 51.4%. while, 14 of people who have do not routine in brushing their teeth at the most of the dental and oral hygiene is 85.7%. the statistical test (chi-square) values obtained $p = 0.002 < 0.05$, it can be concluded that there is a significant correlation between the cariogenic foods consumption with dental and oral hygiene.

The researchers' analysis of the results of this research is there is a relationship between tooth brushing habits with dental and oral hygiene. Brushing the teeth is one of the technical made to keep teeth and mouth are always clean, well maintained and protected from bacteria that can cause bad breath. Unroutine the students in brushing and do not knowing how or techniques in brushing causes dental and oral hygiene is not protect so that it can cause dental caries and of developing dental caries can cause bad breath.

V. CONCLUSIONS AND SUGGESTIONS

It can be concluded that there is a relationship between the cariogenic foods consumption and tooth brushing habits with caries incident and dental and oral hygiene of students of elementary school. This research about the relationship of cariogenic food consumption and toothbrushing habits with the caries incidence and dental and oral hygiene with multivariate analyzes is expected can created a new theories that support or refute the theories that already existed in previous studies.

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VALIDITY TEACHING MATERIALS OF INDONESIAN EDUCATION IN BEGINNING CLASS OF ELEMENTARY SCHOOL COURSE BASED INTEGRATED SCIENCE AND SOCIAL STUDIES

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Abstract. The aim of the research is to develop teaching materials of Indonesian education in beginning class of elementary school course based integrated science and social studies based Scientific Approach to optimize students competence in Elementary School Teacher Education Department. The specific objective of the first study to explain the validity of teaching materials of Indonesian education in beginning class of elementary school course based integrated science and social studies based Scientific Approach to optimize students competence in Elementary School Teacher Education Department. This study consists of two main steps: Firstly, to design teaching materials refers to the 4-D model of development; Secondly, to explain validity the teaching materials. Data collection techniques is questionnaire. The research instrument consisted of Questionnaire respon. Data from this study were analyzed by descriptive statistics, such as score of questionaire Response students and lecturer. The results showed that the teaching materials of Indonesian education in beginning class of elementary school course based integrated science and social studies based Scientific Approach to optimize students competence in Elementary School Teacher Education Department was valid.

Keywords: Teaching Materials, Indonesian Education in Beginning Class of Elementary School Course, Science and Social Studies, Scientific Approach, Students Competence in Elementary School Teacher Education Department

I. INTRODUCTION

Curriculum 2013 is a curriculum designed to enhance previous curriculums. The curriculum is based on 2013 levels Elementary School (SD) using the integrated thematic learning with a view to providing the ability and experience of a holistic and comprehensive in students. In this case, learning is no longer presented in the form of a segmented every subject, but presented in a thematic integrated. Integrated thematic learning is a merger of two integrated learning model that is webbed and integrated. Fogarty (1991: 54) says "*webbed curricula represent the thematic approach to integrating subject matter. Typically, this thematic approach curriculum development begin with a theme*".

In conjunction with the integrated thematic learning, in Curriculum 2013 (the game No. 67, 2013), Lesson Indonesian become a motor for driving and for other subjects. It appears once in charge of Core Competence (KI) and the Basic Competency (KD) in Subjects Indonesian in early elementary classes (classes I-III) in which loaded with science and social studies subjects. In other words, the curriculum of 2013, science and social subjects are not presented in a separate subject with its own KI and KD, but the charge KI and its KD⁻ put in charge of Indonesian subjects. Therefore, it is necessary to develop teaching materials that accommodate each characteristic Indonesian subjects, social studies, and science are combined in the early grades will be used as teaching material subjects Indonesian Education in Early Elementary Classroom.

Through this teaching material students are expected to gain theoretical example PGSD packaging materials that accommodate the characteristics of social studies and science combined with Indonesian subjects, who also did not ignore the characteristics of Indonesian subjects. Therefore, the teaching materials developed in this study is an urgent need to be realized in order to provide supplies for prospective elementary school teachers who will spearhead the implementation of Curriculum 2013 in SD. The provision embodied in the form of teaching materials Subjects Indonesian Education in Early Elementary Classroom, in which are given concrete examples of packaging planning, implementation, and assessment of learning Indonesian, combined with teaching science and social studies.

Teaching materials produced through this research in addition to accommodate the characteristics of Indonesian subjects, social studies, and science are combined based on a thematic approach, also based on a scientific approach (scientific approach). Learning is a scientific process. Therefore Curriculum 2013 mandates the essence of the scientific approach or a scientific approach to learning. The scientific approach is believed to be the golden bridge and the development of attitudes, skills, and knowledge of learners. (Permendikbud, 2013). Furthermore expressed in Permendikbud (2013) that the scientific method refers to the techniques of the investigation of phenomena or symptoms, acquire new knowledge, or correcting and integrating previous knowledge.

Based learning approach is scientifically proven to be more effective results compared with traditional learning. The research proves that the traditional learning, retention of information of teachers by 10 percent after fifteen minutes and the acquisition of contextual understanding by 25 percent. In the scientific approach based learning, retention of information from the teacher for more than 90 percent after two days and the acquisition of contextual understanding by 50-70 percent (Permendikbud, 2013). To obtain the necessary learning integrated learning steps using a scientific approach, which consists of five steps, namely observation, ask, gather information, association, and communication (Permendikbud No. 81A, 2013: 43).

Teaching materials is one important aspect that contains the knowledge, concepts, facts, tangible material, both printed and unprinted used as a source of learning materials. Development of teaching materials in this study sought meets the requirements outlined by the National Education Standards Agency (BSNP) which includes: feasibility contents which include compliance with the standards and basic competencies, the accuracy of the material, the material supporting the learning, the feasibility of the presentation which include presentation techniques, presentation of learning, the completeness of the presentation; and the feasibility of covering linguistic conformity with the level of development of learners, communicative, keruntutan and unity of ideas.

This research is the emphasis on optimizing competence PGSD students as prospective elementary school teachers in the curriculum implies 2013 through the development of teaching materials MK Indonesian Education in Early Elementary Classroom by integrating field-Social Science-Based Scientific Approach. Judging from the research-based scientific substance, the substance of this study is a new topic by researchers and other researchers because the scientific basis is an implementation of Curriculum 2013. However, from the development of teaching materials already done previous studies, which were conducted Rukmi and Sukartiningsih (2002); Damayanti and Sukartiningsih (2004); Sukartiningsih (2005); Sukartiningsih and Yermiandhoko (2008); Sugiarto (2009); and Ibrahim and Sukartiningsih (2012). These studies represent research and development of instructional media and thematic learning Indonesian. This research is continuing substance and topics such studies with the aim to generate continuous improvement in accordance with the development of science and practical needs in the field.

Based on the description in the background, this study will answer the following general problem formulation How Instructional Materials Development Course Indonesian Education in Early Grades SD-IPS Integrated Science-Based Approach to Optimizing Scientific Competence PGSD Student Department. Furthermore, the formulation of such a common problem, detailed formulation of specific issues. In the first study focused on the formulation of a special issue number 1, namely MK How is the preparation of Instructional Materials Indonesian Education in Early Grades SD-IPS Integrated Science-Based Approach to Optimizing Scientific Competence Students of PGSD?

The specific objectives of the first study is to describe the feasibility of teaching materials Subjects Indonesian

Education in Early Elementary Classroom integrated science-based IPS Scientific approach to optimize student competence PGSD Department. In general the results of this development is expected to contribute to the improvement of the competence and quality of graduates PGSD, especially the ability to design, implement, and assess learning Indonesian in Early Elementary Classroom integrated IPA-based IPS Scientific approach.

II. RESEARCH METHODS

This research is research Research & Development (R & D) Borg and Gall (1983), which consists of 10 stages, namely (1) survey: analysis of the needs and constraints, (2) the Review of literature and products related research, (3) the development of the draft (4) test expert, (5) a revision the main products, (6) a limited field test, (7) the revision of the products have been applied, (8) major field test, (9) the revision of the final product (10) dissemination to a wider arena. Phase-10 is not performed in this study because this phase is done through the relevant institutions. The procedure of this study was designed as follows.

In the first year, the focus of activities include the analysis of the needs and constraints analysis. The objectives of the phase 1 is the assessment and identification of problems and the fact that the case of Indonesian Education Course in Early Elementary Classroom integrated IPA-IPS. Activities include (1) Survey and the observation and analysis of the needs analysis related constraints Subjects Indonesian Education in Early Grades integrated SD-IPS in PGSD IPA; (2) Interview with the faculty in PGSD from several regions in Indonesia. Interviews with students related to the activities carried out in the lecture and efforts to optimize PGSD student competence in designing courses Indonesian Education in Early Elementary Classroom integrated IPA-IPS. Analysis of constraints reflected on the problems faced by lecturers to improve their professional ability, especially in the development of student competence draft the Indonesian Education Courses in Early Grades integrated SD-Social Science-Based Scientific Approach; (3) the Review theoretical concepts associated with learning Indonesian, science, and social studies courses Indonesian Education in Early Grades integrated SD-Social Science, Scientific approach; (4) drafting teaching material Course Indonesian Education in Early Grades integrated SD-Social Science-Based Scientific Approach (Class I-III SD), and (5) Validation Expert. Survey data collection needs and constraints analysis conducted by questionnaire and interview guide. Data analysis techniques used to process the data analysis of the needs and constraints in the form of questionnaires (quantitative data) were analyzed by simple statistics such as percentage and mean.

The variables and operational definitions of each variable is explained as follows.

1. The development process is a series of product formulation, testing the device so as to produce products such as teaching materials Subjects Indonesian Education in Early Elementary Classroom integrated science-based IPS Scientific approach to dissemination.
2. The teaching materials is one important aspect that contains the knowledge, concepts, facts, tangible

material, both printed and unprinted used as a source of learning materials.

3. Model thematic integrative learning is packaging in the form of themes that integrate multiple subjects.
4. The Scientific Approach (scientific approach) is a learning approach, characterized by scientific (scientific), which consists of five steps, namely observation, ask, gather information, association, and communication.
5. Students PGSD Competence is the ability of elementary school student teachers in planning, implementing, and assessing thematic integrative learning in elementary school.

III. ANALYSIS

Results of research in compiling teaching materials products MK Indonesian Education in Early Elementary Classroom integrated science-based IPS Scientific approach can be described as follows.

A. Preparation of draft teaching materials Subjects Indonesian Education in Early Grades integrated SD-Social Science-Based Scientific Approach

In the first year of this study have been compiled draft instructional materials Subjects Indonesian Education in Early Elementary Classroom integrated science-based IPS Scientific approach with the following characteristics.

1. Material teaching materials Subjects Indonesian Education in Early Grades integrated SD-IPS IPA prepared in accordance with the characteristics of Indonesian Course, science, and social studies and arranged thematically integrated
2. Material teaching materials relevant to the subject matter Indonesian, science, and social studies curriculum is based on the charge in 2013.
3. Systematic teaching material consists of a cover page, Preface, table of contents, use of guide books, materials, glossary, index and bibliography.

B. Validation Draft Subjects Subjects Indonesian Education in Early Grades integrated SD-Social Science-Based Scientific Approach.

Validation is done to check the suitability of the material (material validation), presenting and teaching materials kegrafikaan order to obtain valid and feasible to implement. Validation is done by experts who are experts in the field of education to-SD's language appears logical, science, and social studies. Based on the validation conducted on the draft teaching material Course Indonesian Education in Early Elementary Classroom integrated science-based IPS Scientific approach can be described as follows:

1. Validation of Subjects of Matter Eligibility

Validation of teaching materials on the feasibility of the material is done by experts who are experts in the field of education to-SD's language appears logical, science, and social studies. The validation results can be described as indicated in Table 1 as follows.

Table 1. Results of Validation Draft Feasibility material I Subjects

No	Item	Score
A. Material Relevance		
1	Completeness material contains learning outcomes (learning outcomes) that supports the achievement of student competence	4
2	Breadth of material, related to the topics integrated into Indonesian, science, and social studies	4
3	The depth of the material, which includes the deepening of the theory of learning Indonesian in early elementary school class integrated IPS and IPA	4
B. Material accuracy		
1	Materials (examples and exercises) are presented based on facts, concepts, principles and theories Indonesian, science, and social studies so as to avoid misconceptions in students.	3
2	Illustration given in accordance with the rules and learning the Indonesian language, science, and social studies in an integrated SD and accurate	3
C. Support Material		
1	Support materials (examples, exercises, problems, and bibliography) in accordance with the development of science and technology	4
2	Recency features (definition, description and example) reflect current events using the referral last five years	4
3	Contextual, presented from the immediate environment with the daily life of students	4
4	Completeness of the materials developed according to the characteristics Indonesian, science, and social studies, scientific approach	4
5	Encouraging students to be able to understand, identify, troubleshoot, and apply the learning materials using a scientific approach	4
Jumlah		38
Percentage		95%
criteria		Sangat Layak

Note: The value range 0-4

From Table 1 it appears that the results validate the feasibility of teaching materials have which can be explained as follows:

a. Suitability material aspects include:

- 1) Completeness of the material contains learning outcomes (learning outcomes) that supports the achievement of the

- competence of the students obtain a score of 4;
- 2) breadth of material, related to the topics integrated into Indonesian, science, and social studies to get a score of 4;
 - 3) the depth of the material concerning the deepening of the theory that includes learning material Indonesian in early elementary grade integrated science and social studies, getting a score of 4 ..
- b. Aspects of the accuracy of the material, with the following criteria:
- 1) Content (examples and exercises) are presented based on facts, concepts, principles and theories Indonesian, science, and social studies so as to avoid misconceptions in students getting a score of 3.
 - 2) illustration accordance with the rules and learning Indonesian, rules and learning science, and social studies learning principles and presented in an integrated SD and accurately obtain a score of 3.
- c. Learning support material aspects, with the following criteria:
- 1) support materials (examples, exercises, problems, and bibliography) in accordance with the development of science and technology to get a score of 4.
 - 2) Recency features (definition, description and example) reflect current events using the referral last five years to get a score of 4
 - 3) Contextual, served from the immediate environment with the daily life of the students receive a score of 4.
 - 4) Completeness of the material developed in accordance with the characteristics of Indonesian, science, and social studies and scientific approach to obtain a score of 3
 - 5) Encourage students to be able to understand, identify, troubleshoot, and apply the learning materials using a scientific approach to obtain a score of 4.

Overall, the results validate the feasibility of obtaining the material with a percentage score of 38 feasibility of teaching materials is 95%. The results showed that the teaching materials developed in this study is very feasible and can be used with slight revisions.

2. Validation of the Feasibility teaching materials Presentation

Validation of teaching materials was also based on the presentation format. The results validate the feasibility of the presentation can be described as follows.

Table 2. Results of Validation Draft Feasibility material I Subjects

No	Butir	Skor
A. Teknik Penyajian		
1	Keruntutan konsep, konsep materi disajikan secara induktif berdasarkan pendekatan saintifik.	3
2	Kekonsistenan sistematika penulisan, memuat pendahuluan, isi, penutup, serta latihan.	4
3	Keseimbangan antarbab, proporsional pembahasan materi dan jumlah halaman seimbang	3
B. Penyajian Pembelajaran		
1.	Berpusat pada kebutuhan siswa, penyajian dan pembahasan materi bersifat interaktif dan partisipatif.	4
2.	Penyajian dan pembahasan materi bertahap untuk mencapai capaian pembelajaran	4
3.	Penyajian materi Bahasa Indonesia, IPA, IPS dilakukan secara terpadu sesuai pendekatan saintifik	4
C. Kelengkapan Penyajian		
1.	pendahuluan yang memuat prakata, petunjuk penggunaan buku, muatan isi serta tujuan, dan daftar isi.	4
2.	Isi dilengkapi ilustrasi, tabel, rujukan, dan latihan.	3
3.	Penutup terdiri dari daftar pustaka, indeks subjek, daftar istilah dan petunjuk pengerjaan tugas.	4
Jumlah		33
Persentase		91,7%
Kriteria		Sangat Layak

From Table 2 it appears that the validation presentation of teaching material consists of three aspects, namely presentation techniques, presentation of learning, and completeness of the presentation. Results of the validation of each of these aspects can be explained as follows.

- a. Aspect Presentation Techniques include:
Results of the validation aspects of presentation techniques include:
- 1) keruntutan concept, the concept of the material presented inductively based scientific approaches to get a score of 3;
 - 2) systematic consistency of each chapter contains an introduction, contents and cover, as well as exercises to get a score of 4;
 - 3) Balance antarbab, proportionate and number of pages of the material balance (weight and almost the same amount) received a score of 3.
- b. Presentation aspects of learning, including:
Results of the validation aspects of presentation techniques include:
- 1) Focusing on the needs of students, the presentation and discussion of the material

- is interactive and participatory. getting a score of 4;
- 2) presentation and discussion of the material Presentation and discussion of the material gradually to achieve the learning outcomes receive a score of 4;
 - 3) Presentation of Indonesian material, Science, Social Studies carried out in an integrated manner with the steps appropriate scientific approach to get a score of 4.
- c. Presentation Completeness aspects, including:
- 1) an introduction that includes the preface, instructions for use books, the content and purpose of the charge, and a list of isi.mendapatkan score of 4;
 - 2) Fill furnished with pictures, illustrations, tables, references, and ending the practice. getting a score of 3;
 - 3) The cover consists of a bibliography, a subject index, glossary and instructions for performing tasks get a score of 4

Validation feasibility aspects of the presentation of the results obtained with the 33 percentage of 91.7%. These results indicate that the teaching materials developed in this study is feasible and can be implemented with little revision.

3. Validation of the Feasibility Linguistic teaching materials

Validation of teaching materials on the feasibility aspect of language carried out by Indonesian experts. Results validate the feasibility of teaching materials on the feasibility aspect of language described as follows.

Table 3. Results of the Feasibility Linguistic Validation Draft I Subjects

No	Butir	Skor
A. Kesesuaian dengan Tingkat Perkembangan Siswa		
1.	Materi yang ada pada bahan ajar disajikan dengan bahasa yang mudah dipahami dan menuntut kemampuan berpikir kritis dengan menghindari kalimat yang bermakna bias dan sarkasme.	3
2.	Bahasa yang digunakan sesuai dengan tingkat kemampuan mahasiswa.	4
B. Komunikatif		
1.	Keterpahaman pesan, materi disajikan secara komunikatif dengan bahasa yang mudah dipahami mahasiswa.	4
2.	Ketepatan tata bahasa dan ejaan pada pemilihan kata dan kalimat berpedoman pada kaidah tata bahasa Indonesia dan EYD	4
3.	Kebakuan istilah dan simbol digambarkan melalui ilustrasi yang tepat, bermakna, dan konsisten	4
C. Keruntutan dan Keterpaduan Alur Pikir		
1.	Keruntutan bahasa yang digunakan	4

No	Butir	Skor
	dalam setiap paragraf dan wacana yang terdapat pada bahan ajar bersifat deduktif, induktif, naratif, maupun deskriptif	
2.	Keruntutan dan keterpaduan materi, penyampaian pesan antarparagraf memiliki hubungan logis	4
Jumlah		27
Persentase		96,4%
Kriteria		Sangat layak

Table 3. The visible results of the validation aspects of language teaching materials consists of three aspects, namely conformity with the level of student development, communicative, and keruntutan and integration flow of thought, each of which is described as follows.

- a. Aspects of conformity with the developmental level of students, include:
 - 1) The material on teaching materials are presented in an easily understood and require critical thinking skills by avoiding meaningful sentence sarkasme. mendapatkan bias and a score of 3;
 - 2) The language used in accordance with the level of students' ability to get a score of 4.
- b. Communicative aspects, including:
 - 1) Keterpahaman messages, materials presented in communicative language that is easy to understand the student gets a score of 4;
 - 2) The accuracy of grammar and spelling in the selection of words and sentences based on the rules of grammar Indonesia and EYD get a score of 4;
 - 3) Kebakuan terms and symbols depicted through illustrations proper, meaningful, and consistently get a score of 4.
- c. Keruntutan aspect and integration mindset, include:
 - 1) keruntutan language used in each paragraph and discourse contained in teaching materials deductive, inductive, narrative, descriptive and get a score of 4;
 - 2) keruntutan and coherence of matter, delivering a message antarparagraf have a logical relationship to get a score of 4.

Overall, the results validate the feasibility aspect of language to obtain a score of 27 by percentage of aspects of the feasibility of presentation is 96.4%. The results show that the language in the draft teaching materials is very feasible and can be used with slight revisions.

4. Validation teaching materials from the aspect of feasibility Kefrafikaan

Results of the validation aspect kegrafikaan developed teaching materials that can be described as follows.

Table 4. Results Validation Draft Feasibility Kefrafikaan I Subjects

No	Butir	Skor
A. Ukuran Buku		
1	Ukuran bahan ajar sesuai dengan standar ISO A4	4
2	materi dan ukuran bahan ajar yang disajikan sesuai dengan nilai estetika tata letak dan jumlah halaman	4
B. Desain Kulit Buku		
1.	Tata letak dalam desain bahan ajar diatur secara proporsional dan menarik	3
2.	Tipografi kulit sampul sesuai dengan pembelajaran terpadu berkarakter Bahasa Indonesia, IPA, dan IPS dan menggunakan huruf yang mudah dibaca serta ukuran huruf yang proporsional untuk dibaca oleh mahasiswa.	4
3.	Ilustrasi desain kulit buku mencerminkan isi buku, bentuk, warna, ukuran yang sesuai dan proporsional.	3
C. Desain Isi Buku		
1.	Penempatan unsur tata letak dalam bahan ajar konsisten berdasarkan pola.	4
2.	Kesesuaian judul, subjudul, dan nomor halaman.	4
3.	Menggambarkan isi/materi dan mengungkapkan karakter objek.	4
4.	Tipografi isi dalam bahan ajar sederhana dan mudah dipahami.	4
5.	Ilustrasi isi dalam bahan ajar memperjelas dan mempermudah pemahaman materi bahan ajar.	4
Jumlah		38
Persentase		95%
Kriteria		Sangat Layak

From Table 4 it appears that the validation kegrafikaan includes three aspects, namely the size of the book, the design of book covers, book design. Each of these aspects of DAPT is described as follows.

- a. Aspects of Book Size, covers
 - 1) in accordance with the ISO standard A4 size used to get a score of 4;
 - 2) the material and size of the teaching materials were prepared in accordance with the aesthetic value of the layout and the number of pages to get a score of 4.

- b. The design aspect of the foreskin, covering
 - 1) The layout in the design of teaching materials and interesting set proportionally get a score of 3;
 - 2) Typography cover skin according to the character of Indonesian integrated learning, science, and social studies and use the letters readable font size proportional to be read by students. getting a score of 4;
 - 3) Illustration design of book covers reflect the contents of the book, shape, color, size appropriate and balanced propoesional mendapatkan 3.
- c. Design aspects of the contents, covers
 - 1) The placement of elements of the layout in a consistent teaching materials based pola mendapatkan score of 4;
 - 2) Suitability title, subtitle, and page number. getting a score of 4;
 - 3) Describe the contents and reveal the character of objek.mendapatkan score of 4;
 - 4) Typography contents of teaching materials simple and understandable to get a score of 4;
 - 5) Illustration of the content of the teaching materials to clarify and simplify the understanding of teaching materials. getting a score of 4.

Validation of the results obtained score kegrafikaan feasibility aspect is 38 with a percentage of 95%. These results can be interpreted that the teaching materials developed in this study is feasible and can be used with little revision.

Tabel 5. Rekapitulasi Hasil Validasi Draf I Bahan Ajar

No	Kriteria Bahan ajar	Penilaian Validator		
		Jumlah Skor Perolehan	Persentase (%)	Kategori
1	Kelayakan Materi	38	95%	Sangat layak
2	Kelayakan Penyajian	33	91,7%	Sangat layak
3	Kelayakan Bahasa	27	96,4%	Sangat layak
4	Kelayakan Kefrafikaan	38	95%	Sangat layak
Rata-Rata		94,5%		Sangat layak

Data in Table 5. Indicates that 1) the feasibility aspects of language gets a percentage of 95% can be interpreted very feasible to use with little revision; 2) aspects of the feasibility of presenting a percentage of 91.7% can be interpreted very feasible to use the revision; 3) the feasibility aspect of the material with a percentage of 96.4% can be interpreted very feasible to use the revision; 4) kegrafikaan feasibility aspects with a percentage of 95% can be interpreted very fit for use with

minimal revision. Thus the final percentage of votes against the draft I validator is 73.85% of teaching materials can be interpreted very fit for use with minimal revision.

IV. RECOMMENDATIONS

From the results of this research can be submitted the following recommendations:

1. Teaching materials MK Indonesian Education in Early Grades SD Integrated Science-Based IPS Scientific Approach compiled through research is expected to provide one solution providing teaching materials eligible to be implemented for students PGSD
2. It should be arranged in college teaching materials relevant to the demands of the curriculum and the needs of society, the curriculum in 2013 with thematic integrative approach in SD.
3. The results showed that the teaching materials prepared by the experts validation activities may increase the feasibility of teaching materials before implemented

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VALUES OF CHARACTER IN TRADITIONAL CHILDREN GAMES IN WEST JAVA (STUDY OF ORAL TRADITION)

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Abstract. Indonesia has a diversity of ethnicity, religion, language, and culture. It is a treasure of priceless, therefore it must be maintained, developed and preserved. Cultural diversity as an oral tradition is the cultural heritage of the archipelago. According Pudentia, oral tradition is not just a cultural richness, but also as an identity that has a value that is difficult when compared dosed with an understanding of the present. Traditional games children in West Java is one form of oral tradition that is now widely abandoned replaced by modern games the result of advances in technology. Modern games for kids today is certainly more exciting than the traditional game. Traditional children's games as one of the cultural heritage has a lot of value, such as: the historical value, social values, cultural values, and the values of the characters. The values of the characters in this traditional game looks in this type of game, movement and songs carried by the time the game was delivered. Traditional games hosted by children together. They ran, jumped, shouted and laughed with joy. In the traditional game a lot of physical movements are performed, sometimes the game was also accompanied by singing.

Keywords: Oral Tradition, Traditional Games, Values of Character.

I. INTRODUCTION

All people around the world agree with opinions stating that education is essential for the progress of a nation. Therefore, PBB or the United Nations through the UNESCO (United Nations Educational, Scientific and Cultural Organization) launched the four pillars of education in order to improve the quality of a nation, namely: (1) learning to know (learning to know), (2) learn to do something (learning to do), (3) learning to be something (learning to be), and (4) learning to live together (learning to live together). Education is a plan to establish the next generation in the learning environment by providing science, in order to achieve the ability, spiritual, religious, intelligence, personality, noble morality and self-control.

Along with the educational goals of UNESCO, education in Indonesia is a goal-oriented national education ie educating the nation and developed a complete Indonesian man, the man whose faith and piety towards God almighty One and noble character, knowledge and skills, physical and spiritual health, steady and independent personality, and a sense responsibility of civic and nationality. The national education goals are basically UUD 1945 and Pancasila with religious values roots as well as the cultural diversity that exists in Indonesia.

Implement education in Indonesia is based on national education goals is not easy, but the hard work and the good cooperation between the government and the people of Indonesia. The government should organize and manage the implementation of the national education system well, so what is listed on the national education goals can be achieved. Society must obey and support the implementation of education so that the people of Indonesia that people become smart, have good character, healthy, skilled, cultured, and is responsible for the nation and country, or that people become character.

The character of the Indonesian nation has contained the items of Pancasila which amounted to 45 in accordance with the TAP MPR No. I / MPR / 2003. In grains of Pancasila envisaged that the Indonesian people have fear of God Almighty, mutual respect and live in harmony among religions, not to impose the will of the people of different religions, loving, tolerant, not arbitrarily, dared to defend the truth, mutual to respect, cooperate, and others.

The challenge for the government, parents, educators, and education observers, tried hard how to make the original character of the Indonesian nation as listed on Pancasila grains remain part of Indonesia in the conduct of life everyday until whenever. These characters legacy is a legacy of the most expensive compared with a heritage that is material.

Indonesian national character a lot stored in the cultural diversity of each tribe, both in oral culture, materials, buildings, art, or behavior. But unfortunately the characters in a variety of cultures is only stored neatly. Our society already many are beginning to forget even left the culture of his ancestors. Today's society many misjudge the cultural heritage of his ancestors were considered old-fashioned and not in accordance with the progress of time, advances in technology.

One example of a culture that is becoming obsolete even forgotten that the traditional children's games. Almost every region in Indonesia have these kinds of games are in accordance with the traditional way of thinking, the natural environment, and the habits of its people, as well as in Tatar Sunda, West Java.

II. TRADITIONAL CHILDREN'S GAMES IN WEST JAVA

Why is it called the traditional children's games? Because in addition to traditional games are modern

children's games. The traditional game is a game that brought the children in ancient times. The game is done together in the open air, taking advantage of the media from the natural surroundings. While the modern game is a game that uses advanced technologies, costly, and do not have to do together.

The traditional game by James Danandjaja (2002) is one of the forms in the form of children's games, which circulated orally among the members of a particular collective, traditional and inherited form of hereditary and has a lot of variety. The nature or characteristics of traditional children's game is an old, of unknown origin, who the creator and where they come from. Usually spread by word of mouth and sometimes change the name or form though basically the same. When viewed from the root, traditional games is nothing but the activity that is governed by a regulation game which is inherited from previous generations who do humans (children) with the purpose of obtaining excitement. According Soepandi (1985) traditional game is any good deed or not to use the tool, which is inherited from a common ancestor, as a means of entertainment or to please.

There are many types of children's games traditional in West Java, played by boys and girls, including: *jajangkungan* (*engrang*), *bebentengan*, *oray-orayan*, *adu kelom batok*, *bandring* (*katepel*), *maen kaleci* (*gundu*), *ucing sumput*, *meong bangkok*, *sapintrong*, *congklak*, *eundeuk-eundeukkan*, *ucang-ucang angge*, and *pecle / sondah*.

Jajangkungan (*engrang*) is a game that requires special skills, especially the balance of the body. The players must be able to stand and walk on bamboo stamping along the 30 cm high with bamboo approximately 2 to 2.5 meters. *Jajangkungan* game (*engrang*) is usually used as a quick contest, who can get to the finish line first without falling or set foot to the ground.

Bebentengan is a game that must be played by many children. This game can be played by boys and girls. *Bebentengan* requires a fairly wide area and two walls that could serve as the building (headquarters) with a distance of about 2-4 meters. There are at least 6 children who play this *bebentengan* as it will be divided into 2 groups. Each group will try to hold the fort group of opponents in advance in order to become the winner. The losing team will receive the punishment of the winning team.

Oray-orayan is a game that is followed by many children, both male and female. They should line extends to the rear, holding in front of her friend's shoulder. Then they walked with undulating singing *oray-orayan*.

Oray-orayan luar leor mapay sawah
Entong ka sawah parena keur sedeung beukah
Mending ge teuleum di leuwi loba nu mandi
Saha anu mandi, anu mandina pandeuri...

Kelom batok is almost equal to *engrang* because the players must adjust the balance and endurance. Only clogs the shell does not use bamboo as a media game but using coconut shells as the name of the game. *Kelom batok* not only need a balance and endurance but also the strategies in play. The best player is a player who can play a shell so that the audible rhythm and tinny sound.

Katepel or *bandring* includes games that train agility and accuracy, the play usually boys. The game is quite dangerous if children are not supervised while playing, since at the time of release seeds or pebbles, not targeted. This game uses basic materials: wood, rubber, leather, and seeds or pebbles.

Kaleci games (marbles) or playing marbles usually played by boys, at least 3 people. This game trains the dexterity and precision because children should be able to throw the marbles with his finger, and marbles should lead to his marbles so out of the loop.

Ucing sumput play most often done by girls, because this game requires patience to find his friends were hiding. One of them should there be a cat who is tasked with finding his friends were hiding.

Meong bangkok can be done by boys and girls. This game should be done in a fairly broad because the number of players *meong bangkok* about 12 to 20 people. Children form a circle, holding hands tightly so as not to be separated. Two of his plays into 2 cats. Cats that a cat chasing the other. If the cat that chased entered the circle, then the cat chasing maintained so do not go in circles.

Sapintrong usually performed by some girls. *Sapintrong* game using rubber knot bracelet made lengthwise so that it can be twisted around. The game is minimal done by 3 people. A play, skipping appropriate rubber rounds, and two people each holding a rubber tip, dealing more or less within 3 meters, and twirling it with his rhythm remained so could jump not to step on the rubber.

Congklak is a game using the media made of wood by 12 holes. Ten holes are dealing, two-hole to tip ends. The game was done by two people. Both children have to enter each one pebble into the hole, so that the gravel was holding discharged.

Eundeuk-eundeukkan performed on the tree, the children sing *eundeuk-eundeukkan* wagging a tree branch underfoot. *Eundeuk-eundeukkan* means wobbling.

Ucang Angge performed by two brothers. The younger sister seated in both the instep of his brother, and his brother sitting on a chair or bench, shaking his brother were sitting in both legs.

Pecle (*sondah*) that the game is done by skipping six boxes alternately with the left leg. In this game takes the balance of the body from falling. Before the jump, a child throws a piece or broken tiles prior to the intended direction of the box.

III. VALUES OF CHARACTER IN TRADITIONAL CHILDREN GAMES

Character values are good values that are embedded in the attitudes and behavior of human beings. The values reflected in the character of the Indonesian nation grains of Pancasila. These values are the original character of the Indonesian nation. Historically, the framers of Pancasila explore the attitudes and behavior of the Indonesian people everyday then compiled into five principles of Pancasila. All five were then detailed basis to 36 Pancasila, and then developed into 45 Pancasila corresponding TAP MPR No. I / MPR / 2003.

The values in character education by the Pusat Kurikulum Departemen Pendidikan Nasional (2010) there

are 18 character values, namely: religious, honesty, tolerance, discipline, hard work, creative, independent, democratic, curiosity, the spirit of nationalism, patriotism, recognize excellence, friendship, love peace, love to read, care for the environment, social care, and responsibility.

The values of the characters in the traditional games children Sundanese people reflected on the type and movement games, as well as in poetry or words in the game. According Danandjaja (1997), based on the type and movement games, can be categorized into three groups, namely: (1) a game to play and have fun (recreation); (2) the game to compete (competitive); and (3) the game that is instructive. The traditional games that are recreational in general do in your spare time. The traditional games that are competitive, have characteristics: an organized, competitive nature that determines who wins and who loses, has regulations adopted jointly by the participants. While traditional game meant to be instructive, there are educational elements in it. Through games like these children are introduced to a wide variety of skills and life skills (life skills) they need to cope with life as a member of society.

Games that are recreational eg *oray-orayan*, *maen Kaleci*, *ucing Sumput*, *sapintrong*, and *eundeuk-eundeukkan*. Games that are competitive, that *jajangkungan* (*engrang*), *bebentengan*, *adu kelom batok*, *meong bangkok*, *congklak*, and *pecle or sondah*. The game that is instructive that *ucang angge*.

The types and forms of the traditional games, all of which contain elements of education even though such games are recreational or competitive. The traditional game is becoming a means of socialization for the children so that they can adjust to the environment, and as members of social groups. The whole traditional games above should be carried out by a group of children, at least two children, and should be done together or consecutively. Honest character, obeying the rules of the game, disciplined, brave, unity, tolerance, and responsibility, is the core characters that must be possessed of every child in this traditional game so that the game can be implemented.

All types of traditional games which do children ancient times, is a means of entertainment or fun, because it is essentially a child's world is a world of play. Through traditional games, children discover their world, they can laugh, yell, scream, run, jump, and interact directly with their friends, sometimes there are children who cry. In this activity, children rights granted, because through some traditional games, they also get a lot of lessons, skill or prowess. For example, through the game *engrang*, *adu kelom batok*, and *sapintrong* child practice body balance and train the courage and self-confidence. In the game *oray-orayan*, *ucing sumput* and *bebentengan* children are trained to be honest, by the rules, be responsible, and the importance of togetherness. In *ucang angge* game, children are trained to become a loving and responsible to her brother. In *ucang angge* reflected the character of the Sundanese people *silih asah*, *silih asih*, and *silih asuh* (care of each other, love each other, and protect each other).

IV. CONCLUSION

Traditional games children in West Java as one of cultural heritage Indonesia's must be preserved, maintained, and reintroduced to the children of today. Through traditional games are expected world real children will again present in his life, because through traditional games, joy, joy, togetherness among children will be present in his life. Through traditional games, the original character of the Indonesian nation as listed on Pancasila grains will again adorn everyday behavior. Being honest, brave, responsible, caring, law-abiding, concerned the nation above personal, loving, tolerant, not arbitrarily, brave stand for truth, mutual respect, and willing to cooperate should still be reflected in the person of every Indonesian child as the future generation. Hopefully!

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WRITTEN CORRECTIVE FEEDBACK: ENHANCING WRITING ABILITY THROUGH DIRECT CORRECTION

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Abstract. To enhance writing ability, written corrective feedback (WCF) is one of pedagogy activity that is usually carried out in helping students in learning writing. Thirty-six EFL students of first semester of English Study Program at IKIP-PGRI Pontianak participated in the study which explored the implementation of direct correction (DC) in enhancing basic writing. Besides the lecturer, the intervention of collaborator in giving direct correction was also applied during classroom instruction. The combination of quantitative and qualitative data was collected and analyzed by using critical and comparative analysis. Although first cycle indicated unsatisfied result, only 47% those who achieved the criterion, another cycle showed the expected writing improvement. It was 71% students attaining the criterion. This recent findings support previous research on the positive effects of WCF on DC with a beneficial advantage of error correction in writing instruction.

Keywords: WCF; direct correction; classroom instruction.

I. INTRODUCTION

Writing is a very complex activity and requires special skills in order to be well written and interesting. It is not easy to be able to produce a good paper, it is necessary for training and guidance from experts. As stated by Craig (2013: 1), which states that to produce good writing cannot be mastered in one course, but writing is a development process that requires time and attention.

In the context of higher education, writing course is given firstly when lecturing (first semester) until the end of the semester (six semesters). At the beginning of the semester, students are equipped with the mastery of the material on a scientific paper that includes Basic Writing and Academic Writing. Basic Writing is given to introduce to students the basic concepts such as the introduction of the type of writing English words (part of speech), arranging the words into sentences is good and true (structure) until the writing of the text (paragraph).

At the beginning of semester, students are also introduced how to make a good paper for courses based English. So that the work of students can link the content of an idea or a thought with lecturers and colleagues. It is in line with Lieberman and Wood (2003: 30-31), which states that writing is a bridge to connect students with teachers and colleagues. Writing is the most difficult skill because it writing is maddening, frustrating, very complex activity in which there are components or process (Harris and Graham, 2012: 3).

To produce a good paper, at least some of components must be mastered. The components according to Broad (2003: 6) include: 1) ideas: relevance, clarity, quantity, development, and persuasiveness 2) form: organization and analysis; 3) flavor: style, interests, and sincerity; 4) mechanics: punctuation, grammar, and so forth; 5) The teaching writing in college, the lecturers at least provide insight to students about the importance and difficulty of

writing. Therefore, in the learning process in the classroom, students become a center of learning.

In learning process, there are still many students who have difficulty in writing from the use or selection of appropriate vocabulary, grammar used and so on. Of the 35 students, only 10 people, or 28.6% who have good writing category. It was found when the researchers taught and told the students to write a text recount the topic of the most memorable experiences at the time in high school. Once the researchers conducted a question and answer with the class, almost all the students say writing is a difficult job. The reason is that the still weak English skills. Have never written at the time was still in high school. In other words, the input of the students are still lacking and this is a serious issue to be immediately addressed.

Briefly, using appropriate methods to teach writing are not enough in the learning process. It is however needed a written corrective feedback (WCF) from the lecturers. With WCF, the students will be very useful in order to avoid similar errors. Adler-Kassner and O'Neill (2010: 61) says that the interaction between teachers and students in the use of language and learning becomes essential in writing instruction because the feedback from the lecturer cannot be separated with the revision of the student and also understanding of writing as a whole. For that reason, the researchers want to do the teaching by implementing a written correction.

To overcome the problems, researchers used a written correction with direct-type correction. This was done because the students still required immediate correction of the lecturer. Direct correction is a correction where the lecturer mark and correct the errors for students. The lecturer provides the correct form (Ellis, 2009). The previous study on the direct correction has shown that this type of correction is quite effective in improving writing skills in (Kao, 2013; Farid and Abdul Samad, 2012).

As research has been done, the researchers will conduct research by applying direct correction in order to improve students' writing.

II. LITERATURE REVIEW

Hutchinson (2005: 5) defines that writing is just another form of expression; skill develops with practice by putting words on paper and by processing thought, and grammatical structures. In my point of view, this definition focuses on writing process by putting correct words, thought and by using grammatical structures. This definition is also supported by Nadler, et al. (2005: 128). They state that writing according to the standard usage of a given language, is using appropriate letters and symbols. The use of letters and symbols is to represent the sounds of a language. Donovan and Pellegrino (2004: 33) explain that writing is at the heart of mastering the alphabetic system. Writing starts with the encoding of speech to print.

Olson (2009: viii) defines that writing is nothing more than thought on paper considered, organized thought. Rochberg (2004: 2) says that writing is therefore related the constellations to cuneiform signs from which one could read and derive meaning, and thus expresses the idea that written messages were encoded in celestial phenomena. Based on some definitions above, it can be concluded that writing is expressing the idea or message by putting appropriate letters and symbols on paper by processing thought and grammatical structures.

Kane (2000: 13-15) say that there are three rules in writing, they are: grammar, the rules which structure the language; usage, concerning how we should use the language in certain situations, mechanics, conventions of writing require that a sentence begins with a capital letter and end with full-stop punctuation (period, question mark, or exclamation point and so on). Bratcher and Ryan (2004: 19) say that writing takes into account context, content, structure, and mechanics, as well as process. (In a social studies context, we may focus only on content.).

Broad (2003: 6) also adds that writing consists of ideas: relevance, clarity, quantity, development, persuasiveness; form: organization and analysis; flavor: style, interest, sincerity; mechanics: specific errors in punctuation, grammar, etc.; wording: choice and arrangement of words. According to Hegarty (2000: 5), writing involves remembering the sequence of sounds, the shapes of the letters, vocabulary, grammatical structures, and punctuation. Jacobs mentions that there are five aspects of writing: content, organization, vocabulary, language use, and mechanics (Weigle, 2002: 114). Lieberman and Wood (2003: 19) defines that writing produces occasions to foreground and clarify thinking; to record, shape, and analyze experiences; to express internal lives; to explore ideas learned from others.

After considering writing components according to the experts, it can be concluded that writing components consist of content/ideas, organization, vocabulary, grammatical structure, and mechanics.

The effective teaching of writing is an essential component in any successful FL college. Reichelt's review of teaching practices around the world reveals the various purposes of FL writing instruction, including the

development of language skills as well as intellectual abilities related to critical thinking and cultural literacy (Manchón, 2009: 13). The ultimate goal of studying writing is not only to understand the process, but also to be able to inform teaching; therefore, it is important to relate writing behavior to the quality of the resulting text (Manchón, 2009: 96). To make good writing the lecturer should consider the process of writing itself. The process can be taught in writing class. The writing process according to Brown and Hood (1989: 10) describe that there are main stages of the writing process: preparing to write → drafting → revising.

Kendall and Khuon (2006: 4) states that the writing process are: prewriting → drafting → revising. Recently, some experts have different term for writing process, for instance Crawford, et al. (2005: 116) mention and add the writing process can be: rehearsing, drafting, revising, editing, and publishing. Rehearsing, it means that the act of finding a topic, gathering information, and collecting one's thoughts about the topic. Editing is the process of making a composition presentable before it is made public. During the editing phase paragraphs or pages may sometimes be cut or added, and the composition may have to be re-edited to ensure coherence (Crawford, et al. (2005: 116). And publishing or sharing a work with an audience, the act of sharing them can be a source of great pride for the author, and fire the whole enterprise of writing with intense motivation. Publishing thus serves another purpose: it enables students to see what others are doing, and becomes a means of informal teaching about composition among peers (Crawford, 2005: 117).

Prewriting, language learners learn to organize their writing by discussing and visualizing before they start. This involves providing experiences and comprehensible input that help students build background. Rohman as cited in McDonald and McDonald (2002: 3), is one of the first and one of the most clearly articulated of the essays published defining the beliefs and goals of that movement. Kendall and Khuon (2006: 4) say that prewriting encouraging kids to draw on their prior knowledge and schema by making connections between what they already know and what they are learning helps them develop as proficient writers.

Drafting, this offers students the opportunity to get their ideas down. It may be in writer's notebooks, on separate sheets of paper, or on the computer. Crawford, et al. (2005: 116) say that drafting is the act of setting ideas on paper in their initial form. The process is tentative and experimental. Writers display their ideas on paper or on a computer screen so they can see what they know and have to say about their topic.

Revising, according to Johnson (2008: 179-180) this is the heart of the writing process. Here a piece is revised and reshaped many times. The draft stage is like throwing a large blob of clay on the potter's wheel. Revising is where you shape the blob, adding parts, taking parts away, adding parts, and continually molding and changing. Here you look for flow and structure. You reread paragraphs and move things around. Basically those terms are similar except Crawford, et al. add publishing. In practice the process can be different from what the experts have explained orderly:

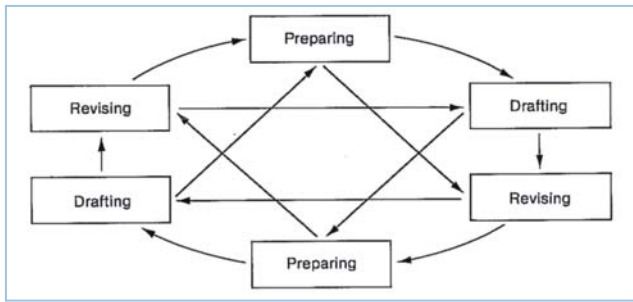


Fig. 1 Writing process in practice according to Brown and Hood

As a lecturer, he/she needs to monitor individual student's progress (Vargas, 2013: 114). Monitoring can be conducted by giving corrective feedback. Melzer (2009: 25) say that multilingual writers, especially Indonesian students may make errors in their writing that are different from those made by native English speakers (NES). For example, they may make the errors that NES also make, such as problems with spelling, with punctuation (commas, apostrophes, etc.), with subject-verb agreement, or with inappropriate word choice (using "conversational" language instead of "formal" language).

Students' writing sometimes needs to be corrected because the students are in learning language process so errors may occur this occasion, and it is believed that writing is difficult for those English as FL. Actually, before entering university, students have learned language for many years, but why they often have some errors in language skills. However, it is necessary that error correction can be conducted. To make clear of term of error correction in writing, the writer will provide some definitions according some linguists and professional educators.

Correction is viewed as feedback by most researchers (Mishra, 2005: 61) such as, Fergusson. He defines that correction is feedback on error. Ancker says that error feedback, also by the name of error correction, grammar correction, or Written Correction, can appear in different forms (Tsao, 2011). Murphy also considers correction to be feedback (Mishra, 2005: 61). He says:

Correction is a form of feedback to learners on their use of the language. Essentially it is neutral and may describe success or failure: because language in use exploits both form and function, it may be concerned with accuracy or fluency. Giving correction, the teacher attempts to help and improving learning; indeed, learners are reported to want correction and find it useful.

Direct feedback refers to overt correction of student's errors, that is, teachers locating and correcting errors for students. Teacher provides the student with the correct form (Ellis, 2009). Ferris as cited in Liu (2008) defines that direct correction is to provide the correct linguistic form for students (word, morpheme, phrase, rewritten sentence, deleted word[s] or morpheme[s]). Hyland and Hyland (2006: 83) say that direct feedback may take various forms, including crossing out an unnecessary word, phrase, or morpheme; inserting a missing word or morpheme; or writing the correct word or form near the erroneous form (e.g., above it or in the margin). Bartels (2005: 229) adds that direct correction is to point out the error and address it

with intracharacter component analysis, stroke, and repeated writing. Chandler (2003) on her research found that direct correction is best for producing accurate revisions, and students prefer it because it is the fastest and easiest way for them as well as the fastest way for teachers over several drafts.

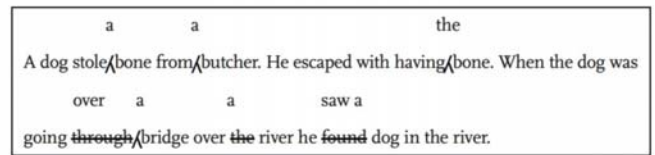


Fig. 2 Direct Written Correction

As evidenced from the literature, in recent years there has been a fair amount of interest in applying direct correction, and the impact direct correction proved the improvement of student writin. However, most studies have focused implemented of direct correction in EFL contexts. Chandler with his experiment as one evidence that direct correction significantly effects student writing. This recent study focuses on classroom action research by implementing direct correction in creative writing class at IKIP-PGRI Pontianak in the academic year 2015/2016.

III. METHODOLOGY

A. Participants

The study was conducted to the second semester with thirty students in the academic year 2015/2016. They came from a wide variety of language backgrounds and areas in West Kalimantan including Malay, Dayakness, and Javaness

B. Instruments and Data Collection

A mixed-method action research approach (Burns, 2010; Creswell, 2009; Creswell & Clark, 2011) was used in this study. Three instruments were developed for data collection: observation sheet, questionnaire, and writing test. To supplement and validate the questionnaire and record sheet data, the first author took detailed field notes throughout the study.

C. Data analysis

The participants' interview and lecturer's field notes (observation) were (a) read thoroughly, (b) thematically coded, (c) verified for coding accuracy, and then (d) quantified. The writing test was analyzed by using descriptive statistics (by mean score).

D. Procedure

The reason researcher used classroom action research method in this study because in line with the purpose of research is to improve the writing skills in the recount text. According to Lewin (in Yuliawati et al. (2012: 23) the key concepts in the classroom action research are four components: planning, acting, observing and reflecting.

In the planning stage, the researcher made some preparations of a class action by applying direct correction, namely: 1) Preparation of learning scenarios which contains steps in class activities set out in the form of lesson plan, 2) research instrument in the form of sheets of observation and interview guide, and writing test, and 3) determining the methods and techniques of learning.

In acting stage, the scenarios in which written correction was implemented in learning activity. While, the observatory was carried out to document everything related to the activities during the learning process. The researcher supported by an observer (professors as collaborators) to observe the concordance between learning plans and the implementation of a written correction in class. The observation outlined in the format of observations that have been prepared. Then, we corrected the student writings after they submitted their work.

In addition, reflection was made to see the whole process of the implementation of the actions and results of student understanding. Reflecting is analyzing the data obtained from observation. Reflection phase includes activities to understand, explain and conclude the data. Researcher and observers assessed the results of action for consideration whether the cycle has reached the criteria or not. Based on the result of reflection, the study was conducted in two cycles. Two cycles was deemed sufficient since researcher has already reached the desired target.

E. Result and discussion

This classroom action research conducted in two cycles. Each cycle cover topics about impressing experience in senoir high school, in the first cycle of learning indicators discussed about describing the recount text, while in the second cycle, the students were asked to write their impressing experience duirng in senoir high school.

At the end of each meeting, the the lecturer gave an evaluation to determine the extent to which improving student learning outcomes. Every learning process was carried out under the prevailing system and called for a change until it reaches the preset criteria. Problems learning in the class, more focused on improving student learning outcomes in the material properties of the light through writing stages. The research activities used appraisal formats such as: sheets activity assessment and student learning activities, as well as a list of values of student learning outcomes by administering the evaluation.

Implementation of the learning process in the classroom action research was conducted. The subjects of the course was recount text. The assessment were used in this study, namely in terms of the performance indicators set a 80% increase on the completeness criteria.

Based on the results of the reflection on the first cycle, the researcher in the implementation of the learning process was still weaknesses that the lecturer paid less attention to time allocation, and the explanation of the writing stages had not been optimal so that students in the group did not understand what to do in creating the idea, the lecturer was still not optimal in delivering the materials in accordance with the hierarchy of learning, the lecturer was also less trigger and maintain the involvement of the students, so that some students who were able to write, including students who excel, while other students felt less attention, and the lecturer should also make use of the whitebord to write down important words or phrases.

Then, in the learning activities, the students paid less attention to what was described, so that these activities tended to be undisciplined, then the students were lacking in providing questions to the lecturer about the subject matter. So, the writing test to find the learning outcome of the

students had not reached the expected performance indicators. Of weaknesses in the first cycle, then the second cycle of the researcher enhanced the strategies and activities such as learning, the lecturer uses the time efficiently or adjusted the use of time allocation when describing the material, as well as the implementation of writing draft.

At the time of going to finalize the draft, the lecturer offered the chance to the students to ask some questions to get better understanding on recont text. In the second cycle the researchers also further improved the quality of teaching so that learning process looked like an active, all the students were motivated and were delighted to receive the learning, because the lecturer was good at presenting the material in accordance with the hierarchy of learning as well as triggering and maintaining student involvement,. In addition, the lecturer asked the students to submit their work. the student writings were devided into two parts to make easy and quick in correcting the writing errors. The next week meeting, the students received their own work with the correction provided. The felt happy because they learned something new from what the lecuturer had corrected.

After receiving their work, the lecuterer had the students revise the writing, and submitted it again next meeting. The lecturer and collaborator checked again what the students had revised. The tabel 1 shows the description of the mean score of writing assessment both cycle one and two.

TABLE 1
MEAN SCORE OF WRITING ASSESSMENT

N	Cycle	Mean
36	One	67
36	Two	71

The the results of the data from the first cycle and the second cycle, it was proven that learning outcomes of students had increased both in the first cycle and the second cycle. In the first cycle, the researcher (or the lecturer) felt unsatisfied about the student mean score because only 17 students who attained 70 in score. While, in the second cycle, the mean score was improving alhtough the result was not really significant. The lecturer felt it was enough since 28 students got 70-75 even one student achieved 80 score.

These results indicates that by using demonstration method of learning outcomes of students has increased, both in terms of evaluation of learning outcomes, assessment of teacher activity and activity assessment of student learning. As well as in the second cycle is improving student learning outcomes have achieved mastery learning in accordance with pre-determined performance indicators. Therefore, action research, in science learning material properties of light using direct correction had been proven to be able to improve student learning outcomes.

In this section I present the discussion based on the proposition of the written correction which affect the students' improvement in writing accuracy. Both the students and the lecturer agree that providing written correction is advantageous in helping students improve their writing skills. The advantages of providing written correction reflect the interaction between the students and the lecturer. The results of the current research showed that there seemed to be a strong bond between providing

language learners with written correction and their writing accuracy. It is in line with the suggestion by Ferris as cited in Burke and Pieterick (2010: 21) that teacher commentary, error correction produce beneficial results. It is different from Truscott's argument that feedback is notably unsuccessful in helping to reduce error frequency in subsequent student writing (Ferris, 2005: 261)

Written correction pushes the learners towards noticing the linguistic problems that they are struggling with and that sometime they take for granted. However, Brookhart (2008: 1) suggests that good feedback is to give students information they need so they can understand where they are in their learning and what to do next—the cognitive factor. She also adds that once students feel they understand what to do and why, they develop a feeling that they have control over their own learning—the motivational factor. In other words, providing WCF prompts the learners to try and modify their developing writing system in line with the correction provided.

What improves students' writing accuracy? This question is delivered to explore how far WCF affects the students' improvement in writing accuracy. The students have different answers about what writing aspects become improved. First, WCF makes their grammar become better (Interview note, 24/12/2013). Grammar here refers to the set of rules that allow us to combine words in our language into larger units (Greenbaum and Nelson, 2002:1). Grammar plays important role in writing where students can put words in the right order. It is the central component of writing and mediates between the system of written symbols, on the one hand, and the system of meaning, on the other.

WCF is conducted to present the Standard English to the students where they have not been familiar with the correct rules, or perhaps, they are inaccurate in using grammar. However, correction is required with the analytic grammar which makes explicit the knowledge of the rules in which the students operate the language properly (Greenbaum and Nelson, 2002:1). Many students were marked down on their papers for grammatical errors. For example, verb tenses, modals+verb constructions, personal pronouns, the genitive 's, the "be" usage, article usage, -ed and -ing form, prepositional usage, pluralization of nouns, cohesive devices (found from the worksheets). Grammatical correction is essential for the students as the student will then understand the mistake they have made and learnt from it, and their ability to write accurately will improve.

However, Truscott argues strongly for the abolition of grammar correction (Ferris, 2005: 262) the appearance of Truscott's articles led to a published debate in 1999 in the *Journal of Second Language Writing*. Nevertheless, the problem is that if lecturer does not correct their students' grammatical mistakes, fossilization will occur, and it will become very difficult to later eliminate these errors. Therefore, grammar correction is required to help the students to understand more grammar and the students can improve the clarity and quality of their writing. Secondly, the lecturer conducts written correction on the content of student writing to help the students to write better. Concerning with the content correction, it goes in line with statement of Coffin et al. (2003: 105) which state that feedback on the content of the essay writing is lecturer's

concern which is a key area of this particular university course.

The correction from the lecturer makes the content of the text better because the sentences they make are well-organized. It has also been stated by Nation (2009: 137) that positive correction on the content of student writing can do a lot to increase the amount of writing that learners do and to improve their attitude to writing. The evidence that student writers who receive correction on content improved during revision as the study conducted by Aswell, Fathman and Whalley, Ferris as cited in Ferris (2005: 201).

The content in writing is important because it works to achieve the communicative purpose of the text (Nation, 2009:47) between writers and readers. However, clear use of language is essential in academic writing. Well-structured paragraphs and clear topic sentences enable a reader to follow the line of thinking without difficulty. It is what the students feel after receiving correction from the lecturer. "The content was better because of the well-formed sentences we made." (Interview note, 24/12/2013). Third, LWC helps students become more self-sufficient and aware of the elements that lead to successful writing.

Commenting on the organization of repairing in the language classroom, Seedhouse, as cited in Pawlak (2012: 143) points out that the focus of repair in meaning-and-fluency contexts is on establishing mutual understanding and negotiating meaning. The students feel that LWC make their writing well-organized (Interview note, 24/12/2013). In other words, a well-organized piece of writing supports readers by making it easy for them to follow, while a poorly organized piece leads readers through a maze of confusion and confounded or unmet expectations. Ferris (2005: 214) suggests that the organization of writing consists of three parts a clear beginning (introduction), middle (body), and end (conclusion) to the essay.

The beginning introduces the topic and clearly expresses the main idea. The body paragraphs include topic sentences that are directly tied to the main idea (thesis). Each body paragraph is well-organized and includes a topic sentence, supporting details, and a summary of the ideas. While, coherence devices (transitions, repetition, synonyms, pronoun reference, etc.) are used effectively within and between paragraphs. The conclusion ties the ideas in the body back to the thesis and summarizes why the issue is interesting or important. Fourth, the students become creative in determining the vocabulary in their writing because of LWC (Interview note, 24/12/2013). Most EFL students have limited vocabulary knowledge. However, the decontextualized vocabulary had indeed become a problem and something of a disincentive (East, 2008: 6) in writing.

Therefore, the commentary on vocabulary is important for EFL students as the lecturer's assistance gives information which relates to some semantic field, in which the students can use appropriate words based on the context. Since writing requires accurate and automatic word recognition skills, learners would need to be equipped with sufficient vocabulary knowledge to write well. From the explanation above, it can be inferred that LWC can help the students not only to have better clarity and quality of their grammatical structure but also to be able to create a meaningful content of the text because the sentences they make well-organized.

However, a well-organized piece of writing and contextual vocabulary in their writing can support readers by making it easy to follow. What types of written correction affect the improvement of writing accuracy? This is the last issue related to the types of written correction lecturer utilizes. This study was conducted to investigate what types of written correction used by the lecturer which can affect the students' improvement in writing accuracy.

However, Truscott (as cited in Ferris, 2005: 289) strongly argues that CF is ineffective or harmful because it consumes so much teacher and student energy and attention, taking time away from activities that could promote genuine learning. Many previous studies have proved the effectiveness of types of error correction. Kao (2013) and Farid and Abdul Samad (2012) on their experiments about the effectiveness between direct and indirect correction, it is known that direct correction is sufficient for students' acquisition of English article than those who receive indirect correction. On contrary, other studies conducted by Maleki and Eslami (2013), and Abedi, Latifi, Rassaei and Molinzadeh (2010) show that there is greater improvement in producing writing than those who received direct correction. Other types of correction are focused and unfocused correction. The studies related to unfocused CF group did not do better than the control group where accuracy in English articles was concerned (Farrokhi and Sattarpour, 2011; Sheen, Wright and Moldawa, 2009). While, Saeb's (2013) study shows that there is a significant improvement in accuracy for the two experimental groups from pretest to posttest. Also, the difference between the focused and unfocused groups in the posttest is not significant. These results suggested that providing written CF was effective for improving learners' grammatical accuracy and that focused and unfocused written CF were not of differential effect in this regard. Since both correction types are equally facilitative in increasing accuracy of preposition usage, lecturer may consider using them accordingly in writing tasks.

The best time to correct the student errors in writing is the final draft. The lecturer agreed that the most appropriate and effective of written correction is the one which offers optimal condition to help students notice their linguistic errors, understand them and incorporate the correct target language version in their own language. The experienced FL lecturer shared the feeling that correction makes tired and requires a great deal of time and effort. Written correction was tiring and required time. It is in accordance with Truscott's (1999) statement that correction absorbs enormous amounts of teachers' time and energy. Before giving correction, the lecturer gives an assignment to the students to make final draft of the writing text for one week. The next meeting their work has to be submitted to the lecturer. Correction ran for at least one week. So, the students receive their corrected work. In other words, the students are not involved in the correction process in the classroom. It contrasts to Krashen (1984) and Zamel (1985) in Ferris and Hedgcock (2005: 197) who conclude the effectiveness of teacher feedback and the likeliness to be used when it is provided on preliminary drafts for revision. However, my opinion is in line with Ferris and Hedgcock's (2005: 197) statement that feedback on earlier drafts is

formative, helping students to see where their developing text can be improved.

IV. CONCLUSION

To sum up, WCF affects the students not only to have better accuracy clarity and quality of their grammatical structure but also to able to create a meaningful content or organization of the text because the sentences they make well-organized. The lecturer and the collaborator used direct correction in correcting student errors in writing and it affected the students' improvement in writing accuracy. In addition, to what writing stage the correction should be given leads to the pros and cons. The recent study shows the fact that the lecturer gives written correction after the final drafts since, if the correction is conducted in preliminary draft, it would be time consuming. Correcting on the final draft can evaluate overall writing and provide the suggestion to the students to write better. Providing feedback on a final draft is intended to help the writer reflects on lessons learned that can be applied to future writing projects.

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DEVELOPING AN ADAPTIVE AND ENGAGING E-LEARNING MEDIA FOR E-LEARNING COURSE IN HIGHER EDUCATION

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Abstract. This study aims to: (1) produce an adaptive and engaging e-learning media suitable to the needs of the students and lecturers for e-learning course; (2) reveal the appropriateness of developed adaptive and engaging e-learning for e-learning subjects; (3) find out the effectiveness of teaching using the developed adaptive and engaging e-learning media for e-learning subjects based on learning styles. The study employed Alessi and Trollip's research and development model consisting of the stages of planning, design, and development. The tryout product subjects in the study were 30 students and 2 lecturer in the Study Program of PTIK, IKIP PGRI Pontianak. The data collecting instruments were an interview guideline, a media appropriateness questionnaire, a student response questionnaire and an achievement test. The results of the study are as follows. (1) The developed product is an adaptive and engaging e-learning media with the address website ikipptik.com. (2) The whole results of the validation by the media expert, materials expert show that the product is appropriate to use with a mean score of >3.40 , which is very good. The result of the tryout students shows a mean score of 3.38, which is good. (3) Regarding the learning outcomes, the mean score is 71.33.

Keywords: adaptive and engaging e-learning, learning styles, online learning, e-learning course

I. INTRODUCTION

Information technology development becomes a supporting power for a potential progress in the implementation of learning in higher education, especially for learning implemented by online. By online learning through e-learning, students are able to learn widely, more knowledge and insight grasped, enhancing effectiveness, efficiency and flexibility and e-learning is also able to position students as the center of active learning. It goes along with the concept of andragogic implemented in higher education, that students play the key role as active learners. (Dewey in Conrad and Donaldson, 2004:3). According to Rosenberg (2006:72), e-learning is the use of Internet technologies to create and deliver a rich learning environment. Moreover, e-learning is often related to remote learning, a learning on the basis of web, and et cetera (Khan, 2005:3). Therefore, through e-learning, the students are able to learn anywhere at any time without limited to the restriction of space and time via internet technology on the basis of web.

One of several developments of e-learning system is adaptive e-learning. In e-learning adaptive system, the learning materials are adjusted to the learning style according to visual, auditory and kinesthetic basis, and are combined with sequential learning style which means that it learns the material in a sequential order, step-by-step and global is otherwise (Surjono, 2015:21). A feature that differs from e learning adaptive-system is that in the system, there is provided learning adaptation effect according to each individual in learning (Mustafa and Sharif, 2011:20). The importance of learning style applied in learning may help the students in understanding course's materials and giving a hand for the lecturers in delivering their teaching materials optimally which will not be monotone to all of their students.

A high-quality e-learning needs to be equipped with multiple activities which make the students are content and enjoy the learning process so that it becomes an engaging e-learning (Surjono,2015:23). According to Conrad & Donaldson, 2004:7), engaging is defined as an involvement to actively participate in the situation of learning. Engaging related closely with the involvement from the students in online learning through activities conducted in e-learning. It was concluded that the adaptive and engaging e-learning media is a media e-learning is based on the concept of learning styles, and the availability of learning through engagement activity..

A problem occurring upon the students who are taking e-learning course in the study program of PTIK IKIP PGRI Pontianak is that the implementation of learning is still focusing on the lecturer and the students are tend to act passively. E-learning media has not been designed in a variety of learning styles. There is absence of activities used in supporting students' involvement in e-learning. And the study results are still considered as low. According to the problems above, the researcher offers a solution to develop the adaptive and engaging media of e-learning.

The importance of adaptive and engaging media of e-learning shall be developed since it is able to provide appropriate learning materials pursuant to the characteristics of student's learning style whether it is visual, auditory or kinesthetic. Engaging e-learning means that there is activities supporting student's involvement in the process of learning. Adaptive and engaging e-learning media in this research are implemented in the form of blended e-learning, which refers to learning models combined face-to-face via offline and online learning (Sutopo, 2012:4). The implementation on the e-learning course is meant for the students to have understanding and skills in creating e-learning media, in

addition to in accordance with the course taken and being studied.

This research aims to: (1) generate adaptive and engaging e-learning media pursuant to the needs of the students and lecturer in e-learning courses; (2) identify the appropriateness of adaptive and engaging e-learning media; (3) identify the effectiveness of learning using adaptive and engaging e-learning media in the e-learning courses according to learning styles.

II. RESEARCH METHOD

The development of adaptive and engaging e-learning media is included in Research and Development (R & D) research type. This media development uses allies and trollip models through three steps consisting of planning, design and development.

TABLE 1
STAGES IN PRODUCT DEVELOPMENT

Step 1 Planning	Step 2 Design	Step 3 Development
a. Defining product scope.	a. Developing ideas.	a. Preparing texts.
b. Identifying characteristics of the students, lecturers and supporting resources.	b. Conducting analysis on the concept of learning instruments and the materials of e-learning course.	b. Combining parts.
c. Determining obstacles.	c. Translating the results of analysis on the needs of system according to the variety of learning styles and analysis of materials to generate the design considered as representing the whole requirements	c. Preparing subject matters.
d. Estimating costs.	d. Creating design of flow chart, layout and storyboard.	d. Creating product.
e. Creating planning documents.	e. Determining design of display.	e. Conducting alpha test (validation of media experts and material experts), going for the first revision.
f. Determining and collecting sources.	f. Approval from the users about product design.	f. Conducting beta test by testing the products of the 5 students then implementing final revision.
g. Implementing initial discussion.	g. Evaluation and revision is conducted on each aspect.	g. Product trial and conducting a summative evaluation in the form of response, activity and learning result test.
h. Determining planning for product display		
i. Obtaining approval from users whether it fits their needs.		

(Alessi and Trollip, 2001).

In addition, this research utilized experiment class using adaptive and engaging e-learning media and control class using conventional e-learning media as a comparison which may exhibit the level of learning effectiveness generated. Moreover, the experimental design used is quasi experimental using the randomized posttest-only control group design, using matched subject design.

A. Research Subject

The samples are taken randomly in every class category. The tryout product subjects in the study were 30 students of C-morning class in VI (sixth), attending e-learning course and 2 lecturer in the Study Program of PTIK, IKIP PGRI Pontianak

B. Instrument and Data Collection Technique

Data collection technique in this research employed direct communication technique via interview guidelines instrument. Indirect communication technique is implemented by means of an instrument using self-administered questionnaire to identify the quantity of adaptive and engaging e-learning product provided for media experts, material experts and students (alpha test and beta test). Measurement technique is conducted in the form of posttest after implementing learning provided for experimental class and control class.

III. FINDINGS AND DISCUSSION

Product development result comes up in the form of adaptive and engaging e-learning media created according to the needs of the students and lecturer in e-learning course. This product is created using html, php, javascript, CSS, Jquery programming languages. Materials presentation is provided in a visual form that is in video tutorial which was created using active presenter application. Presentation of materials in auditory learning style is using powerpoint presentation and its audio in the form of narrator using voice recorder. Material presentation in kinesthetic learning style was provided in the form of simulation using adobe flash CS 6.

The product result comes up in the form of web designed to exhibit the learning styles, providing a responsive web page display. It is equipped with navigation menu buttons in horizontal, vertical and drop-down shapes, consisting of feedback, hint, chat, forum, course, task, logout, help and questionnaire. Activities come up in the form of chat, forum, tasking and quizzes. The creation of class and course for e-learning course, data for students and lecturer, chart for learning styles questionnaires, timeline and assessment and account registration system which may be conducted by the administrator. The product is resulted in the website address *ikiptik.com*

A. Descriptive Analysis

The result of product appropriateness obtained from alpha test, which is validation process conducted by media experts of which the final score average is 3.54, in excellent product appropriateness category and to the material experts which obtaining the final score average of 3.94 in excellent product appropriateness category. Meanwhile, the result of beta test validation (5 students) generated the final score of 3.57 in

excellent product appropriateness category.

The whole results of product appropriateness can be seen in figure 1.

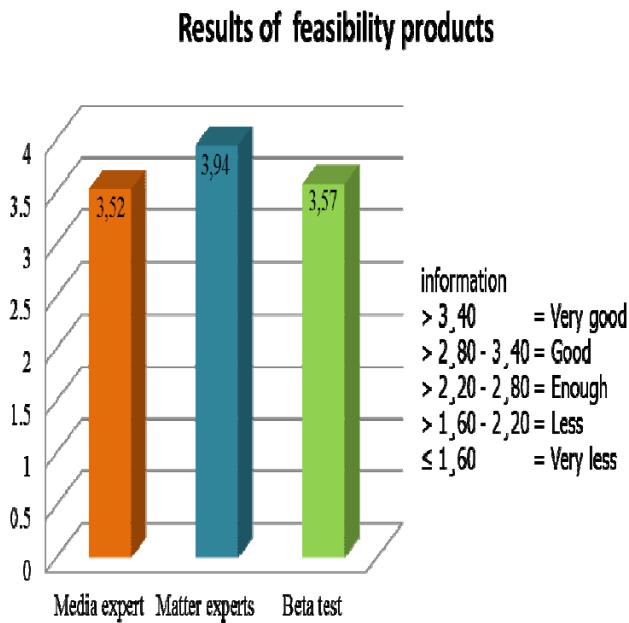


Fig. 1 Results of feasibility products

Product assessment result from media experts, material experts and students are in the score average of > 3.40 in excellent product appropriateness category as a whole and the results exceed minimum score of 2.20-2.80, so it means that the product is appropriate for use. Moreover, it is conducted product revision according to the suggestions and recommendation for revision consists of grammar fixes legibility, suitability of materials, the addition of ditugas ratings, user quizzes, and shape of chatting. The next product is eligible for used..

Display for adaptive and engaging e-learning media can be seen on figure 2.

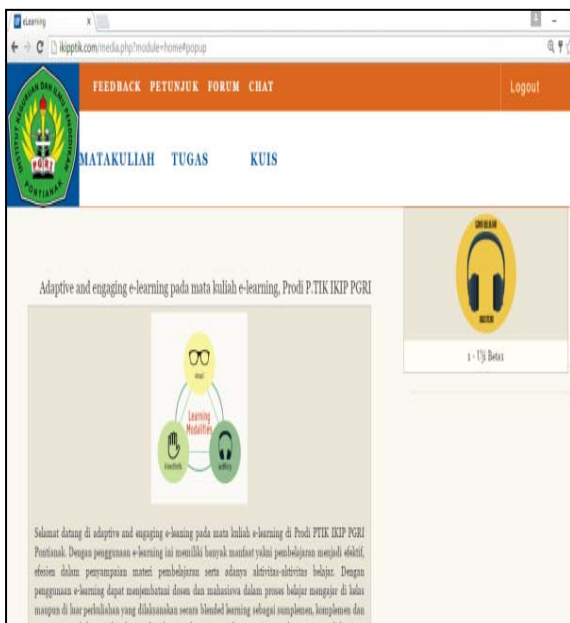


Fig. 2 Adaptive and engaging e-learning media

Display for questionnaire learning styles can be seen on figure 3.

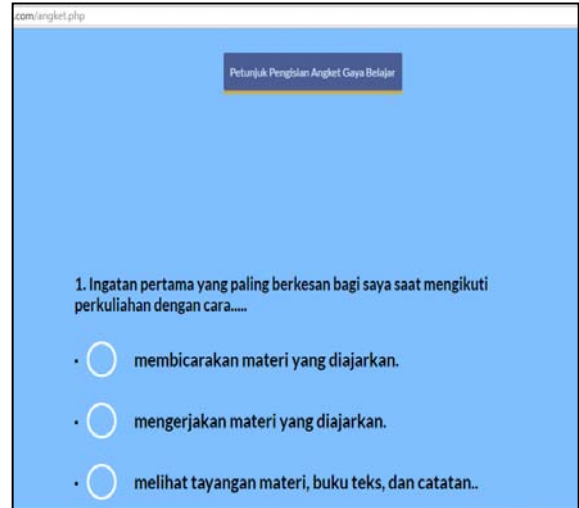


Fig. 3 Questionnaire learning styles

Display for e-learning course materials in visual learning style can be seen on figure 4.

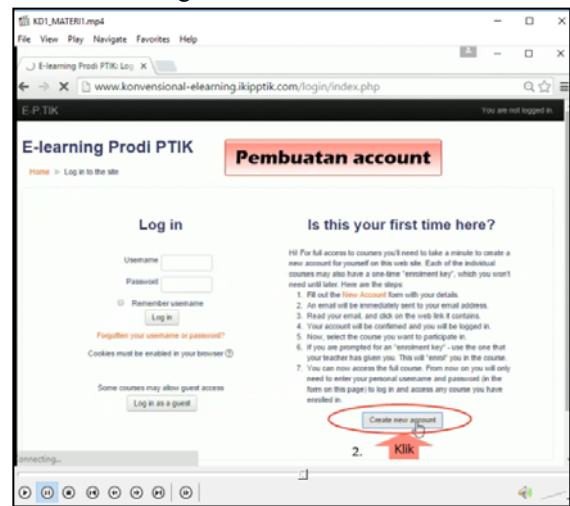


Fig. 4 Materials in visual learning style

Display for e-learning course materials in auditory learning style can be seen on figure 5.

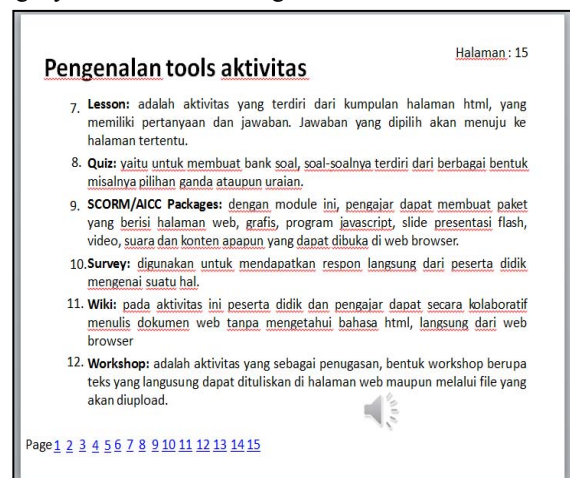


Fig. 5 Materials in auditory learning style

Display for e-learning course materials in kinesthetic learning style can be seen on figure 6.

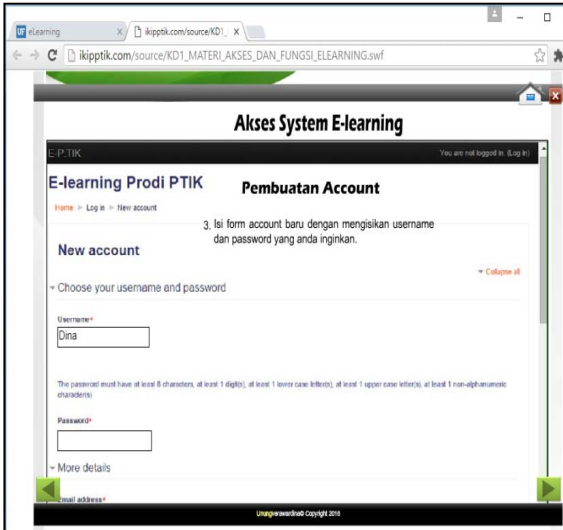


Fig. 6 Materials in kinesthetic learning style

Display for forum activity can be seen on figure 7.

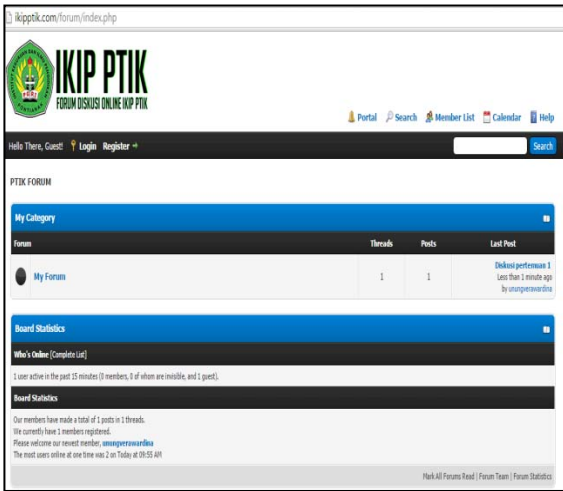


Fig. 7 Forum activity

Display for chatt activity can be seen on figure 8.

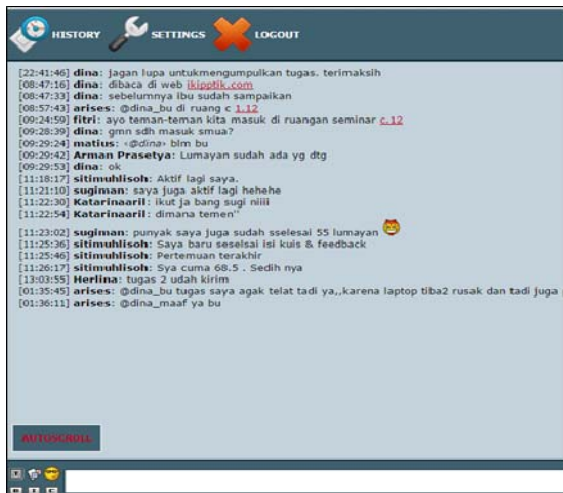


Fig. 8 Chatt activity

Display for assignment activity can be seen on figure 9.

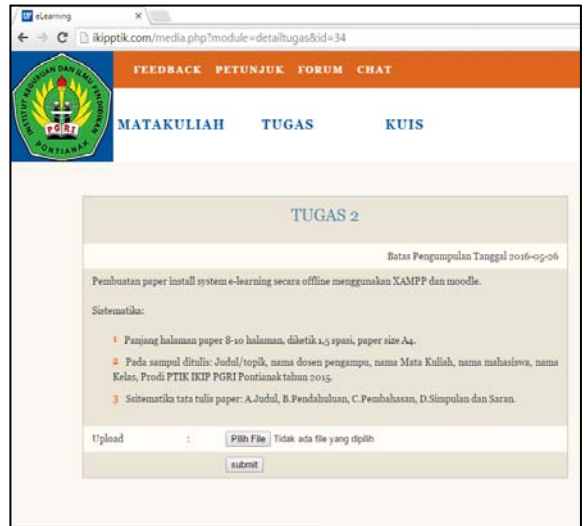


Fig. 9 Assignment activity

Display for quiz activity can be seen on figure 10.

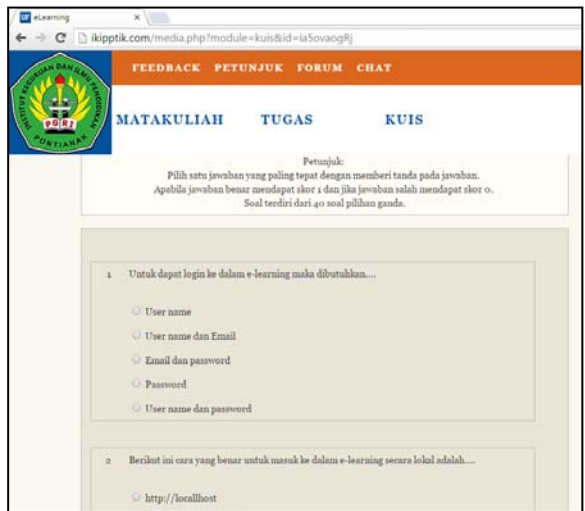


Fig. 10 Quiz activity

Display for page lecturers can be seen on figure 11.

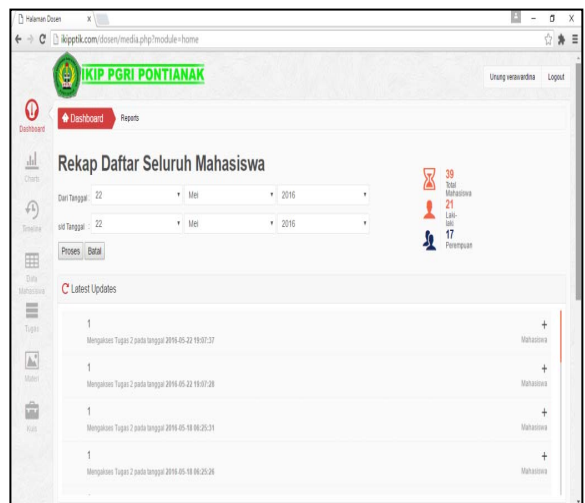


Fig. 11. Page lecturers

After the product validated and considered as appropriate for use, the product, later on, is applied in the learning in the form of blended learning, which for its learning application is conducted for three meetings in-class e-learning course according to lecturing schedule and in unlimited time outside of the class. Students can access the media with login via pin given, then completed a questionnaire to determine the learning style whether visual, auditory or kinesthetic, then the system will display the material according to learning style scores obtained. And access activities in the form of chat, forums, assignments and quizzes.

The trial activity on product of adaptive and engaging e-learning media which has been applied in the lecturing resulting data as follow: The results of trial response on adaptive and engaging e-learning media obtain a final score average of 3.36 in good product category.

Learning result generated is the result from post-test score in experimental class of which the total is as many as 2140, the average is 71.33 and standard deviation is 7.82. Meanwhile the result from control class learning shows the total as many as 1801.25, the average is 62.11, and standard deviation is 10.57. According to the learning results specified previously, the experimental class performs better compared to control class.

B. Analysis Requirements Test

Analysis technique utilized in this research is homogeneity test, normality test and t-test. From the result of homogeneity test, it can be seen that the post test score for class category s 0.303 can be assumed and defined as homogeneous since the significance value is $0.303 > 0.050$. Normality test using the calculation of Kolmogorov-Smirnov test generates that the scores for experimental class and control class shows the scores of 0.200 and $0.188 > 0.05$ respectively. According to the result, the data is considered as normal-distributed. Meanwhile in order to identify whether there is difference in the results of experimental class score to control class score, the calculation using t-test is needed. It is obtained that $t_{\text{counted}} = 3.753$ and $t_{\text{table}} = 1.697$. $T_{\text{counted}} > t_{\text{table}}$ or $3.753 > 1.697$, then the H_a is accepted and H_o shall be rejected. It is concluded that there is difference between the results of students learning taught using adaptive and engaging e-learning media and the results of students learning taught using conventional e-learning media.

IV. CONCLUSION AND SUGGESTION

Product for adaptive and engaging e-learning media generated is a learning media in electronic form which is created according to visual, auditory and kinesthetic learning styles. The presence of facility on learning involvement through activities in the form of chat, forum, tasking and quizzes. The results of adaptive and engaging e-learning media can be accessed at *ikipptik.com*. An adaptive and engaging e-learning media appropriateness achieving appropriateness level at the average score of > 3.40 in excellent appropriateness category. Media effectiveness result through the score of students' learning result in experimental class is as many as 71.33 which means that it is better compared to control class which shows the score of 62.11.

Product utilization suggestions media utilization can be maximized in the other courses in the form of blended learning so that the learning process can be conducted anywhere at any time without limited to the space and time. Adding various activities of learning in the media. Consistent in presenting the materials according to the variety of students' learning style and conducting updates on teaching materials. Managing media maintenance, such as system security, hosting capacity and media content management. It can be added for the results of tasks and quizzes assessment which can be exported in the form of word, excel and pdf.

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LANGUAGE ATTITUDE AND THE SELECTION OF THE LANGUAGE OF URBAN STUDENTS IN IKIP PGRI PONTIANAK

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Abstract : The purpose of this study is to describe the attitude of the language and the selection of the language student urban Educational status of language and literature of IKIP PGRI Pontianak Indonesia. The methods used in this research is descriptive method. Samples obtained as many as 86 people from the entire population by using the technique of random. The data obtained through observation and question form. Data analysis techniques using a calculation of average and percentage. The results showed that (1) 94% positive attitude towards urban students mother tongue (2) 76% positive attitude towards urban students of Malay dialect of Pontianak, (3) 63% urban students behave positively toward other regional languages, (4) 90% urban students be positive towards language of Indonesia, (5) 86% urban students choose to use language with friends who came from the same area in the situation of the talks that are emotional topics of conversation, personal settings, and the talk in houses.

Kata kunci : Language Attitude, the selection of language. Urban Student

I. INTRODUCTION

One feature that distinguishes human beings with other living beings is the ability in terms of language usage. Language is one of the symptoms of social, both as a communication tool and as a way to identify social groups. View of de Saussure (1989:16) which mentions that the language is one of the Community institutions, in common with other civic institutions, such as marriage, inheritance of property remains, and so forth have beckoning of the importance of attention to social dimensions of language.

Current studies about the science of Sociolinguistics in great demand and its development is very fast. Because it examines language Sociolinguistics associate with civic dimension. From the perspective of Sociolinguistics phenomenon of language attitudes (language attitude) in a multilingual society is a symptom that is interesting to be reviewed, because through the language attitudes can determine the survival of the language.

Country Indonesia is known as a country that has a compound or heterogeneous population. This can be seen from the Kemajemukan tribes, customs, religion, skin color, and language. Diversity in terms of languages of Indonesia society resulted in a bilingual society became even multilingual. Cause factor kemultilingualan Indonesia society is due to the displacement of the population, ethnic, interracial marriage and education.

Demikain also students IKIP PGRI Pontianak which basically each have a mother tongue according to their origin. This condition makes the students master the language of the respective languages, namely Dayak, Malay, Chinese, Javanese, Madurese and in accordance with their origin. These languages have a sub-sub tribes making it more dialects of each language. Based on data obtained from the

Public Administration and Civil Service Bureau showed that the students of IKIP PGRI Pontianak from different tribes and ethnic variety in the area of West Kalimantan. These facts show that the interests of society to educated at IKIP PGRI Pontianak was very large although there have been many colleges in various districts of West Kalimantan. The interest of students for studying in the city of Pontianak resulted in their becoming multilingual community namely the community who controlled more than two languages. Factors of urbanization have students be multilingual since driven by the need to socialize with local people who use the language daily i.e. Malay Pontianak.

As Expat residents so it is not surprising that efforts arose to learn local languages so that they can socialize with a community/indigenous population. These efforts arise as a manifestation of the human need to memepertahankan his life. The needs are no less important is the need to communicate with other people as social beings always want to socialize with the new environment he enters (Elva Sulastriana, 2003:2). Education Program student of language and literature of IKIP PGRI Pontianak Indonesia originating from different areas and lived in Pontianak in their education for a little over five years would have to adapt to the surrounding communities which use Malay dialects of Pontianak.

In general people in the world use two languages or two dialects or variations in daily communication, when the two languages or two dialects or variations used someone interchangeably in daily life can lead to language, dialect, and the variations of touch each other or the mutual influence. This is known as contact languages. As expressed by Weinreich (1968:1) that two or more languages are in contact is called the language in the languages that dipegunakan interchangeably by the same person. This

means that contact languages happen to people who use those languages.

Other events from the influence of factors being bilingual is the tendency of speakers *dwibahasawan* to select the language. That is the tendency of speakers for changing the language or variety or dialect of one language or variety or dialect of the other. This is usually caused by a factor of the situation and needs of the language.

Based on the above background, this research aims to know the language and attitude of students in urban language selection IKIP PGRI Pontianak. Urban students because students said IKIP PGRI Pontianak 60% comes from the district and sub-district, then lived in Pontianak (West Kalimantan provincial capital).

The limitations of language attitude *dikemukakan* by Lambert (1967:91-102) that the attitude consists of three components, namely, (a) a cognitive component is associated with knowledge and ideas used in the process of thinking, (b) the components of the affective concerns the problem of the assessment of like or dislike something, and (c) the components of the *konatif* regarding the conduct or conduct as the final award through the components of this is people usually try to surmise how the attitude of a person against a State of which it faces.

Through these three components, people usually try to surmise how the attitude of a person towards a situation that is being faced. The third component of this attitude are generally closely related. However, often experience the "fun" or "unpleasant" obtained someone within the community led to the relationship these three components that are not in line. When these three components were in line, then it could be foreseen that behavior shows attitude. But if it's not in line, then in that case the behavior cannot be used to find out the attitude. Many experts who did say that the behavior is not necessarily showing the attitude.

According to Garvin and Mathiot there are three characteristic attitude the language as described (a) Fidelity languages (language loyalty) that encourage the community of the language *memertahankan* language, and if necessary to prevent the existence of the influence of other languages, (b) the pride of languages (language pride) that encourages people to develop their language and *menggunakanya* as a symbol of identity and unity of the community, (c) the awareness of the existence of norms of language (awareness of the norm) that encourages people to use language carefully and manners and is a huge factor in its effect on the Act i.e. the usefulness of language activities (*linguae* use).

The third trait expressed Garvin and Mathiot above is the characteristics of a positive attitude towards language. Conversely, if the third characteristic of the attitude of that language already disappeared or weakening of a person or of a group of community members said, it means a negative attitude towards the language have plagued people or group.

Will be the case with the selection of language, Fasold (Chaer, 2010:78) suggested several factors that can affect the selection of language, among other things: (a) the ability of the speakers, the speakers will more typically use language more lands, (b) the ability of the listener, usually also speakers tend to use the language used by the listener, this occurs when speakers of both first and second language, (c)

the age, the more mature people tend to use a second language to indicate a sense of ownership to a place (d) social status, in certain situations a person is going to use a language that show high social strata, (e) the degree of relationship, each time someone uses a language at the first meeting, but use other languages when the relationship is getting closer, (f) ethnic relations, one sometimes speaks a language with ethnicity, *se-people* (g) pressure from outside, if a language is not favored in a society for a reason This language, then the owner will only use the language in the home such as *stealth*, (h) place, sometimes the selection language by using the principle of the Division of integrative, using the first language in the home, and the second language outside of the House for example.

In relation to the linguistic situation in Indonesia, the study of the selection of languages in the community in Indonesia is concerned with problems of language usage in bilingual or multilingual society because of the linguistic situation in Indonesia at least society is characterized by the use of two languages, i.e. local languages as mother tongue (on most community Indonesia), Indonesia language as the national language, and foreign languages. Determinants of electoral language Ervin-Trip (Suwito, 1985:125) identifies four main factors which led to the election of the following languages (a) the situation and setting (time and place), (b) a participant in the interaction, that include things such as: age, gender, occupation, socioeconomic status, national origin, ethnicity, background, and its role in relation to the other participants, (c) the topic of conversation.

II. METHOD

This research is descriptive-qualitative method with sociolinguistic approach. The population in this research is the whole urban student semester V prodi IKIP PGRI Pontianak from different counties throughout West Kalimantan Province of 430 people. Using random sampling techniques, obtained a sample of 86 people. The data obtained using the technique of direct communication in the form of direct observation and question form, which is then processed by using the calculation of the percentage.

III. DISCUSSION

A. Based on the settings of the talks

a. Inside the House

Students use the mother tongue with a friend who comes from the same area and has long been known by 90% while in the House. This is done because they have familiarity or the sense of family that high, given as a fellow nomads who came from the same area. A high sense of family is a mirror of the loyalty and pride towards the language. In this case students proud and true to our mother tongue. Kesadaran will be the origin of the area becomes a factor for them in maintaining the use of the mother tongue outside the area of origin.

The use of the mother tongue by 60% in the House are retained when talking with other people who recently became known, though *sebahasa URibu*.hal this was done because even though it comes from the same area they consider the degree of relationship, each time someone uses

a language at the first meeting, but use other languages when the relationship is getting closer.

The use of other regional languages, dialects of Malay Pontianak Indonesia language and performed by 10% by the student at home if they use the word or the term of the present that is not in their native language. Use of the mother tongue is done differently if they meet with a different gender. The mother tongue of 40% is used by students when dealing with other kinds of friends, and children under them, although he said the partners speak the same mother.

b. Outside the home

Outside the House, 87% of students using everyday language and bahasa Indonesia with a familiar friend or acquaintance although it has the same mother tongue. This means that 13% of students use the mother tongue when it is outside of the House to a friend who has long been known as well as acquaintance. The use of the mother tongue in the home due to decreased intensitasnya luat reasons the ability of listeners. Usually the speakers tend to use the language used by the listener, in this environment where the student speaks i.e. Vampires, many of which have a different mother tongue. So the reason the place is sometimes a consideration of language selection by using the principle of the Division of integrative, using the first language in the home, and the second language outside of the home.

B. Based on the situation of the talks

a. Serious

Students use the mother tongue with fellow friends talk a fellow mother tongue in the House when discussing things seriously (79%), using a language dialect of vampires (2%), and Indonesia (9%). The use of the mother tongue of intensitasnya is quite high because they talk about serious issues such as family, and finances. Family matters is considered the problem a secret so that the use of the mother tongue intended to maintain confidentiality.

Different case if the students different mother tongues, then when talking about serious things in the House are not at all using the mother tongue, recalling friends interlocutor did not speak with the same speaker (0%). They are more likely to use a language dialect of Pontianak (37%), Indonesia (58%), and other regional languages (5%). Language use and the language dialect of Pontianak Indonesia because the partners talk alike lived in Pontianak so speakers looked more effectively using language that is equally understandable by speakers and partners of the interlocutor.

Outside the House while maintaining the mother tongue of students with sebahasa friends mom when discussing serious matters (27%). The use of a language dialect of Pontianak higher than the use of the mother tongue (54%), considering the place of the talks is outside the home disekelilingnya-speaking communities are heterogeneous. While the use of the language of Indonesia is lower than the use of both languages (19%). The reason for using the language because there are things that the secret nature but also not much serious talk about outside the House.

However, if the student outside the House talking with a different mother tongue, when discussing things seriously no way using the mother tongue (0%) and other areas (0%).

More students using the language dialect of Pontianak (75%), and Indonesia by 25%. Language use and the language of Pontianak Indonesia dialect when discussing serious matters with friends of different origin, because keeping the distance between the pembicar with the listeners of different mother tongues. So the use of the language and the language of Pontianak Indonesia dialect considered more effective so that misunderstandings do not occur.

b. Relaxed

Situasi pembicaraan yang santai membuat mahasiswa menurunkan intensitas penggunaan bahasa ibunya meskipun di dalam rumah dengan teman bicara sebahsa ibu (60%) dibandingkan dengan pembicaraan yang serius. Mereka bahkan menggunakan alternative bahasa lainnya seperti bahasa dialek Pontianak (20%), bahasa daerah lainnya (5%), bahasa Indonesia (15%). Hal ini dilakukan karena pembicaraan yang santai meliputi senda gurau dan olok-olok saja sehingga penggunaan bahasa disesuaikan dengan istilah atau kosakata bahasa-bahasa tersebut yang sudah mereka kuasai selama berada di Pontianak.

Demikian pula ketika mahasiswa membicarakan hal-hal yang bersifat santai dengan teman berbeda bahasa ibu di dalam rumah, bahasa ibu tetap dipertahankan (15%) meskipun tidak banyak yang menggunakan namun hal ini berarti bahwa mitra bicara mengajak teman bicara untuk "masuk" ke dalam area kedaerahan pembicara ketika bersenda gurau dan berolok-olok dengan menyelipkan kata atau istilah dari bahasa ibu pembicara. Namun penggunaan bahasa Indonesia (35%) dan bahasa dialek Pontianak lebih tinggi (50%) penggunaannya di dalam rumah, hal ini karena situasi santai di dalam rumah tidak membicarakan yang bersifat rahasia.

The use of a language dialect of Pontianak (60%) and Indonesia (25%) are more dominant than the mother tongue (15%) when students are in casual talks with friends situation sebahasa the use of the mother tongue mother retained even though students are out of the House. This reflects their loyalty towards his native language. Similarly mother tongue retained its use by 8% of students when outside the House with different interlocutors mother tongue while in a relaxed situation. Nevertheless the language dialect of Pontianak remained more dominant pemakiannya (76%), as well as the language of Indonesia (16%). This indicates that the use of the languages and dialects of Pontianak Indonesia became the choice of the wearer due to consider where they are located.

c. Emotional

The situation of the talks that the emotional make owners more menggunakannya mother tongue in the home (89%) with a fellow mother tongue, compared to the use of language dialect of vampires (2%) and Indonesia (9%). This suggests that talks which involves the emotions like anger, disappointed, happy, sad, or happy with their home language is expressed.

Not the case when the owner of the mother tongues spoken with different mother tongues despite the talks conducted in the House. More students using the language dialect of Pontianak (58%), Indonesia (39%), and other regional languages (3%). This shows that the student is not at all use the language his mother when expressing disappointment, sadness, happiness, and other emotional

situations with a different native language talk, even though it is inside the home.

The use of the mother tongue remains high (65%) are done by the student when situations of emotional talks outside the House with my mother, the sebahasa dialect of Pontianak (20%), Indonesia (15%). These data demonstrate that loyalty and pride against the mother tongue is done when a student expresses sorrow and happiness with my mother's sebahasa although berbada outdoors. Pride and loyalty accompanies students in expressing happiness or sadness when they are out of the House with their cognate.

Instead of the use of the language of Indonesia (50%) are more widely used by students when they are talking with different mother tongues outside the home. Similarly the Furbish dialect of Pontianak (35%) remains in use. The second language is given that they are in the home luau with partners speak a different first language anyway so pemakain both languages become more dominant than the other languages. In spite of the mother tongue (5%) and other areas (10%) retained in expressing their emotions when outside the home.

C. Based On The Subject

a. Personal

Use of languages on the basis of the subject personally carried students home with my friend sebahasa mother using the mother tongue of 85%, the language dialect of Pontianak 10%, other 4% regional language, and language of Indonesia 1%. This fact indicates that the student's mother sebahasa presume that they are important to use mother tongue when they talk about personal problems, personal problems relating to confidentiality between the speaker and the listener's fellow ethnic.

Instead the use of a language based on personal topics of conversation with friends of different origin, students are not at all using the mother tongue. Students tend to use bahasa Indonesia (72%), language dialect of Pontianak 25%, other 3% regional language. This fact shows that students consider the ability of the listener a different mother tongue, so usually the speakers also tend to use the language used by the listener, this occurs when speakers of both first and second languages.

The use of the mother tongue of intensitasnya decreased compared to (13%), the use of languages of Indonesia (36%) and language dialects of Pontianak (35%) occupying almost the same position, even other areas of language use (16%) higher than the use of the mother tongue. This shows that consideration of the setting outside the home will affect attitudes and language selection. The setting or settings outside the home of the community from a variety of ethnic, and mastery of a second language (bahasa Indonesia), and adaptability with housing in Pontianak they already mastered resulted in the use of the mother tongue be decreased, even though their interlocutors came from a fellow mother tongue.

Similarly, the use of the languages of Indonesia (88%) of students using it when they talk about private matters outside the home with a different mother tongue. Language dialect of Pontianak is also quite widely used by students (35%) outside the House although they discuss personal topics. Consideration of mastery of a second language, the language of Indonesia and Malay Pontianak dialect more selected

student when outside the home. Other considerations because the interlocutors not sebahasa mother. The mother tongue is not used at all (0%).

b. General

The use of language is based on the general topic of conversation in the House by fellow language user language used respondent as much as 36%, language dialect of Pontianak, Indonesia 22% 35% and 5% other languages. This fact shows that when speakers talk about their general topics not fixated on one use of language alone, but all of the languages they can speak and is used even though the talks were conducted in the House.

The intensity of the use of mother tongues in no way used by speakers when they meet with the different interlocutors mother tongue although the talks conducted in the House. This appears from the following data. The use of a language dialect of Pontianak Indonesia language of 30%, 55%, other 15% regional language, and language (0%).

Almost similar when public speaking is done outside the home. Speakers use the mother tongue (5%), language dialect of Pontianak 36% < 3% other local languages, languages of Indonesia 56%. This shows that Indonesia is more dominant language used when talking about things that are common outdoors though with my sebahasa mother. Likewise, the data shows the use of the language outside the House with different interlocutors, more respondents using the language of Indonesia (83%), language dialect of Pontianak, 12% other areas 5%. This fact shows that the respondents prefer a second language bahasa Indonesia when membicarakan topik in general outdoors for example on campus.

IV. CONCLUSIONS

Based on the data that has been collected and analyzed it can be disimpulkan that (1) 94% positive attitude towards urban students mother tongue (2) 76% positive attitude towards urban students of Malay dialect of Pontianak, (3) 63% urban students behave positively toward other regional languages, (4) 90% urban students be positive towards language of Indonesia, (5) 86% urban students choose to use language with friends who came from the same area in the situation of the talks that are emotional topics of conversation, personal settings, and the talk in houses.

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ANALYSIS OF COMPETENCE EXAM MASTER (UKG) TEACHER IN ECONOMIC SMA IN JAKARTA

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Abstract: End of 2015 is the time for Indonesia to enter the ASEAN Economic Community (AEC) which will take place between 10 integration Southeast Asian countries. With the MEA is expected the Indonesian economy will be better by expanding market share. Applicability MEA does not only affect the free trade sector, but also workers who make the various ASEAN countries freely compete to fill a variety of sectors across the ASEAN countries. To be able to compete with other ASEAN countries, Indonesia must have qualified human resources. One effort to do that is through the development of education in Indonesia to print high quality human resources. Strategic education in Indonesia is the existence of Guru. Teachers become a major actor in the success of education in Indonesia. The Ministry of Education and Culture, under the Directorate General of Teachers and Education Personnel continually strive to improve the quality of teachers, including teacher professionalism made a map that illustrates the mastery of competencies, through a competency test teachers (UKG) periodically, which began in 2012. At the same time, Economics teachers also must have the capability required by the Act, competent professionals and Pedagogy. Therefore this study aims to assess the extent to which a portrait of competence Master Economics high school level in the area of East Jakarta, as a barometer of Indonesia, policies regarding the model and implementation strategy Development Profession Sustainable (PKB) through the results of evaluation of the implementation of the UKG in 2015, and how the Planning Development of Teacher Competency. The research method used was the study of documents and deep interviews, using descriptive statistics.

Keywords: Education, Economy, Competence, Teacher

I. INTRODUCTION

Indonesia is one of the countries that are members of the ASEAN Economic Community (AEC) or the ASEAN Economic Community (AEC) which implemented by the end of 2015. the impact of the enactment of MEA is the creation of a free market in capital, goods and services, and labor. Thus Indonesia will not only compete with domestic labor, but also to compete with workers from the countries of Southeast Asia.

While MEA is applied, the Indonesian people are also required to be creativity and of a high quality to be 'good' and able to compete with ASEAN countries. But look at the reality of today, Indonesia apparently still not ready to face the MEA to be carried out within a few months. There are still many workers in Indonesia who need to be equipped with education and training to improve their skills and their quality.

Given the important role of education to produce qualified human resources, the government needs to put the development of the education sector as a top priority for print-quality human resources. Various efforts have been done in order to support government development such as education, primary schools in remote, launched a program of compulsory education, provide assistance in the form of BOS and BOP, increase the number of graduation requirements, and tighten the accreditation of schools to enhance the qualification of human resources. However, it appears that these efforts have not shown satisfactory results.

Teachers as educators is an important key in improving the quality of education. Overall, the quality of education starting from the quality of their lessons the teacher. According to data of Ministry of National Education in 2010, there were more than 54% of teachers have kualifikasi standards that need to be improved and 13.19% in the condition of school buildings need to be repaired.

Table 1. Rate of Literacy

Negara	2011	2012	2013
Brunei Darussalam	6.4	6.8	7.2
Cambodia	6.7	9.7	0.7
Indonesia	3.0	3.3	4.1
Lao PDR	-	-	9.0
Malaysia	3.9	4.1	4.2
Myanmar	5.0	5.6	5.1
Philippines	-	-	-
Singapore	6.2	6.4	6.5
Thailand	-	-	-

Viet Nam	4.2	4.7	4.8
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in line with the above description, it is important to do research on the ability, competence of teachers in Indonesia, and the factors that influence it. Therefore, researchers interested in studying about the mapping of teacher competency test results (UKG) Master Economic School in East Jakarta in 2015.

Problem Formulation

Based the identification of problems are found, we propose the following research question: How high school economics teacher competence mapping in East Jakarta?

How policy on the model and implementation strategy Profession Sustainable Development (PKB) through the results of evaluation of the implementation of the UKG, 2015? How Teachers Competency Development Planning?

A. Education

etymological terms, education is derived from the Greek "paedagogike". It is a compound word consisting of the word "pais" meaning "child" and the word "ago" means "I lead". So paedagogike berarti I guide children. People who work with the intention of guiding children take him to a place of learning, in Greek is called "paedagogos". So education is an attempt to guide the children. The definition of other education proposed by Tilaar (2002: 435) states that "the essence of education is to humanize humans, a process which sees humans as a whole in its existence". Observing the statement of Tilaar can be obtained a description that in the educational process, there is the process of teaching and learning, so the education evident process of formation of a human is more human. In the National Education Act No. 20 of 2003 Article 1, paragraph 1 states that:

Based on some sense education has been described above it can be concluded that education is a conscious effort planned to be able to develop their potential, adds to the experience and to improve the ability to become a man of intelligence, character, morals, dignity and become fully human.

B. Educators

Teacher sare one human component in the learning process, which had a role in the formation of the business potential of human resources in the field of development. Therefore, a teacher who is one element in the field of education must play an active and placing his position as professional staff, in accordance with the demands of the growing community. In a special sense it can be said that in every one of the teacher is liable to bring students to a maturity or level of maturity of the particular.

In general, to become a teacher must have the skills and competence in the mereka ajarkan.

Teachers are professional educators with the task The main educating, teaching, guiding, directing, train and evaluate students (Article 1 of Law no. 14 of 2005). Undeniably, that one important factor in creating a system of quality education and relevant is the teacher as the spearhead

in carrying out the mission of education in schools (Silverius, 2000 in Education statistics 2009).

C. Competency Test Teacher(UKG)

Competency Test Guru is ratings the competence of teachers as part of teacher performance appraisal in order of rank and jabatannya.Uji career guidance teacher competence to function as mapping the competency of teachers (pedagogical and professional), as the basis for Sustainable Development program Profession (PKB) and part of the process of performance assessment and competency (PKK) [Kemendikbud, Directorate GTK, UKG Guidelines 2015].

II. METHOD

ex post facto method chosen in this study because of the method according to the research objectives to be achieved, namely to obtain information related to the status of symptoms when the research was done. Methods of ex post facto can be used to define the interrelationships between the various variables at the time of the study or studies done.

The collection or data collection is the recording of events - events or things - things or information - information or characteristics - characteristics of some or all elements of the population that will support or supporting research (Hasan, 2002). Data collection methods used in this research is the study of the documentation later if the data, and also to dig deep interview UKG implementation evaluation and planning of teacher competence development.

The study documentation is data collection techniques that are not directly addressed the subject of research, but through the document. Documents that can be used can be diaries, personal letters, meeting minutes report, the case records in social work and other documents (Hasan, 2002).

III. RESULT AND DISCUSSION

A. Quantitative Data Description

Description of the research data is done by describing some descriptive statistics of vari- variables measured in this study. The descriptive statistics were used to describe the data that is the size of data concentration and size distribution data. Measures of central tendency of data includes the value of the arithmetic mean (mean), median and mode. While the size of data dissemination includes the range and standard deviation.

In addition to sharing some descriptive statistics, this section also presents data research variables in a frequency distribution table groups and histogram.Penyajian results of descriptive statistical analysis starts from the Teacher Competency Mapping Test Results (UKG) competence pedagogy, professional competence, combined competence and pedagogical professionals by gender, public and private schools, levels of education, teachers' status of civil servants or non-civil servants, and certification status.

1. Mapping results UKG by gender

a. Results UKG competence Pedagogy Master men

Based on the measurement of results UKG Competence Pedagogy Master men, as presented in table IV.1 above can be seen that the resulting data UKG Competence Pedagogy Master males had a score of 27.78 to 100 range. That is, empirically lowest score 27.78 and the highest score of 100, with a score range of 72.22. The average value of the results of UKG Competence Pedagogy Master Male at 58.65; median of 55.56, and the mode of 50.93. Standard deviation or standard deviation score results UKG Competence Pedagogy Master Men of 1.54.

b. Results UKG Professional Competence Master Men

Based on the measurement results to the results UKG Professional Competence Master Men, as contained in the table above can be seen IV.2 that the resulting data UKG Professional Competence Master males had a score of range. 29.76 to 91.27 That is, empirically the lowest score and the highest score 91.27 29.76 with a score range of 61.51. The average value of the results UKG Professional Competence Master Men of 70.17; median of 73.41, and the mode of 73.41. Standard deviation or standard deviation score results UKG Professional Competence Master Men of variance 1.36 to 185.24.

c. Results UKG Pedagogy and Professional Competence Master Men

Based on the measurement results to the results UKG Pedagogy and Professional Competence Master Men, as IV.3 contained in the table above can be seen that the resulting data UKG in Professional Competence Pedagogy and Master males had a score of range. 29.17 to 93.89 That is, empirically the lowest score and the highest score 93.89 29.17 with a score range of 64.72. The average value of the results UKG Pedagogy and Professional Competence Master Male at 66.71; median of 69.44, and the mode of 69.44. Standard deviation or standard deviation score results UKG Pedagogy and Professional Competence Master Men of variance 1.26 to 157.83.

d. Results UKG Competence Pedagogy Master Women

Based on the measurement of results of UKG Competence Pedagogy Master Women, as contained in table IV.4 above can be seen that the resulting data UKG Competence Pedagogy Master Women have a score of range. 13.89 to 97.22 That is, empirically the lowest score and the highest score 97.22 13.89 with a score range of 83.33. The average value of the results of UKG Competence Pedagogy Master Women at 56.94; median of 55.56, and the mode of 50.94. Standard deviation or standard deviation score results UKG Competence Pedagogy Master Women by 1.65 to 271.00 variance.

e. Results UKG Women Teachers Professional Competence

Based on the measurement results to the results UKG Professional Competence Master Women, as contained in the table above can be seen that IV.5 UKG data of Professional Competence Master Women have a score of range. 31.75 to 97.22 That is, empirically the lowest score and the highest score 97.22 31.75 with a score range of

65.47. The average value of the results UKG Women's Professional Competence Master of 70.17; median of 73.41, and the mode of 73.41. Standard deviation or standard deviation score results UKG Women Teachers Professional Competence of 1.36 to 186.15 variance.

f. Results UKG Competence Pedagogy and Professional Women Teachers

Based on the measurement of results UKG Pedagogy and Professional Competence Master of Women, as contained in table IV.6 above can be seen that the resulting data UKG Competence Pedagogy and Professional Women Teachers have scores range 31.94 to from 90.28. That is, empirically the lowest score and the highest score 90.28 31.94 with a score range of 58.34. The average value of the results of UKG Competence Pedagogy and Professional Women Teachers at 66.20; median of 68.06 and 66.67 mode. Standard deviation or standard deviation score results UKG Competence Pedagogy and Professional Women Teachers of 1.31 to variance. 171.77

2. Mapping Results UKG Based Home School

a. UKG Results Teacher Competence Pedagogy SMA

Based on the measurement results to the results of Pedagogy Teacher Competency UKG SMA, as IV.7 contained in the table above can be seen that the resulting data UKG Competence Pedagogy Master SMA has a score range from 13.89 to 97.22. That is, empirically the lowest score 13.89 and the highest score 97.22 with a score range of 83.33. The average value of the results of UKG Competence Pedagogy Master SMA at 57.88; median of 55.56, and the mode of 55.56. Standard deviation or standard deviation score results UKG Competence Pedagogy Master SMA of 284.28 with a variance 1.68.

b. Results UKG Public School Teachers Professional Competence

Based on the measurement results to the results UKG Professional Competence Master of SMA, as contained in table IV.8 in above it can be seen that the resulting data UKG Teacher Professional Competence SMA has a range of scores 37,70 to 97.22. That is, empirically the lowest score 37,70 and the highest score of 97.22 with a score range of 59.52. The average value of the results UKG Teacher Professional Competence SMA at 72.05; median of 73.41, and the mode of 77.38. Standard deviation or standard deviation score results UKG Teacher Professional Competence SMA of 1.23 variance to 149.85.

c. Results UKG Pedagogy and Professional Competence of State School Teachers

Based on the measurement results to the results UKG Pedagogy and Professional Competence Master of SMA, as contained in the table IV.9 above can be seen that the resulting data UKG Pedagogy and Professional Competence Master SMA has a range of scores 37,50 to 90.28. That is, empirically the lowest score 37,50 and the highest score of 90.28 with a score range of 52.78. The average value of the results UKG Pedagogy and Professional Competence Master SMA at 67.80; median of 69.44, and the mode of 70.83. Standard deviation or standard deviation score results

UKG Pedagogy and Professional Competence Master SMA by 1.21 to 146.54variance.

d. Results UKG Private High School Teacher Competence Pedagogy

Based on the measurement results to the results of UKG Competence Pedagogy Private high school teachers, as presented in table IV.10 the above it can be seen that the resulting data UKG Competence Pedagogy Private high school teachers have a range of scores 27,78-100. That is, empirically the lowest score 27,78 and a highest score of 100 with a score range of 72.22. The average value of the results UKG Private High School Teacher Competencies Pedagogy at 57.02; median of 55.56, and the mode of 50.93. Standard deviation or standard deviation score results UKG Private High School Teacher Competencies Pedagogy of 1.53 to 233.34variance.

e. Results UKG Private School Teachers Professional Competence

Based on the measurement results to the results UKG Private High School Teacher Professional Competence, as contained in the table above can be seen IV.11 that the resulting data UKG Private High School Teacher Professional Competency has a range of scores 29,76 to 91.27. That is, empirically the lowest score 29,76 and the highest score of 91.27 with a score range of 61,51. The average value of the results UKG Private High School Teacher Professional Competence at 67.93; median of 73.41, and the mode of 73.41. Standard deviation or standard deviation score results UKG Private High School Teacher Professional Competence 1.48 to 219.21variance.

f. Results UKG Pedagogy and Professional Competence of Private School Teachers

Based on the measurement results to the results UKG Pedagogy and Professional Competence of Private high school teacher, as contained in the table IV.12 above can be seen that the resulting data UKG Pedagogy and Professional Competence of Private School Teachers have a range of scores 29,17 to 93.89. That is, empirically the lowest score 29,17 and the highest score of 93.89 with a score range of 64,72. The average value of the results UKG Pedagogy and Professional Competence of Private School Teachers at 64.66; median of 68.06, and the mode of 68.06. Standard deviation or standard deviation score results UKG Professional Competence of Private High School Teacher of 1.36 with variance 186.57.

3. Mapping Results UKG Based Education Qualifications

a. UKG Results High School Teacher Competence Pedagogy Graduates S2

Based on the measurement results to the results of UKG Competence Pedagogy Teacher High School graduates S2, as contained in the table above can be seen that IV.13 N valid data as many as 46 pieces, while the data is missing or lost data is 0. This means that all data is valid and ready for processing. According to the table VI.13 well known that the resulting data UKG Teacher Competencies Pedagogy High School graduate S2 has a range of scores 23,15 to 97.22. That

is, empirically the lowest score 23,15 and the highest score of 97.22 with a score range of 74.07. The average value of the results of UKG Competence Pedagogy Teacher High School graduates S2 at 59.78; median of 57.87, and the mode of 69.44. Standard deviation or standard deviation score results UKG Competence Pedagogy Teacher High School graduates of S2 with a variance 1.69286.46.

b. Results UKG Professional Competence Teacher High School Graduates S2

Based on the measurement results to the results UKG Professional Competence Teacher High School graduates S2, as presented in Table IV .14 above can be seen that the N data is valid as many as 46 pieces, while the data is missing or lost data is 0. This means that all data is valid and ready for processing. According to the table VI.14 well known that the resulting data UKG Professional Competence Teacher High School graduates S2 has a score range from 39.68 to 97.22. That is, empirically the lowest score 39,68 and the highest score of 97.22 with a score range of 57,54. The average value of the results UKG Professional Competence Teacher High School graduates S2 at 70.95; median of 72.42, and the mode of 81.35. Standard deviation or standard deviation score results UKG Professional Competence Teacher High School graduates S2 with a variance 1,47216.12.

c. Results UKG Pedagogy and Professional Competence Teacher High School Graduates S2

Based on the measurement results to the results UKG Pedagogy and Professional Competence Teacher High School Graduates S2, as IV.15 contained in the table above can be seen that the resulting data UKG Pedagogy and Professional Competence Teacher High School Graduates S2 has a score range from 38.89 to 90.28. That is, empirically the lowest score 38,89 and the highest score of 90.28 with a score range of 51,39. The average value of the results UKG Pedagogy and Professional Competence Teacher High School Graduates S2 at 67.60; median of 69.44, and the mode of 62.50. Standard deviation or standard deviation score results UKG Professional Competence Teacher High School Graduates S2 of 195.06 with a variance 1.39.

d. Results UKG Competence Pedagogy Teacher High School Graduates S1

Based on the measurement results to the results of UKG Competence Pedagogy Teacher High School graduates S1, as presented in Table IV .16 above can be seen that the N data is valid as many as 186 pieces, while the data is missing or lost data is 0. This means that all data is valid and ready for processing. According to the table VI.16 well known that the resulting data UKG Teacher Competencies Pedagogy High School graduate S1 has a range of score. 13.89-100 That is, empirically lowest score 13.89 and the highest score of 100 with a score of 86.11range.

e. Results UKG Professional Competence Teacher High School Graduates S1

Based on the measurement results to the results UKG High School graduate Master of Professional Competence

S1, as contained in the table above can be seen that IV.17 N valid data as many as 186 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table VI.17 well known that the resulting data UKG Professional Competence Teacher High School graduates S1 has a score range 29.76-91.27. That is, empirically the lowest score 29.76 and the highest score 91.27 with a score range of 61.51.

f. Results UKG Pedagogy and Professional Competence

Teacher High School Graduates S1
Based on the measurement results to the results UKG Pedagogy and Professional Competence Teacher High School Graduates S1, as contained in table IV.18 above can be seen that the resulting data UKG Pedagogy and Professional Competence S1 graduate high school teacher had a score of range. 29.17 to 93.89 That is, empirically the lowest score 29.17 and the highest score 93.89 with a score range of 64.72. The average value of the results UKG Pedagogy and Professional Competence Teacher High School Graduates S1 at 66.28; median of 68.06, and the mode of 70.83. Standard deviation or standard deviation score results UKG Pedagogy and Professional Competence Teacher High School Graduates S1 of 158.51 with a variance 1.25.

g. Results UKG Pedagogy Teacher Competency High School Diploma and the

Based measurement results to the results of UKG Competence Pedagogy high school teacher and high school graduates DIII, as IV.19 contained in the table above can be seen that the resulting data UKG Teacher Competencies Pedagogy High School graduate High School Diploma and has a range of score. 37.04-83.33 That is, empirically the lowest score 37.04 and the highest score 83.33 with a score range of 46.29. The average value of the results of UKG Competence Pedagogy high school teacher and high school graduate Diploma at 57.87; median of 60.19, and the mode of 60.19. Standard deviation or standard deviation score results UKG Competence Pedagogy Teacher High School Graduates DIII and SMA at 1.67 with variance 280.69.

f. Results UKG Professional Competence Teacher High School Graduate Diploma and School

Based on the measurement results to the results UKG Professional Competence Teacher High School Graduates DIII and high school, as contained in IV.20 table above can be seen that the resulting data UKG Professional Competence Teacher High School Graduates High School Diploma and have a range of scores from 39.68 to 71.43. That is, empirically the lowest score 39.68 and the highest score 71.43 with a score range of 31.75. The average value of the results UKG Professional Competence high school teacher and high school graduate Diploma at 60.19; median of 67.46, and the mode of 71.43. Standard deviation or standard deviation score results UKG Professional Competence Teacher High School Graduate Diploma and High School at 1:45 with a variance of 212.09.

g. Results UKG Competence Pedagogy and Professional Teacher High School Graduate Diploma and School

Based on the measurement results to the results of UKG Competence Pedagogy and Professional Teacher High School Graduate Diploma and High School, as contained in the table IV.21 above can be seen that the resulting data UKG Pedagogy and Professional Competence Teacher High School Graduates High School Diploma and have a range of scores from 40.28 to 70.83. That is, empirically the lowest score 40.28 and the highest score 70.83 with a score range of 30.55. The average value of the results UKG Pedagogy and Professional Competence high school teacher and high school graduate Diploma at 59.49; median of 68.06, and the mode of 68.06. Standard deviation or standard deviation score results UKG Professional Competence high school teacher and high school graduates DIII 1.44 to 207.10 variance.

4. Mapping Results UKG Based Teacher Status PNS / CPNS and Non-Civil

a. Results UKG Pedagogy High School Teacher Competency PNS / CPNS

Based on the results measurement of the results of High School Teachers' Professional Competence UKG PNS / CPNS, as presented in table IV.23 above can be seen that the N data is valid as many as 114 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processed. According to the table VI.23 well known that the resulting data UKG High School Teacher Professional Competence PNS / CPNS has a score range from 37.70 to 95.24. That is, empirically the lowest score 37.70 and the highest score 95.24 with a score range of 57.54.

b. Results UKG Pedagogy and Teacher Professional Competency PNS / CPNS

Based on the measurement results to the results of Pedagogy and Professional Competence UKG high school teacher PNS / CPNS, as presented in table IV.24 above can be seen that the N data is valid as many as 114 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table VI.24 well known that the resulting data UKG Pedagogy and Professional Competence high school teacher PNS / CPNS has a score range from 37.50 to 90.28. That is, empirically the lowest score 37.50 and the highest score 90.28 with a score range of 52.78.

c. Results UKG Private Teacher Competence Pedagogy

Based on the measurement of results UKG Private Teacher Competence Pedagogy, as presented in Table IV.25 above can note that N valid data as many as 124 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table VI.25 well known that the resulting data UKG Competence Pedagogy Private Teachers have scores range from 27.78 to 100. That is, empirically lowest score 27.78 and the highest score of 100 with a score range of 72.22.

d. Results UKG Private Teacher Professional Competence

Based on the measurement results to the results UKG Private Teacher Professional Competence, as presented in Table IV.26 above can be seen that N valid data as many as

124 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table VI.26 well known that the resulting data UKG Private Teacher Professional Competency has a score range from 29.76 to 97.22. That is, empirically the lowest score 29.76 and the highest score 97.22 with a score range of 67.46.

e. Results UKG Pedagogy and Professional Competence of Private Teachers

Based on the measurement of results of Pedagogy and Professional Competence UKG Private Teachers, as presented in Table IV .27 above can be seen that the N data is valid as many as 124 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table VI.27 well known that the resulting data UKG Pedagogy and Professional Competence of Private Teachers have scores range from 29.17 to 93.89. That is, empirically the lowest score 29.17 and the highest score 93.89 with a score range of 64.72.

5. Mapping Results Based Certification Status UKG

a. Results UKG Pedagogy Master Certified Competence

Based on the measurement results to the results of Pedagogy Master Certified Competence UKG, as contained in table IV.28 above can be seen that the N data is valid as many as 178 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table VI.28 well known that the resulting data UKG Pedagogy Master Certified Competence has a score range of 13.89-100. That is, empirically lowest score 13.89 and the highest score of 100 with a score of 86.11 range.

b. Results UKG Certified Master Professional Competence

Based on the measurement results to the results UKG Certified Master Professional Competence, as presented in Table IV.29 above can be seen that the N Data valid by 178 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. Based on Table IV.29 is also known that the resulting data UKG Certified Master Professional Competence has a score range from 29.76 to 95.24. That is, empirically the lowest score 29.76 and the highest score 95.24 with a score range of 65.48.

c. Results UKG Pedagogy and Professional Competency Teacher Certified

Based measurement results to the results UKG Pedagogy and Professional Competence Certified Master, as presented in Table IV .30 diatas can be seen that the N data is valid as many as 178 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table IV.30 well known that the resulting data UKG Pedagogy and Professional Competence Certified Master has a score range from 29.17 to 93.89. That is, empirically the lowest score 29.17 and the highest score 93.89 with a score range of 64.72.

d. Results UKG Pedagogy Teacher Not Certified Competence

Based on the measurement results to the results of UKG Competence Pedagogy Master Certified yet, as contained in the table IV.31 diatas it can be seen that the N data is valid as many as 60 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table IV.31 well known that the resulting data UKG Competence Pedagogy Master Certified yet have a score range from 27.78 to 87.96. That is, empirically the lowest score 27.78 and the highest score 87.96 with a score range of 60.18.

e. Results UKG Not Certified Master Professional Competence

Based on the measurement results to the results UKG Certified Professional Competence Master yet, as contained in the table IV. 32 above it can be seen that the N data is valid as many as 60 pieces, while the data is *missing* or lost data is 0. This means that all data is valid and ready for processing. According to the table IV.32 well known that the resulting data UKG Certified Professional Competence Master yet had a score range from 31.75 to 97.22. That is, empirically the lowest score 31.75 and the highest score 97.22 with a score range of 65.47.

f. Results UKG Pedagogy and Professional Competence Master Certified yet

Based on the measurement results to the results UKG Pedagogy and Professional Competence Certified Master yet, as contained in IV.33 table above can be seen that the N data is valid as many as 60 pieces, while the data is *missing* or lost data is 0. this means that all data is valid and ready for processing. According to the table IV.33 well known that the resulting data UKG Pedagogy and Professional Competence Certified Master yet had a score of range. 31.94 to 90.28 That is, empirically the lowest score 31.94 and the highest score 90.28 with a score range of

g. Recapitulation UKG Outcome Mapping Based Certification Status

Table II. Rekapitulasi UKG Outcome Mapping Based Certification Status

		A	B	C	D	E	F
N	Valid	178	178	178	60	60	60
	Missing	0	0	0	0	0	0
Mean		57,52	70,03	66,28	57,40	70,57	66,62
Median		55,56	73,41	68,06	55,56	73,41	69,44
Mode		55,56	73,41	62,50	50,93	73,41	68,06
Std. Deviation		15,96	13,71	13,07	16,75	13,38	12,50
Variance		254,70	188,02	170,96	280,50	179,13	156,40
Range		86,11	65,48	64,72	60,18	65,47	58,34
Minimum		13,89	29,76	29,17	27,78	31,75	31,94
Maximum		100,00	95,24	93,89	87,96	97,22	90,28

Description:

- A = Results UKG Competence Pedagogy Master Certified
- B = Results UKG Professional Competence Certified Master
- C = Results UKG Competence Pedagogy and Professional Certified Master
- D = Results UKG Competence Pedagogy Teacher Not Certified
- E = Result UKG Professional Competence Teacher Not Certified
- F = Result UKG Competence Pedagogy and Professional Teacher Not to Certified

6. UKG outcome Mapping by Age

a. Teachers Age 30-40 Years

Based on the measurement results to the results of UKG Competence Pedagogy, Professional, and Pedagogy and Professional Teacher Age 30-40 Years, as contained in the table above can be seen that IV.35 N data invalid many as 47 pieces, while the data is *missing* or lost data is 0. this means that all data is valid and ready for processing.

According to the table IV.35 well known that the resulting data UKG Pedagogy Teacher Competency Age 30-40 Years has a range of scores 27, 78 to 87.96. That is, empirically the lowest score 27.78 and the highest score 87.96 with a score of 60.18 range.

According to the table IV.35 in mind that the resulting data UKG Teacher Professional Competence Ages 30-40 Years have scores range from 31.75 to 97,22. That is, empirically the lowest score 31.75 and the highest score 97.22 with a score of 65.47 range.

According to the table IV.35 in mind that the resulting data UKG Pedagogy and Teacher Professional Competency Age 30-40 Years has a range of scores 31.94-90.28. That is, empirically the lowest score 31.94 and the highest score 90.28 with a score range of 58,34.

Based on the measurement results to the results of UKG Competence Pedagogy, Professional, and Pedagogy and Professional Teacher Age 41-50 Years, as contained in the table IV.36 above can be seen that the N data is valid as many as 82 pieces, while the data is *missing* or lost data is 0. this means that all data is valid and ready for processing.

According to the table IV.37 in mind that the resulting data UKG Pedagogy Teacher Competency Age 41-50 Years has a score range from 27.78 to 100. That is, empirically lowest score 27.78 and the highest score of 100 with a score range of 72,22.

According to the table IV.38 in mind that the resulting data UKG Teacher Professional Competence Ages 41-50 Years have scores range from 37.70 to 91.27, That is, empirically the lowest score 37.70 and the highest score 91.27 with a score of 53.57 range.

According to the table IV.36 in mind that the resulting data UKG Pedagogy and Teacher Professional Competency Age 41-50 Years own range of scores 34.72-93.89. That is, empirically the lowest score 34.72 and the highest score 93.89 with a score of range 59.17. As for the average value of the results UKG Pedagogy and Teacher Professional Competency Age 41-50 Years 68,38; median of 70.13, and the mode of 73.61. Standard deviation or standard deviation score results UKG Pedagogy and Teacher Professional Competency Age 41-50 amounted to 12.57 with variance 158.09.

b. Teacher Age 51-60 Years

Based on the measurement results to the results of UKG Competence Pedagogy, Professional, and Pedagogy and Professional Master's Age 51-60 Years, as contained in the table can be seen that the N IV.37 diatas valid data as much as 109 pieces, while the data is *missing* or lost data is 0. this means that all data is valid and ready for processing.

According to the table IV.37 unknown that the resulting data UKG Pedagogy Teacher Competency Age

51-60 Years has a score range from 29.76 to 87.96. That is, empirically the lowest score 29.76 and the highest score 87.96 with a score of range 74.07. As for the average value of the results of UKG Competence Pedagogy Teacher Age 51-60 Years of 51.56; median of 50.93, and the mode of 50.93. Standard deviation or standard deviation score results UKG Age 51-60 Competence Pedagogy Teacher of 15.41 to 237.47 variance.

According to the table IV.37 in mind that the resulting data UKG Teacher Professional Competence Ages 51-60 Years has a score range 13,89-95.24. That is, empirically the lowest score 13.89 and the highest score 95.24 with a score of range 65.48. As for the average value of the results UKG Teacher Professional Competence Age 51-60 Years of 67.06; median of 71.43, and the mode of 63.49. Standard deviation or standard deviation score results UKG Age 51-60 Teacher Professional Competence of 15.27 to 233.44 variance.

According to the table IV.37 in mind that the resulting data UKG Pedagogy and Teacher Professional Competency age range 51-60 years have score of a 29, 17 to 88.89. That is, empirically the lowest score 13.89 and the highest score 88.89 with a score of range 59.72. As for the average value of the results UKG Pedagogy and Teacher Professional Competency Age 51-60 Years of 62.41; median of 65.28, and the mode of 70.83. Standard deviation or standard deviation score results UKG Pedagogy and Teacher Professional Competency Age 51-60 amounted to 13.87 with variance 192.47.

B. Qualitative Data Description

1. Master Perception UKG by

Mr / Mrs teacher sees that UKG has the benefit that is to measure the ability of teachers in accordance with matter of teaching and help teachers be better prepared to make the teaching and teachers become more confident in educating the children of the nation. However, after the implementation of the UKG, no follow-up to the teachers who score below KKM UKG. So impressed just want to spend government funds at the end of the year alone.

2. Preparation UKG by Teacher

Preparation done by Mr / Mrs teacher in the face of UKG is a lot of reading and relearn various materials tested, especially material pedagogik.

3. Implementation UKG according Teacher

In the implementation of UKG years 2015 went smoothly, but the facilities are still inadequate as some computers are supposed to be used in the implementation is still no *error*, too many questions that seem ambiguous and do not have the answers.

4. Evaluation and follow-up

follow-up is expected is that the government follow up on teachers that scored below the KKM, also offered training so that teachers become more prepared and confident in carrying out the UKG. Besides training for teachers with a variety of speakers who are

competent so that teachers become more professional in teaching.

5. Planning Teacher competency of future measures of teacher competence should be more comprehensive as mandated by law that the competence includes 4: pedagogy, professional, social and personality, That means measuring the periodic quarterly and there must be sustainability in maintaining and raising teacher competence, the spirit did not drop, but rather build teacher with affection.

IV. CONCLUSIONS AND SUGGESTIONS

A. Conclusions

From the description the previous chapter on the results of research and discussion, a number of conclusions as follows:

1. That to see the quantitative data of test results pedagogical competence, competence
2. professional and professional combination of pedagogy and described in 6 classification:
 - a. By Gender (Master Laki- men and Women)
 - b. Based on the origin of the school (Master Public and Private)
 - c. Based on educational qualifications (D3 and High school; S1; S2)
 - d. Based on the status of teachers PNS / CPNS and Non PNS
 - e. Based on the status of the certificate (Master certified and Master yet certified)
 - f. Based on the age of the teachers (30 -40; 41-50; 51-60),
3. by Gender, on the average of male teachers is higher than female teachers.
4. Based on the origin of the school, on average, higher than the State teacher private teacher.
5. Based on educational qualifications, in average teacher education S2 higher than S1 and D3 / high school.
6. Based on the status of teachers, the average civil servant teachers is higher than the teachers Non PNS.
7. Based on the certification status, the average teacher has not been certified higher than certified teachers.
8. based on the age of the teacher, the average teacher aged 30-40 is higher than other age groups.
9. that's the qualitative data, there are 5 things that can be delivered:
 - a. UKG has been perceived well by the teacher.
 - b. Preparation in the face of UKG tell well prepared.

- c. implementation UKG rated still not perfect, there are shortcomings that must be corrected.
- d. Evaluation and Follow-up should be made sustainable, continuous, not accidental, in the spirit of building a teacher Indonesia with affection.
- e. Planning to measure the competence of future teachers, should be comprehensive and sustainable.

B. Suggestions

based on the conclusions outlined above, it can be a few suggestions as follows:

1. to be more attention to teachers who score lower, female teachers, private teachers, teachers with qualifications SMAdan D3 and S1, teachers Non PNS, certified teachers and teachers with groups old age 41-50 and 51-60.
2. For the implementation of the 2016 UKG much better, follow up UKG more sustainable, and comprehensive.
3. For the measurement model of teacher competence that will come more comprehensive, with the spirit of Indonesian teachers build with affection.

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ANALYSIS OF STUDENT'S ABILITY ON MATHEMATICAL REPRESENTATION IN JUNIOR HIGH SCHOOL

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Abstract. This study was conducted in three junior high schools in the province of West Kalimantan, which aims to describe the mathematical representation ability of junior high school students in math material. This research uses descriptive method, with data drawn from the results of tests the mathematical representation ability of students and verified through in-depth interviews. The results showed that: 1) student's mathematical representation ability of class VIII E SMPN 1 Bengkayang in the fraction material as a whole is low. Student's mathematical representation ability with high ability level classified as moderate, students with intermediate ability level classified as low, and students with lower ability level classified as very low; 2) student's mathematical representation ability of class VII B SMP Negeri 08 Pontianak in the angles material as a whole is very low. Student's mathematical representation ability with high ability level classified as moderate, students with intermediate ability level classified as very low, and students with lower ability level classified as very low; 3) student's mathematical representation ability of class VII SMPN 1 Sungai Raya after obtaining STAD cooperative learning in the line material is good. Overall 60% of students have a mathematical representation ability is excellent, 22.85% of students classified as good, 11.42% of students classified as quite and 5.71% classified as less.

Keywords: mathematical representation ability, fractions, angles, lines

I. INTRODUCTION

One of the characteristics of mathematics is the object being studied in mathematics is abstract, while thinking of students in general still is concrete, it can cause a lot of students have difficulties in mathematics. The visual representation used by teachers in learning to facilitate students in learning and understanding abstract ideas.

Representation raised by the students are expressions of ideas or mathematical ideas shown students in efforts to find solutions its problem. It is expected that when students have access to representations and ideas of their show, they have a ready set of tools that will significantly expand their capacity to think mathematically [1]

The ability of a mathematical representation is closely connected with mathematical problem solving. Montague [2] says that successful problem solving is not possible without first representing the problem appropriately. Students who have difficulty representing math problems will have difficulty solving them. These students either have not acquired problem representation strategies or do not know how to use them appropriately.

This is in line with that expressed in the NCTM [1], the representation of idiosyncratic built by students as they solve problems and investigate mathematical ideas play an important role in helping students understand and solve problems. Representation idiosyncratic provide a way or ways that are meaningful to students in discovering a method to find a solution.

It is important for students not only learn about the representation of conventional or representations contained in mathematics textbooks but also to build, refine, and use representation of their own as a tool to support learning and working on math problems.

Montague [2] assert appropriate problem representation is the basis for understanding the problem and making a plan to solve the problem. He further said that visualization is a very powerful representation strategy. Many students do not develop the ability to use visual representation automatically during math problem solving. These students need explicit instruction in how to use visualization to represent problems. Other students may use visualization, but apply it inappropriately, and, thus, ineffectively.

Teaching mathematical problem solving is a challenge for teachers, who tend to rely on mathematics textbooks in learning. Most

mathematics textbooks only slightly instruct students to draw a picture or make a diagram of the information contained in the problem. When do students who have difficulty in solving mathematical problems, usually draw a picture of a problem without considering the relationships between the components of the problem, as a result, they still can not understand the problem, so it can not make a plan to solve it.

So, the representation ability is not just create an image, diagram, chart, or graph of a problem but the type of representation chosen to describe a problem and its relationship with the components contained in the matter is very important. Representation is effective, either in writing or in an imagination if it shows the relationship between the parts in question. It is called by Montague [2] as a schematic representation.

From the description, it is clear, mathematical representations ability is important in learning mathematics. But in reality teachers rarely teach students to create a representation of the mathematical problems encountered. Though weak ability of students' mathematical representation can lead to low student learning outcomes. Therefore, researchers are interested in analyzing of student's mathematical representation ability in junior high school on some mathematical material that lines, angles, and fractions. The problem in this study were: (1) how student's mathematical representation ability in junior high school in terms of student ability levels (high, intermediate, and lower ability)? and (2) how student's mathematical representation ability in junior high school in terms of the types of mathematical representations?

II. LITERATURE

Learning objectives of mathematics has been transformed, not only emphasizes on improving learning outcomes, but is also expected to improve the ability to: (1) mathematical communication; (2) mathematical reasoning; (3) mathematical problem solving; (4) mathematical connections; and (5) mathematical representation [1].

One of the math skills students should possess is the ability of representation. Standard representation of *the National Council of Teachers of Mathematics* (NCTM), established that the learning programs from pre-kindergarten through

grade 12 should enable students to: 1) create and use representations to organize, record, and communicate mathematical ideas; 2) select, apply, and translate among mathematical representations to solve problems; and 3) use representations to model and interpret physical, social and mathematics phenomena [1].

The ability of representation is one component in the NCTM, certainly contains some reason, Jones [3] says that there are three reasons why the representation is one of the standards process, namely: 1) fluency in doing the translation between different types of different representation the basic capabilities that need to be owned by the students to develop a concept and mathematical thinking; 2) the mathematical ideas presented teachers through various representations will give an enormous influence on students learn in mathematics, and 3) students need training in building its representation itself so that it has the ability and good understanding of the concept and flexible that it can be used in solving the problem .

Representation is generally defined as a process of the formation abstraction and demonstration mathematical knowledge. In addition, representation also means a description of the relationship between an object with a symbol. The ability of representation is defined as a person's ability to present a mathematical object, be it a problem, statement or a solution to the many notations or symbols.

There are four main ideas in order to conceptualise the notion of representation. Firstly, within the domain of mathematics, representation may be regarded as internal-abstraction of mathematical ideas or cognitive schemata that are constructed by the learner. Secondly, representation can be explicated as mental reproduction of a former mental state. Thirdly a structurally equivalent presentation through pictures, symbols and signs also resembles to the concept of representation. Lastly, it is also known as something in place of something [4]

Thinking about mathematical ideas which are then communicated require external representation of it form: verbal, images, and concrete objects. Thinking about mathematical ideas that allows a person's mind works on the basis of the idea is the internal representation. In line with these opinions, Goldin [5] says that the external representation is

the result of the embodiment to describe anything that is done in the representation of internal.

Internal representation of a person difficult to observe directly because it is a mental activity of a person in mind (*minds-on*). But a person's internal representation it can be concluded or inferred based on its external representation in a variety of conditions; for example, from disclosure through words (verbal), through writings in the form of symbols, images, graphs, tables or through props (*hands-on*). In other words, a mutual relationship between the internal and external representation of a person when facing problem.

There are various classifications of external representation. Schnotz in Elia [6] dividing the external representation in two different classes are *descriptive* and *depictive* representation. Representation of *descriptive* consist of symbols that have a structure arbitrary and linked to the contents expressed simply by the significance of a convention, namely text, while the representation of *depictive* including signs *iconic* associated with the contents are revealed through structural features are common in concrete or on the level more abstract, namely visual display.

Representation appears as part of the communication of mathematics. The function of representation is to communicate mathematical ideas, appropriate representations would make the communication of mathematical ideas become effective. The more developing mathematical language a student, the better they are able to give a reason.

Shield & Galbraith in Neria & Amit [7] states that student can communicate their explanations about math strategies or solutions in a variety of ways, namely by symbolic (numerical and/ or symbols algebra), verbally, in charts, graphs, or tables of data. While, Gagatsis and Elia [8] says that for elementary school students grades 1, 2 and 3 representations can be classified into four type of representation is the representation of verbal, drawing informational, image decorative, and the number line.

Lesh, Post, & Behr in Hwang Chen, Dung, & Yang [9] divides the representation used in mathematics education in five types, include real world object representation, concrete representation, arithmetic symbol representation, spoken-language representation and picture or graphic representation. Among them, the last three

are more abstract and a higher level of representations for mathematical problem solving. Language representation skill is the skill of translating observed properties and relationships in mathematical problems into verbal or vocal representations. Picture or graphic representation skill is the skill of translating mathematical problems into picture or graphic representations. Arithmetic symbol representation skill is the skill of translating mathematical problems into arithmetic formula representations.

Cai, Lane, and Jacobcsin [10] states a variety of representation which is often used in communicating mathematics which include (1) the visual presentation such as tables, pictures, chart; (2) a statement of mathematics or mathematical notation; (3) The written text written in their own language in both formal and informal, or a combination of all of them.

From some classification of such representations can be concluded that basically representation can be classified into: (1) visual representations (drawings, diagrams, graphs, or tables), (2) the symbolic representation (statement of mathematical/ notation mathematical, numeric/ symbol algebra), and (3) the representation of verbal (written text). The use of all kinds of such representations can be made in a complete and integrated testing of a similar problem, or in other words a mathematical representation can be made in various ways.

Activities mathematical learning that engages students to practice and communicate using a wide representation of causing environmental learning becomes riche [11]. Further, they said that in mathematics learning in the classroom, the representation should not be bound to change one form to another in one direction, but it can be a two-way or even in multiple directions. For example presented in the form of graphic representation, teachers can ask students to make other representations such as presenting them in tables, equations/ mathematical model or write the words. Learning mathematics does not always have to be the teacher gives a verbal problem or a problem situation and then the teacher asks the students resolve such problems by using a variety of representations, but the teacher can ask students to do the opposite.

III. METHOD

The research method used in this research is descriptive method. Descriptive method is a method used in solving research problems in a way depict or describe the state of the subject or object of research at the present time based on the facts that appear or as it is. Descriptive study does not provide treatment but described the conditions as its run. Descriptive method chosen in this study to provide an overview of mathematical representation ability of student's junior high school in math material.

The research subjects in this study were students in some junior high schools in the province of West Kalimantan, students of class VII SMP Negeri 1 Sungai Raya, students of class VIII SMP Negeri 1 Bengkayang, and students of class VII SMP Negeri 8 Pontianak. Object of this research is student's mathematical representation ability on the material lines, angles, and fractions.

Techniques of collecting data used in this study is the measurement technique, direct communication, and documentation. The measurement technique using test. The test is given is mathematical representation abilities test students on the material lines, angles, and fractions. The tests used in the form of essays. Direct communication techniques used in this study are in-depth interviews, that the interview process to find out the thoughts, perceptions, and experience of someone deeply. This technique is used to amplify the data collected, thus requiring researchers to conduct interviews with several students representing each of the groups: high, intermediate, and lower ability. Required documentation techniques in this study to classify students into groups of high, intermediate, and lower ability. This grouping is based on the value of final exams before given the tests of mathematical representation ability.

This study uses data collected from the value of students in the mathematical representation test of some materials mathematics. Researchers analyzed the students' answers on the test of mathematical representation ability. Furthermore, researchers conducted initial conclusion and verified through direct interviews. Data from the interviews as the work students to get valid data. Data from the interviews as the work students to get valid data.

IV. RESULT

A. Analysis of Student's Ability on Mathematical Representation in Fraction Material

Student's ability on mathematical representation in fractions material studied in class VIII SMPN 1 Bengkayang. This study reviewed the ability of students' on mathematical representation in student groups high, intermediate, and lower ability. Based grouping levels of ability, from thirty-four students there are six high-ability students, eighteen intermediate-ability students, and ten lower-ability students.

Test of mathematical representation ability consists of six questions, which measures students' ability to perform the translation between a mathematical representation, the translation of the verbal representation to the visual representation, the visual to the verbal, visual to the symbolic, symbolic to the visual, verbal to symbolic, and symbolic to verbal. The test results of mathematical representation for each indicator at each level as follows:

TABLE I
THE AVERAGE ABILITY OF STUDENTS IN PERFORMING TRANSLATION BETWEEN MATHEMATICAL REPRESENTATION IN FRACTION MATERIAL

Levels of Ability	The Average ability of students in Performing Translation Between mathematical representation					
	Verbal-Visual	Visual-Verbal	Visual-Symbolic	Symbolic-Visual	Verbal-Symbolic	Symbolic-Verbal
High	94	33	65	92	71	44
Intermediate	92	26	69	87	72	38
Lower	91	22	39	64	70	33
Average	92.33	27	57.67	81	71	38.33

Based on Table 1, seen that the students with the level of high and intermediate ability on perform translational verbal to visual, symbolic to the visual, and verbal to symbolic already good, but the ability of translational visual to symbolic still relatively moderate and the ability of translational visual to verbal and symbolic to verbal relatively very low. Students with the level of lower, the ability of perform translational verbal to visual and verbal to symbolic has been good, on the ability of translational symbolic to the visual is low and on the ability of translational visual to the verbal, visual to the symbolic, and symbolic to verbal relatively very low.

From six questions of mathematical representation test, then calculated the average values, which are presented in Table 2.

TABLE 2
STUDENT'S ABILITY ON MATHEMATICAL REPRESENTATION
IN FRACTION MATERIAL

Level of Ability	Average	Criteria
High	66.5	Moderate
Intermediate	64	Low
Lower	53.17	Very Low
Average	61.23	Low

From Table 2 it appears that in general the average ability of mathematical representation in the material fractions is still relatively low. At the high ability students, the ability of mathematical representation classified as moderate, intermediate ability students classified as low, and lower ability students classified as very low.

B. Analysis of Student's Ability on Mathematical Representation in Angle Material

Analysis of Student's Ability on Mathematical Representation in Angle Material performed in class VII B SMP Negeri 08 Pontianak which amounts to thirty-five students were grouped into levels of high, intermediate, and lower ability. The test result of student's ability on mathematical representation are averaged for each level of proficiency with predetermined criteria, namely: (1) very high, if students answer questions correctly in the percentage of 90% - 100%; (2) high, if students answer questions correctly in the percentage of 75% - 89%, (3) moderate, if students answer questions correctly in the percentage of 65% - 74%, (4) low, if students answer questions correctly in percentage of 55% - 64%, and (5) is very low, if students answer questions correctly in percentage of less than 55%. The percentage of student's ability on mathematical representation in angle material to each student's ability level are presented in Table 3.

TABLE 3
THE PERCENTAGE OF STUDENT'S ABILITY ON MATHEMATICAL REPRESENTATION IN ANGLE MATERIAL

Level of Ability	Achievement Average Percentage	Criteria
High	69.23%	Moderate
Intermediate	41.62%	Very Low
Lower	21.79%	Very Low
Average	44.21%	Very Low

From Table 3 shows that the ability of a mathematical representation of students in the angle material at all ability levels, high, intermediate, and lower, has not been satisfactory, particularly in the intermediate and lower ability students, the average student's ability on

mathematical representation is still relatively very low.

C. Analysis of Student's Ability on Mathematical Representation in Line Material

Test mathematical representation in the lines material given to the students of class VII SMP Negeri 1 Sungai Raya after obtaining cooperative learning type Student Team Achievement Division (STAD). The ability of mathematical representation limited to the indicator of the ability to interpret the mathematical phenomenon with visual and verbal representations. Tests given to thirty-five students, with an average value of mathematical representation ability is 78.29, classified as good. The average value of the student's mathematical representation ability on the indicator to interpret the mathematical phenomenon with a visual representation is 80.48, classified as excellent. The average value of the indicator to interpret the mathematical phenomenon with verbal representations is 77.14, classified as good. The percentage of students classified as excellent, good, adequate, less, and fail as follows.

TABLE 4
PERCENTAGE OF STUDENTS ABILITY TO INTERPRET MATHEMATICAL PHENOMENON IN LINE MATERIAL

Criteria	Interpret Mathematical Phenomenon		
	Visual Representation	Verbal Representation	Total
Fail	2.85 %	0.00 %	0.00 %
Less	2.85 %	20.00 %	5.71 %
Adequate	25.71 %	0.00 %	11.42 %
Good	0.00 %	51.42 %	22.85 %
Excellent	68.57 %	28.57 %	60.00 %

Based on Table 4, the student's ability of visual representation in the material line is good, because 68.57% of students have had the ability of visual representation classified as excellent. Similarly, the ability of verbal representations, 51.42% of students classified as good and 28.57% of student classified as excellent. However, from Table 4 it is shown that the ability of the visual representation better than verbal representation, because the visual representation only 5.70% of students are classified as fail and less, but the verbal representation there are 20% of students were classified as less.

D. Discussion

The analysis of student's ability on mathematical representation of three junior high school on the mathematics material: fractions,

angles and lines. Analysis of student's ability on mathematical representation in the fractions material is done on indicators of translation between mathematical representation (verbal to visual, visual to verbal, verbal to symbolic, symbolic to verbal, symbolic to visual, and visual to symbolic) in terms of the level of student ability (high, intermediate, and lower).

In general it can be concluded that: first, the ability of students to do the translation from verbal to visual is good for all levels of students' abilities, high, intermediate, and lower, but the translation from visual to verbal, for all levels of ability students, the ability of this indicator is still relatively low. This is because in learning mathematics, especially in fraction material, teachers rarely train students to create a story from a picture of a fraction.

Second, the ability of students to perform translation from verbal to symbolic classified as moderate for all levels of students' abilities, high, intermediate, and lower, but the translation from symbolic to verbal, for all levels of student ability, the ability of this indicator is still relatively low. Similarly, student's ability of the visual translation to verbal, low ability students in perform the translation from symbolic to verbal, as well as unusual students create the story. In learning mathematics, generally given about the story and the students are asked to solve it, which would require the symbolic representation for solving the story.

Third, students' ability to perform translation of symbolic to visual, for students with high and intermediate levels is high, while in the lower level is low. But otherwise, doing translation of visual to symbolic for students with high and lower levels is low and the intermediate-ability students classified as moderate. In the high-ability students, the low score of students on questions that measure the ability of visual translation to the symbolic, not because the students are not able to do the translation from the visual to the symbolic, but they are mistaken in doing arithmetic operation or simplify fractions.

In the lower-ability students, the results of student work and interviews with the students, it appears that students have not been able to illustrate the operation of fractions to right image of the symbolic forms provided.

While the low ability of students in lower level in doing the translation from the visual to the symbolic is that students can not be expressed images containing mixture fractions into a true symbol, and errors also occur when students change mixture fractions to proper fraction.

The analysis result of student's ability on mathematical representation of in the fraction material, which is done by observing the students' work on the answer sheet and reinforced by interviews with some the students showed that there is still quite a lot of students who do not understand the concept of fractions and operating properly. Therefore the use of multiple representation in learning fractions is very necessary for students to understand the concept of fractions and operating properly.

This is in line with the conclusions of the study Cahdriyana, et al [12] which says that there should be a teacher to apply the use of mathematical multiple representation in the process learning, the use of some form of representation, such as charts, graphs, images, symbolic expressions, words (spoken or written text) as an effort to support students in understanding any mathematical concepts; to communicate mathematical ideas of students; to know the relationship (connection) between mathematical concepts; or apply mathematics in realistic mathematical problems through modeling.

In addition to analyzing the student's ability of a mathematical representation in fractions material, the study also analyzed the student's ability of the mathematical representation in angle material. The analysis showed that students with high-ability levels are not all have the mathematical representation ability is high or very high, but there are some students have a low mathematical representation ability. Similarly, in the group of students with intermediate ability level, in this group there are some students who have high or moderate representation ability, although it is more dominating the ability of a mathematical representation is very low. But in the group of students with lower ability levels, all students have the ability mathematical representation is very low.

In general it can be concluded that the average ability of the mathematical representation in the group of student with high-ability levels included in the moderate category, and the group of student with intermediate dan lower ability levels included

in the very low category. Based on these conclusions show that the student's ability of the mathematical representation in the group of high ability levels better than the group of intermediate and lower ability levels.

The analyzed also the mistakes made by students in solving mathematical representation in the angle material, which is done by observing the work of students and interviews. Through the description of the data on student errors in the mathematical representation obtained information that the student group's high ability level, mistakes occurs more often in a question of the type of translation from verbal representations to visual representations. Mistakes made by student with high ability not at understanding the representation of verbal, but the mistakes made at the time of dividing the angle, that does not correspond to algoritma correctly.

The same thing happened to a group of students with intermediate ability, the mistakes also more often occur at about the type of translational representation verbal to visual representation, but the other mistake occur when dividing the angle, some students also made a mistake because of difficulty understanding the questions presented verbally.

The other mistakes that many students on intermediate level is solved mathematical problems related to the symbolic representation. From the interviews, students' difficulties in making mathematical models of the problems, so they can not solve the problem.

In the group of student with lower ability levels, the mistake occurs in all kinds of representations, verbal, symbolic, or visual. The greatest mistake on the type of verbal and symbolic representations. The mistake on the type verbal and symbolic representation, are generally same as that occurred in the group of intermediate-ability level, that is the students have not been able to understand the questions presented verbally and difficulty in making a mathematical model.

The results are consistent with research Murni [13], which concluded that there is interaction between learning approach with early ability junior high school students in the city of Pekanbaru to increase the ability of students' mathematical representation. This means that the approach to learning with prior knowledge of mathematical give a significant influence on

differences in upgrading the mathematical representation of students or differences upgrades mathematical representation of students caused by differences in learning approaches and differences in prior knowledge of the students.

The study also analyzed the ability of the mathematical representation junior high school students in line material. The results of the analysis, the student's ability of mathematical representation in the material lines after implementation of STAD cooperative learning obtained an average value is 78.29 classified as good. This shows that the use of STAD learning and student worksheet which trains students to use various mathematical representation has been able to improve the mathematical representation.

The results are consistent with research findings Murni [13], which concluded that the student's ability of mathematical representation in Junior high School Pekanbaru, who gets learning metacognitive-based *soft skills* (PMSS) and metacognitive (PM) obtained an increase which is significantly higher than students who received conventional learning (PK). That is shows the use of appropriate learning models can be increase of mathematical representation ability of students.

Correspondingly, Mc. Coy, Baker, and Little [11] states that mathematics learning activities that engage students to practice and communicate using multiple representations cause becomes richer learning environment. Further, they said on mathematics learning in the classroom, the representation should not be bound to change one form to another in one direction, but it can be a two-way or even in multiple directions.

V. CONCLUSIONS

From the research and data processing can be summarized as follows: 1) student's mathematical representation ability of class VIII E SMPN 1 Bengkayang in fractions material as a whole is low, with an average value is 61.23. Student's mathematical representation ability of high-ability level classified as moderate, with an average value is 66.5. Student's mathematical representation ability of intermediate-ability level classified as low with an average value is 64, and students with lower ability levels classified as very low, with an average value of 53,17; 2) Student's mathematical representation ability class VII B SMP Negeri 08

Pontianak in the angles material, included in the very low category with a percentage of achievement is 44.21%. Student's mathematical representation ability of high-ability level classified as moderate with percentage of achievement is 69.23%. Student's mathematical representation ability of intermediate-ability level classified as very low with a percentage of achievement is 41.62%, and students with lower ability levels classified as very low, with the percentage of achievement is 21.79%; 3) Student's mathematical representation ability of class VII SMPN 1 Sungai Raya after obtaining STAD cooperative learning in the line material is good. Overall 60% of students have a mathematical representation ability is excellent, 22.85% of students classified as good, 11.42% of students classified as quite and 5.71% classified as less.

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ANALYSIS OF COMPETENCE EXAM MASTER (UKG) TEACHER IN ECONOMIC SMA IN JAKARTA

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Abstract

End of 2015 is the time for Indonesia to enter the ASEAN Economic Community (AEC) which will take place between 10 integration Southeast Asian countries. With the MEA is expected the Indonesian economy will be better by expanding market share. Applicability MEA does not only affect the free trade sector, but also workers who make the various ASEAN countries freely compete to fill a variety of sectors across the ASEAN countries. To be able to compete with other ASEAN countries, Indonesia must have qualified human resources. One effort to do that is through the development of education in Indonesia to print high quality human resources. Strategic education in Indonesia is the existence of Guru. Teachers become a major actor in the success of education in Indonesia. The Ministry of Education and Culture, under the Directorate General of Teachers and Education Personnel continually strive to improve the quality of teachers, including teacher professionalism made a map that illustrates the mastery of competencies, through a competency test teachers (UKG) periodically, which began in 2012. At the same time, Economics teachers also must have the capability required by the Act, competent professionals and Pedagogy. Therefore this study aims to assess the extent to which a portrait of competence Master Economics high school level in the area of East Jakarta, as a barometer of Indonesia, policies regarding the model and implementation strategy Development Profession Sustainable (PKB) through the results of evaluation of the implementation of the UKG in 2015, and how the Planning Development of Teacher Competency. The research method used was the study of documents and deep interviews, using descriptive statistics.

Keywords: Education, Economy, Competence, Teacher

INTRODUCTION

Indonesia is one of the countries that are members of the ASEAN Economic Community (AEC) or the ASEAN Economic Community (AEC) which implemented by the end of 2015. the impact of the enactment of MEA is the creation of a free market in capital, goods and services, and labor. Thus Indonesia will not only compete with domestic labor, but also to compete with workers from the countries of Southeast Asia.

While MEA is applied, the Indonesian people are also required to be creativity and of a high quality to be 'good' and able to compete with ASEAN countries. But look at the reality of today, Indonesia apparently still not ready to face the MEA to be carried out within a few months. There are still many workers in Indonesia who need to be equipped with education and training to improve their skills and their quality.

Given the important role of education to produce qualified human resources, the government needs to put the development of the education sector as a top priority for print-quality human resources. Various efforts have been done in order to support government development such as education, primary schools in remote, launched a program of compulsory education, provide assistance in the form of BOS and BOP, increase the number of graduation requirements, and tighten the accreditation of schools to enhance the qualification of human resources. However, it appears that these efforts have not shown satisfactory results.

Teachers as educators is an important key in improving the quality of education. Overall, the quality of education starting from the quality of their lessons the teacher. According to data of Ministry of National Education in 2010, there were more than 54% of teachers have kualifikasi standards that need to be improved and 13.19% in the condition of school buildings need to be repaired.

Tabel 1.1 Angka Melek Huruf

Negara	2011	2012	2013
Brunei Darussalam	96.4	96.8	97.2
Cambodia	76.7	79.7	80.7
Indonesia	93.0	93.3	94.1
Lao PDR	-	-	79.0
Malaysia	93.9	94.1	94.2
Myanmar	95.0	95.6	95.1
Philippines	-	-	-
Singapore	96.2	96.4	96.5
Thailand	-	-	-
Viet Nam	94.2	94.7	94.8

in line with the above description, it is important to do research on the ability, competence of teachers in Indonesia, and the factors that influence it. Therefore, researchers interested in studying about the mapping of teacher competency test results (UKG) Master Economic School in East Jakarta in 2015.

Problem Formulation

Based the identification of problems are found, we propose the following research question: How high school economics teacher competence mapping in East Jakarta?

How policy on the model and implementation strategy Profession Sustainable Development (PKB) through the results of evaluation of the implementation of the UKG, 2015? How Teachers Competency Development Planning?

II. LITERATURE STUDY

1. Education

etymological terms, education is derived from the Greek "paedagogike". It is a compound word consisting of the word "pais" meaning "child" and the word "ago" means "I lead". So paedagogike berarti I guide children. People who work with the intention of guiding children take him to a place of learning, in Greek is called "paedagogos". So education is an attempt to guide the children. The definition of other education proposed by Tilaar (2002: 435) states that "the essence of education is to humanize humans, a process which sees humans as a whole in its existence". Observing the statement of Tilaar can be obtained a description that in the educational process, there is the process of teaching and learning, so the education evident process of formation of a human is more human. In the National Education Act No. 20 of 2003 Article 1, paragraph 1 states that:

Based on some sense education has been described above it can be concluded that education is a conscious effort planned to be able to develop their potential, adds to the experience and to improve the ability to become a man of intelligence, character, morals, dignity and become fully human.

2. Educators

Teacher sare one human component in the learning process, which had a role in the formation of the business potential of human resources in the field of development. Therefore, a teacher who is one element in the field of education must play an active and placing his position as professional staff, in accordance with the demands of the growing community. In a special sense it can be said that in every one of the teacher is liable to bring students to a maturity or level of maturity of the particular.

In general, to become a teacher must have the skills and competence in the mereka ajarkan.

Teachers are professional educators with the task The main educating, teaching, guiding, directing, train and evaluate students (Article 1 of Law no. 14 of 2005). Undeniably, that one important factor in creating a system of quality education and relevant is the teacher as the spearhead in

carrying out the mission of education in schools (Silverius, 2000 in Education statistics 2009).

3. Competency Test Teacher(UKG)

Competency Test Guru is ratings the competence of teachers as part of teacher performance appraisal in order of rank and jabatannya.Uji career guidance teacher competence to function as mapping the competency of teachers (pedagogical and professional), as the basis for Sustainable Development program Profession (PKB) and part of the process of performance assessment and competency (PKK) [Kemendikbud, Directorate GTK, UKG Guidelines 2015].

III.METODE RESEARCH

ex post facto method chosen in this study because of the method according to the research objectives to be achieved, namely to obtain information related to the status of symptoms when the research was done. Methods of ex post facto can be used to define the interrelationships between the various variables at the time of the study or studies done.

The collection or data collection is the recording of events - events or things - things or information - information or characteristics - characteristics of some or all elements of the population that will support or supporting research (Hasan, 2002). Data collection methods used in this research is the study of the documentation later if the data, and also to dig deep interview UKG implementation evaluation and planning of teacher competence development.

The study documentation is data collection techniques that are not directly addressed the subject of research, but through the document. Documents that can be used can be diaries, personal letters, meeting minutes report, the case records in social work and other documents (Hasan, 2002).

IV.RESULTS AND DISCUSSION

A. Quantitative Data Description

Description of the research data is done by describing some descriptive statistics of vari- variables measured in this study. The descriptive statistics were used to describe the data that is the size of data concentration and size distribution data. Measures of central tendency of data includes the value of the arithmetic mean (mean), median and mode. While the size of data dissemination includes the range and standard deviation.

In addition to sharing some descriptive statistics, this section also presents data research variables in a frequency distribution table groups and histogram.Penyajian results of descriptive statistical analysis starts from the Teacher Competency Mapping Test Results (UKG) competence pedagogy, professional competence, combined competence and pedagogical professionals by gender, public and private schools, levels of education, teachers' status of civil servants or non-civil servants, and certification status.

1. Mapping results UKG by gender

a. Results UKG competence Pedagogy Master men

Based on the measurement of results UKG Competence Pedagogy Master men, as presented in table IV.1 above can be seen that the resulting data UKG Competence Pedagogy Master males had a score of 27.78 to 100 range. That is, empirically lowest score 27.78 and the highest score of 100, with a score range of 72.22. The average value of the results of UKG Competence Pedagogy Master Male at 58.65; median of 55.56, and the mode of 50.93. Standard deviation or standard deviation score results UKG Competence Pedagogy Master Men of 1.54.

b. Results UKG Professional Competence Master Men

Based on the measurement results to the results UKG Professional Competence Master Men, as contained in the table above can be seen IV.2 that the resulting data UKG Professional Competence Master males had a score of range. 29.76 to 91.27 That is, empirically the lowest score and the highest score 91.27 29.76 with a score range of 61.51. The average value of the results UKG Professional Competence Master Men of 70.17; median of 73.41, and the mode of 73.41. Standard deviation or standard deviation score results UKG Professional Competence Master Men of variance 1.36 to 185.24.

c. Results UKG Pedagogy and Professional Competence Master Men

Based on the measurement results to the results UKG Pedagogy and Professional Competence Master Men, as IV.3 contained in the table above can be seen that the resulting data UKG in Professional Competence Pedagogy and Master males had a score of range. 29.17 to 93.89 That is, empirically the lowest score and the highest score 93.89 29.17 with a score range of 64.72. The average value of the results UKG Pedagogy and Professional Competence Master Male at 66.71; median of 69.44, and the mode of 69.44. Standard deviation or standard deviation score results UKG Pedagogy and Professional Competence Master Men of variance 1.26 to 157.83.

d. Results UKG Competence Pedagogy Master Women

Based on the measurement of results of UKG Competence Pedagogy Master Women, as contained in table IV.4 above can be seen that the resulting data UKG Competence Pedagogy Master Women have a score of range. 13.89 to 97.22 That is, empirically the lowest score and the highest score 97.22 13.89 with a score range of 83.33. The average value of the results of UKG Competence Pedagogy Master Women at 56.94; median of 55.56, and the mode of 50.94. Standard deviation or standard deviation score results UKG Competence Pedagogy Master Women by 1.65 to 271.00 variance.

e. Results UKG Women Teachers Professional Competence

Based on the measurement results to the results UKG Professional Competence Master Women, as contained in the table above can be seen that IV.5 UKG data of Professional Competence Master Women have a score of range. 31.75 to 97.22 That is, empirically the lowest score and the highest score 97.22 31.75 with a score range of

65.47. The average value of the results UKG Women's Professional Competence Master of 70.17; median of 73.41, and the mode of 73.41. Standard deviation or standard deviation score results UKG Women Teachers Professional Competence of 1.36 to 186.15 variance.

f. Results UKG Competence Pedagogy and Professional Women Teachers

Based on the measurement of results UKG Pedagogy and Professional Competence Master of Women, as contained in table IV.6 above can be seen that the resulting data UKG Competence Pedagogy and Professional Women Teachers have scores range 31.94 to from 90.28. That is, empirically the lowest score and the highest score 90.28 31.94 with a score range of 58.34. The average value of the results of UKG Competence Pedagogy and Professional Women Teachers at 66.20; median of 68.06 and 66.67 mode. Standard deviation or standard deviation score results UKG Competence Pedagogy and Professional Women Teachers of 1.31 to variance. 171.77

2. Mapping Results UKG Based Home School

a. UKG Results Teacher Competence Pedagogy SMA

Based on the measurement results to the results of Pedagogy Teacher Competency UKG SMA, as IV.7 contained in the table above can be seen that the resulting data UKG Competence Pedagogy Master SMA has a score range from 13.89 to 97.22. That is, empirically the lowest score 13.89 and the highest score 97.22 with a score range of 83.33. The average value of the results of UKG Competence Pedagogy Master SMA at 57.88; median of 55.56, and the mode of 55.56. Standard deviation or standard deviation score results UKG Competence Pedagogy Master SMA of 284.28 with a variance 1.68.

b. Results UKG Public School Teachers Professional Competence

Based on the measurement results to the results UKG Professional Competence Master of SMA, as contained in table IV.8 in above it can be seen that the resulting data UKG Teacher Professional Competence SMA has a range of scores 37,70 to 97.22. That is, empirically the lowest score 37,70 and the highest score of 97.22 with a score range of 59.52. The average value of the results UKG Teacher Professional Competence SMA at 72.05; median of 73.41, and the mode of 77.38. Standard deviation or standard deviation score results UKG Teacher Professional Competence SMA of 1.23 variance to 149.85.

c. Results UKG Pedagogy and Professional Competence of State School Teachers

Based on the measurement results to the results UKG Pedagogy and Professional Competence Master of SMA, as contained in the table IV.9 above can be seen that the resulting data UKG Pedagogy and Professional Competence Master SMA has a range of scores 37,50 to 90.28. That is, empirically the lowest score 37,50 and the highest score of 90.28 with a score range of 52.78. The average value of the results UKG Pedagogy and Professional Competence Master SMA at 67.80; median of 69.44, and the mode of 70.83. Standard deviation or standard deviation score results

UKG Pedagogy and Professional Competence Master SMA by 1.21 to 146.54variance.

d. Results UKG Private High School Teacher Competence Pedagogy

Based on the measurement results to the results of UKG Competence Pedagogy Private high school teachers, as presented in table IV.10 the above it can be seen that the resulting data UKG Competence Pedagogy Private high school teachers have a range of scores 27,78-100. That is, empirically the lowest score 27,78 and a highest score of 100 with a score range of 72.22. The average value of the results UKG Private High School Teacher Competencies Pedagogy at 57.02; median of 55.56, and the mode of 50.93. Standard deviation or standard deviation score results UKG Private High School Teacher Competencies Pedagogy of 1.53 to 233.34variance.

e. Results UKG Private School Teachers Professional Competence

Based on the measurement results to the results UKG Private High School Teacher Professional Competence, as contained in the table above can be seen IV.11 that the resulting data UKG Private High School Teacher Professional Competency has a range of scores 29,76 to 91.27. That is, empirically the lowest score 29,76 and the highest score of 91.27 with a score range of 61,51. The average value of the results UKG Private High School Teacher Professional Competence at 67.93; median of 73.41, and the mode of 73.41. Standard deviation or standard deviation score results UKG Private High School Teacher Professional Competence 1.48 to 219.21variance.

f. Results UKG Pedagogy and Professional Competence of Private School Teachers

Based on the measurement results to the results UKG Pedagogy and Professional Competence of Private high school teacher, as contained in the table IV.12 above can be seen that the resulting data UKG Pedagogy and Professional Competence of Private School Teachers have a range of scores 29,17 to 93.89. That is, empirically the lowest score 29,17 and the highest score of 93.89 with a score range of 64,72. The average value of the results UKG Pedagogy and Professional Competence of Private School Teachers at 64.66; median of 68.06, and the mode of 68.06. Standard deviation or standard deviation score results UKG Professional Competence of Private High School Teacher of 1.36 with variance 186.57.

3. Mapping Results UKG Based Education Qualifications

a. UKG Results High School Teacher Competence Pedagogy Graduates S2

Based on the measurement results to the results of UKG Competence Pedagogy Teacher High School graduates S2, as contained in the table above can be seen that IV.13 N valid data as many as 46 pieces, while the data is missing or lost data is 0. This means that all data is valid and ready for processing. According to the table VI.13 well known that the resulting data UKG Teacher Competencies Pedagogy High School graduate S2 has a range of scores 23,15 to 97.22. That

is, empirically the lowest score 23,15 and the highest score of 97.22 with a score range of 74.07. The average value of the results of UKG Competence Pedagogy Teacher High School graduates S2 at 59.78; median of 57.87, and the mode of 69.44. Standard deviation or standard deviation score results UKG Competence Pedagogy Teacher High School graduates of S2 with a variance 1.69286.46.

b. Results UKG Professional Competence Teacher High School Graduates S2

Based on the measurement results to the results UKG Professional Competence Teacher High School graduates S2, as presented in Table IV .14 above can be seen that the N data is valid as many as 46 pieces, while the data is missing or lost data is 0. This means that all data is valid and ready for processing. According to the table VI.14 well known that the resulting data UKG Professional Competence Teacher High School graduates S2 has a score range from 39.68 to 97.22. That is, empirically the lowest score 39,68 and the highest score of 97.22 with a score range of 57,54. The average value of the results UKG Professional Competence Teacher High School graduates S2 at 70.95; median of 72.42, and the mode of 81.35. Standard deviation or standard deviation score results UKG Professional Competence Teacher High School graduates S2 with a variance 1,47216.12.

c. Results UKG Pedagogy and Professional Competence Teacher High School Graduates S2

Based on the measurement results to the results UKG Pedagogy and Professional Competence Teacher High School Graduates S2, as IV.15 contained in the table above can be seen that the resulting data UKG Pedagogy and Professional Competence Teacher High School Graduates S2 has a score range from 38.89 to 90.28. That is, empirically the lowest score 38,89 and the highest score of 90.28 with a score range of 51,39. The average value of the results UKG Pedagogy and Professional Competence Teacher High School Graduates S2 at 67.60; median of 69.44, and the mode of 62.50. Standard deviation or standard deviation score results UKG Professional Competence Teacher High School Graduates S2 of 195.06 with a variance 1.39.

d. Results UKG Competence Pedagogy Teacher High School Graduates S1

Based on the measurement results to the results of UKG Competence Pedagogy Teacher High School graduates S1, as presented in Table IV .16 above can be seen that the N data is valid as many as 186 pieces, while the data is missing or lost data is 0. This means that all data is valid and ready for processing. According to the table VI.16 well known that the resulting data UKG Teacher Competencies Pedagogy High School graduate S1 has a range of score. 13.89-100 That is, empirically lowest score 13.89 and the highest score of 100 with a score of 86.11 range.

e. Results UKG Professional Competence Teacher High School Graduates S1

Based on the measurement results to the results UKG High School graduate Master of Professional Competence

S1, as contained in the table above can be seen that IV.17 N valid data as many as 186 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table VI.17 well known that the resulting data UKG Professional Competence Teacher High School graduates S1 has a score range 29.76-91.27. That is, empirically the lowest score 29.76 and the highest score 91.27 with a score range of 61.51.

f. Results UKG Pedagogy and Professional Competence Teacher High School Graduates S1

Based on the measurement results to the results UKG Pedagogy and Professional Competence Teacher High School Graduates S1, as contained in table IV.18 above can be seen that the resulting data UKG Pedagogy and Professional Competence S1 graduate high school teacher had a score of range. 29.17 to 93.89 That is, empirically the lowest score 29.17 and the highest score 93.89 with a score range of 64.72. The average value of the results UKG Pedagogy and Professional Competence Teacher High School Graduates S1 at 66.28; median of 68.06, and the mode of 70.83. Standard deviation or standard deviation score results UKG Pedagogy and Professional Competence Teacher High School Graduates S1 of 158.51 with a variance 1.25.

g. Results UKG Pedagogy Teacher Competency High School Diploma and the

Based measurement results to the results of UKG Competence Pedagogy high school teacher and high school graduates DIII, as IV.19 contained in the table above can be seen that the resulting data UKG Teacher Competencies Pedagogy High School graduate High School Diploma and has a range of score. 37.04-83.33 That is, empirically the lowest score 37.04 and the highest score 83.33 with a score range of 46.29. The average value of the results of UKG Competence Pedagogy high school teacher and high school graduate Diploma at 57.87; median of 60.19, and the mode of 60.19. Standard deviation or standard deviation score results UKG Competence Pedagogy Teacher High School Graduates DIII and SMA at 1.67 with variance 280.69.

f. Results UKG Professional Competence Teacher High School Graduate Diploma and School

Based on the measurement results to the results UKG Professional Competence Teacher High School Graduates DIII and high school, as contained in IV.20 table above can be seen that the resulting data UKG Professional Competence Teacher High School Graduates High School Diploma and have a range of scores from 39.68 to 71.43. That is, empirically the lowest score 39.68 and the highest score 71.43 with a score range of 31.75. The average value of the results UKG Professional Competence high school teacher and high school graduate Diploma at 60.19; median of 67.46, and the mode of 71.43. Standard deviation or standard deviation score results UKG Professional Competence Teacher High School Graduate Diploma and High School at 1:45 with a variance of 212.09.

g. Results UKG Competence Pedagogy and Professional Teacher High School Graduate Diploma and School

Based on the measurement results to the results of UKG Competence Pedagogy and Professional Teacher High School Graduate Diploma and High School, as contained in the table IV.21 above can be seen that the resulting data UKG Pedagogy and Professional Competence Teacher High School Graduates High School Diploma and have a range of scores from 40.28 to 70.83. That is, empirically the lowest score 40.28 and the highest score 70.83 with a score range of 30.55. The average value of the results UKG Pedagogy and Professional Competence high school teacher and high school graduate Diploma at 59.49; median of 68.06, and the mode of 68.06. Standard deviation or standard deviation score results UKG Professional Competence high school teacher and high school graduates DIII 1.44 to 207.10 variance.

4. Mapping Results UKG Based Teacher Status PNS / CPNS and Non-Civil

a. Results UKG Pedagogy High School Teacher Competency PNS / CPNS

Based on the results measurement of the results of High School Teachers' Professional Competence UKG PNS / CPNS, as presented in table IV.23 above can be seen that the N data is valid as many as 114 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processed. According to the table VI.23 well known that the resulting data UKG High School Teacher Professional Competence PNS / CPNS has a score range from 37.70 to 95.24. That is, empirically the lowest score 37.70 and the highest score 95.24 with a score range of 57.54.

b. Results UKG Pedagogy and Teacher Professional Competency PNS / CPNS

Based on the measurement results to the results of Pedagogy and Professional Competence UKG high school teacher PNS / CPNS, as presented in table IV.24 above can be seen that the N data is valid as many as 114 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table VI.24 well known that the resulting data UKG Pedagogy and Professional Competence high school teacher PNS / CPNS has a score range from 37.50 to 90.28. That is, empirically the lowest score 37.50 and the highest score 90.28 with a score range of 52.78.

c. Results UKG Private Teacher Competence Pedagogy

Based on the measurement of results UKG Private Teacher Competence Pedagogy, as presented in Table IV.25 above can note that N valid data as many as 124 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table VI.25 well known that the resulting data UKG Competence Pedagogy Private Teachers have scores range from 27.78 to 100. That is, empirically lowest score 27.78 and the highest score of 100 with a score range of 72.22.

d. Results UKG Private Teacher Professional Competence

Based on the measurement results to the results UKG Private Teacher Professional Competence, as presented in Table IV.26 above can be seen that N valid data as many as

124 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table VI.26 well known that the resulting data UKG Private Teacher Professional Competency has a score range from 29.76 to 97.22. That is, empirically the lowest score 29.76 and the highest score 97.22 with a score range of 67.46.

e. Results UKG Pedagogy and Professional Competence of Private Teachers

Based on the measurement of results of Pedagogy and Professional Competence UKG Private Teachers, as presented in Table IV .27 above can be seen that the N data is valid as many as 124 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table VI.27 well known that the resulting data UKG Pedagogy and Professional Competence of Private Teachers have scores range from 29.17 to 93.89. That is, empirically the lowest score 29.17 and the highest score 93.89 with a score range of 64.72.

5. Mapping Results Based Certification Status UKG

a. Results UKG Pedagogy Master Certified Competence

Based on the measurement results to the results of Pedagogy Master Certified Competence UKG, as contained in table IV.28 above can be seen that the N data is valid as many as 178 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table VI.28 well known that the resulting data UKG Pedagogy Master Certified Competence has a score range of 13.89-100. That is, empirically lowest score 13.89 and the highest score of 100 with a score of 86.11 range.

b. Results UKG Certified Master Professional Competence

Based on the measurement results to the results UKG Certified Master Professional Competence, as presented in Table IV.29 above can be seen that the N Data valid by 178 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. Based on Table IV.29 is also known that the resulting data UKG Certified Master Professional Competence has a score range from 29.76 to 95.24. That is, empirically the lowest score 29.76 and the highest score 95.24 with a score range of 65.48.

c. Results UKG Pedagogy and Professional Competency Teacher Certified

Based measurement results to the results UKG Pedagogy and Professional Competence Certified Master, as presented in Table IV .30 diatas can be seen that the N data is valid as many as 178 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table IV.30 well known that the resulting data UKG Pedagogy and Professional Competence Certified Master has a score range from 29.17 to 93.89. That is, empirically the lowest score 29.17 and the highest score 93.89 with a score range of 64.72.

d. Results UKG Pedagogy Teacher Not Certified Competence

Based on the measurement results to the results of UKG Competence Pedagogy Master Certified yet, as contained in the table IV.31 diatas it can be seen that the N data is valid as many as 60 pieces, while the data is missing or lost data is 0. this means that all data is valid and ready for processing. According to the table IV.31 well known that the resulting data UKG Competence Pedagogy Master Certified yet have a score range from 27.78 to 87.96. That is, empirically the lowest score 27.78 and the highest score 87.96 with a score range of 60.18.

e. Results UKG Not Certified Master Professional Competence

Based on the measurement results to the results UKG Certified Professional Competence Master yet, as contained in the table IV. 32 above it can be seen that the N data is valid as many as 60 pieces, while the data is *missing* or lost data is 0. This means that all data is valid and ready for processing. According to the table IV.32 well known that the resulting data UKG Certified Professional Competence Master yet had a score range from 31.75 to 97.22. That is, empirically the lowest score 31.75 and the highest score 97.22 with a score range of 65.47.

f. Results UKG Pedagogy and Professional Competence Master Certified yet

Based on the measurement results to the results UKG Pedagogy and Professional Competence Certified Master yet, as contained in IV.33 table above can be seen that the N data is valid as many as 60 pieces, while the data is *missing* or lost data is 0. this means that all data is valid and ready for processing. According to the table IV.33 well known that the resulting data UKG Pedagogy and Professional Competence Certified Master yet had a score of range. 31.94 to 90.28 That is, empirically the lowest score 31.94 and the highest score 90.28 with a score range of

g. Recapitulation UKG Outcome Mapping Based Certification Status

Table IV.34 Rekapitulasi UKG Outcome Mapping Based Certification Status

	A	B	C	D	E	F	
N	Valid	178	178	178	60	60	60
	Missing	0	0	0	0	0	0
Mean	57,52	70,03	66,28	57,40	70,57	66,62	
Median	55,56	73,41	68,06	55,56	73,41	69,44	
Mode	55,56	73,41	62,50	50,93	73,41	68,06	
Std. Deviation	15,96	13,71	13,07	16,75	13,38	12,50	
Variance	254,70	188,02	170,96	280,50	179,13	156,40	
Range	86,11	65,48	64,72	60,18	65,47	58,34	
Minimum	13,89	29,76	29,17	27,78	31,75	31,94	
Maximum	100,00	95,24	93,89	87,96	97,22	90,28	

Description:

A = Results UKG Competence Pedagogy Master Certified

B = Results UKG Professional Competence Certified Master

C = Results UKG Competence Pedagogy and Professional Certified Master

D = Results UKG Competence Pedagogy Teacher Not Certified
 E = Result UKG Professional Competence Teacher Not Certified
 F = Result UKG Competence Pedagogy and Professional Teacher Not to Certified

6. UKG outcome Mapping by Age

a. Teachers Age 30-40 Years

Based on the measurement results to the results of UKG Competence Pedagogy, Professional, and Pedagogy and Professional Teacher Age 30-40 Years, as contained in the table above can be seen that IV.35 N data invalid many as 47 pieces, while the data is *missing* or lost data is 0. this means that all data is valid and ready for processing.

According to the table IV.35 well known that the resulting data UKG Pedagogy Teacher Competency Age 30-40 Years has a range of scores 27, 78 to 87.96. That is, empirically the lowest score 27.78 and the highest score 87.96 with a score of 60.18 range.

According to the table IV.35 in mind that the resulting data UKG Teacher Professional Competence Ages 30-40 Years have scores range from 31.75 to 97,22. That is, empirically the lowest score 31.75 and the highest score 97.22 with a score of 65.47 range.

According to the table IV.35 in mind that the resulting data UKG Pedagogy and Teacher Professional Competency Age 30-40 Years has a range of scores 31.94-90.28. That is, empirically the lowest score 31.94 and the highest score 90.28 with a score range of 58,34.

Based on the measurement results to the results of UKG Competence Pedagogy, Professional, and Pedagogy and Professional Teacher Age 41-50 Years, as contained in the table IV.36 above can be seen that the N data is valid as many as 82 pieces, while the data is *missing* or lost data is 0. this means that all data is valid and ready for processing.

According to the table IV.37 in mind that the resulting data UKG Pedagogy Teacher Competency Age 41-50 Years has a score range from 27.78 to 100. That is, empirically lowest score 27.78 and the highest score of 100 with a score range of 72,22.

According to the table IV.38 in mind that the resulting data UKG Teacher Professional Competence Ages 41-50 Years have scores range from 37.70 to 91.27, That is, empirically the lowest score 37.70 and the highest score 91.27 with a score of 53.57 range.

According to the table IV.36 in mind that the resulting data UKG Pedagogy and Teacher Professional Competency Age 41-50 Years own range of scores 34.72-93.89. That is, empirically the lowest score 34.72 and the highest score 93.89 with a score of range 59.17. As for the average value of the results UKG Pedagogy and Teacher Professional Competency Age 41-50 Years 68,38; median of 70.13, and the mode of 73.61. Standard deviation or standard deviation score results UKG Pedagogy and Teacher Professional Competency Age 41-50 amounted to 12.57 with variance 158.09.

b. Teacher Age 51-60 Years

Based on the measurement results to the results of UKG Competence Pedagogy, Professional, and Pedagogy and Professional Master's Age 51-60 Years, as contained in

the table can be seen that the N IV.37 di atas valid data as much as 109 pieces, while the data is *missing* or lost data is 0. this means that all data is valid and ready for processing.

According to the table IV.37 unknown that the resulting data UKG Pedagogy Teacher Competency Age 51-60 Years has a score range from 29.76 to 87.96. That is, empirically the lowest score 29.76 and the highest score 87.96 with a score of range 74.07. As for the average value of the results of UKG Competence Pedagogy Teacher Age 51-60 Years of 51.56; median of 50.93, and the mode of 50.93. Standard deviation or standard deviation score results UKG Age 51-60 Competence Pedagogy Teacher of 15.41 to 237.47 variance.

According to the table IV.37 in mind that the resulting data UKG Teacher Professional Competence Ages 51-60 Years has a score range 13,89-95.24. That is, empirically the lowest score 13.89 and the highest score 95.24 with a score of range 65.48. As for the average value of the results UKG Teacher Professional Competence Age 51-60 Years of 67.06; median of 71.43, and the mode of 63.49. Standard deviation or standard deviation score results UKG Age 51-60 Teacher Professional Competence of 15.27 to 233.44 variance.

According to the table IV.37 in mind that the resulting data UKG Pedagogy and Teacher Professional Competency age range 51-60 years have score of a 29, 17 to 88.89. That is, empirically the lowest score 13.89 and the highest score 88.89 with a score of range 59.72. As for the average value of the results UKG Pedagogy and Teacher Professional Competency Age 51-60 Years of 62.41; median of 65.28, and the mode of 70.83. Standard deviation or standard deviation score results UKG Pedagogy and Teacher Professional Competency Age 51-60 amounted to 13.87 with variance 192.47.

2. Qualitative Data Description

1. Master Perception UKG by

Mr / Mrs teacher sees that UKG has the benefit that is to measure the ability of teachers in accordance with matter of teaching and help teachers be better prepared to make the teaching and teachers become more confident in educating the children of the nation. However, after the implementation of the UKG, no follow-up to the teachers who score below KKM UKG. So impressed just want to spend government funds at the end of the year alone.

2. Preparation UKG by Teacher

Preparation done by Mr / Mrs teacher in the face of UKG is a lot of reading and relearn various materials tested, especially material pedagogik.

3. Implementation UKG according Teacher

In the implementation of UKG years 2015 went smoothly, but the facilities are still inadequate as some computers are supposed to be used in the implementation is still no *error*, too

many questions that seem ambiguous and do not have the answers.

4. Evaluation and follow-up

follow-up is expected is that the government follow up on teachers that scored below the KKM, also offered training so that teachers become more prepared and confident in carrying out the UKG. Besides training for teachers with a variety of speakers who are competent so that teachers become more professional in teaching.

5. Planning Teacher competency of future

measures of teacher competence should be more comprehensive as mandated by law that the competence includes 4: pedagogy, professional, social and personality, That means measuring the periodic quarterly and there must be sustainability in maintaining and raising teacher competence, the spirit did not drop, but rather build teacher with affection.

V. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

From the description the previous chapter on the results of research and discussion, a number of conclusions as follows:

1. That to see the quantitative data of test results pedagogical competence, competence
2. professional and professional combination of pedagogy and described in 6 classification:
 - a. By Gender (Master Laki- men and Women)
 - b. Based on the origin of the school (Master Public and Private)
 - c. Based on educational qualifications (D3 and High school; S1; S2)
 - d. Based on the status of teachers PNS / CPNS and Non PNS
 - e. Based on the status of the certificate (Master certified and Master yet certified)
 - f. Based on the age of the teachers (30 -40; 41-50; 51-60),
3. by Gender, on the average of male teachers is higher than female teachers.
4. Based on the origin of the school, on average, higher than the State teacher private teacher.

5. Based on educational qualifications, in average teacher education S2 higher than S1 and D3 / high school.

6. Based on the status of teachers, the average civil servant teachers is higher than the teachers Non PNS.

7. Based on the certification status, the average teacher has not been certified higher than certified teachers.

8. based on the age of the teacher, the average teacher aged 30-40 is higher than other age groups.

9. that's the qualitative data, there are 5 things that can be delivered:

- a. UKG has been perceived well by the teacher.
- b. Preparation in the face of UKG tell well prepared.
- c. implementation UKG rated still not perfect, there are shortcomings that must be corrected.
- d. Evaluation and Follow-up should be made sustainable, continuous, not accidental, in the spirit of building a teacher Indonesia with affection.
- e. Planning to measure the competence of future teachers, should be comprehensive and sustainable.

Suggestions

based on the conclusions outlined above, it can be a few suggestions as follows:

1. to be more attention to teachers who score lower, female teachers, private teachers, teachers with qualifications SMA dan D3 and S1, teachers Non PNS, certified teachers and teachers with groups old age 41-50 and 51-60.
2. For the implementation of the 2016 UKG much better, follow up UKG more sustainable, and comprehensive.
3. For the measurement model of teacher competence that will come more comprehensive, with the spirit of Indonesian teachers build with affection.

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ANALYSIS OF QUANTUM MECHANICS PARAMETERS TO HARMONIC OSCILLATOR BY USING SPREADSHEETS AS WELL AS ITS APPLICATION IN PHYSICS EDUCATION TECHNOLOGY

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Abstract. This research purpose an analysis of one-dimensional harmonic oscillator in quantum mechanics. This research method is by applying computational methods spreadsheet (Microsoft Excel) with leafrog methods. From the analysis, obtained by quantum mechanics parameters. The spreadsheet simulation developed in this study can easily be used to represent Schrodinger equation of simple harmonic oscillator of other problems in quantum mechanics. The understanding of simple harmonic oscillator of wave functions, eigen value, and eigen function is important for the students because some complex problems in quantum mechanics are easy to study.

Keywords: Quantum Mecahnics, , Spreadsheets

I. INTRODUCTION

The spreadsheet is a computer program that is able to process the data and presents it in graphs. One of the most popular spreadsheet program is Microsoft Excel. Program microsoft excel microsoft office is an application standard and is always available on Windows systems. In proram have facilities formulas and functions that can be used to process the data carefully [1]. In addition, the program can visualize models microsoft excel in mathematics. This is because the Microsoft Excel program also displays graphs facilities are quite varied and easy to learn [2].

Spreadsheet (Microsoft Excel) is a computer application that is widely used today. This spreadsheet usage is not only used in the field of administration such as finance, and others [4]. It is also used as a medium of learning is very helpful in the process of learning physics in the field of quantum mechanics. Quantum mechanics is one of the most widely taught topics on the college and university level as it has fundamental role in physics and chemistry. Quantum mechanics is technically difficult to learn because it is mathematically challenging and abstract in nature. Students constantly struggle to master the basic concepts. It is difficult for students to interpret and draw qualitative inferences from mathematics representations [3]. Fast and realistic based computer visualization tools can play key role in teaching and learning of quantum mechanics [4].

From data analysis and graphing to animation and simulations, Microsoft Excel® is a very versatile program for the researchers, teachers and students. The strong features of spreadsheet are their cell based structure and the simple interface that is easy to use for new users also. With a variety of built-in mathematical functions and excellent graphics capabilities, the spreadsheet becomes a powerful instrument for modeling problems in quantum physics as well as in many

areas of the physics. In a spreadsheet, the data manipulations are held in front of the user in a very direct and accessible manner. In addition, the spreadsheet program itself provides for screen graphics, charts, and easy-data manipulation using large number of functions, on-screen numerical and visual feedback, and fast calculations[5, 6, 7,8].

In this paper the authors want to present the use of spreadsheets in the phenomena of quantum physics in the Schrodinger equation.

II. THEORY [9]

The paradigm for a classical harmonic oscillator is a mass m attached to a spring of force constant k . The motion is governed by Hooke's law,

$$F = -kx = m \frac{d^2 x}{dt^2}$$

(as always, we ignore friction), and the solution is

$$x(t) = A \sin(\omega t) + B \cos(\omega t)$$

Where

$$\omega = \sqrt{\frac{k}{m}} \quad (1)$$

is the (angular) frequency of oscillation. The potential energy is

$$V = \frac{1}{2} kx^2$$

The quantum problem is to solve the Schrdtinger equation for the potential

$$V = \frac{1}{2} m\omega^2 x^2 \quad (2)$$

As we have seen, it suffices to solve the time-independent Schrödinger equation:

$$-\frac{\hbar^2}{2m} \frac{d^2\psi}{dx^2} + \frac{1}{2} m\omega^2 x^2 \psi = E\psi \quad (3)$$

In the literature you will find two entirely different approaches to this problem. The first is a straightforward "brute force" solution to the differential equation, using the method of power series expansion; it has the virtue that the same strategy can be applied to many other potentials. The second is a diabolically clever algebraic technique, using so-called ladder operators. I'll show you the algebraic method first, because it is quicker and simpler (and more fun); if you want to skip the analytic method for now, that's fine, but you should certainly plan to study it at some stage.

To begin with, let's rewrite Equation (3) in a more suggestive form:

$$\frac{1}{2m} \left[\left(\frac{\hbar}{i} \frac{d}{dx} \right)^2 + (m\omega x)^2 \right] \psi = E\psi \quad (4)$$

The idea is to factor the term in square brackets. If these were numbers, it would be easy:

$$u^2 + v^2 = (u - iv)(u + iv)$$

Here, however, it's not quite so simple, because u and v are operators, and operators do not, in general, commute (uv is not the same as vu). Still, this does invite us to take a look at the expressions

$$a_{\pm} = \frac{1}{\sqrt{2m}} \left[\left(\frac{\hbar}{i} \frac{d}{dx} \right) \pm (im\omega x) \right] \quad (5)$$

In the present case, we have

$$\begin{aligned} a_+ a_+ &= \frac{1}{2m} \left[\left(\frac{\hbar}{i} \frac{d}{dx} \right)^2 + (m\omega x)^2 + \hbar m\omega \right] \\ a_- a_+ &= \frac{1}{2m} \left[\left(\frac{\hbar}{i} \frac{d}{dx} \right)^2 + (m\omega x)^2 + \hbar m\omega \right] + \frac{1}{2} \hbar\omega \end{aligned} \quad (6)$$

Evidently Equation (5) does not factor perfectly--there's an extra $\frac{1}{2}\hbar\omega$. However, if we pull this over to the other side, the Schrödinger equation becomes

$$\left(a_- a_+ - \frac{1}{2} \hbar\omega \right) \psi = E\psi \quad (7)$$

Notice that the ordering of the factors a_+ and a_- is important here; the same argument, with a_+ on the left, yields

$$a_+ a_- = \frac{1}{2m} \left[\left(\frac{\hbar}{i} \frac{d}{dx} \right)^2 + (m\omega x)^2 \right] - \frac{1}{2} \hbar\omega \quad (8)$$

Thus

$$(a_- a_+ - a_+ a_-) = \hbar\omega \quad (9)$$

and the Schrödinger equation can also be written

$$\left(a_+ a_- + \frac{1}{2} \hbar\omega \right) \psi = E\psi \quad (10)$$

We know that a_- is a new solution to the Schrödinger equation, but there is no guarantee that it will be normalizable--it might be zero, or its square integral might be infinite. Problem 2.11 rules out the latter possibility. Conclusion: There must occur a "lowest rung" (let's call it ψ_0) such that

$$a_- \psi_0 = 0 \quad (11)$$

That is to say,

$$\frac{1}{\sqrt{2m}} \left[\left(\frac{\hbar}{i} \frac{d\psi_0}{dx} \right) - (im\omega x \psi_0) \right] = 0 \quad (12)$$

Or

$$\frac{d\psi_0}{dx} = -\frac{m\omega}{\hbar} x \psi_0 \quad (13)$$

This differential equation for ψ_0 is easy to solve:

$$\int \frac{d\psi_0}{\psi_0} = -\frac{m\omega}{\hbar} \int x dx \Rightarrow \ln \psi_0 = \frac{m\omega}{2\hbar} x^2 + c \quad (14)$$

To determine the energy of this state, we plug it into the Schrödinger equation (10) and (11), evidently

$$E_0 = \frac{1}{2} \hbar\omega \quad (15)$$

With our foot now securely planted on the bottom rung (the ground state of the quantum oscillator), we simply apply the raising operator to generate the excited states

$$\psi_n(x) = A_n (a_+)^n e^{-\frac{m\omega}{2\hbar} x^2} \quad (16)$$

With

$$E_n = \left(n + \frac{1}{2} \right) \hbar\omega \quad (17)$$

III. METHODS

The technique used is the Leafrog methods, as described in spreadsheet physics. The wave function and its second derivative are found at intervals $N \cdot \text{DELTA_X}$, where N is an integer, and in the wave function over an interval DELTA_X assumes it is DELTA_X multiplied by the value of the derivative at important of the interval. This is much more accurate than using the value of the derivative at beginning of the interval. Similarly, to find the change in derivative over an interval the method used the value of the second derivative in the middle of that interval.

IV. RESULT

The macro used to find the eigen value is a very simple one. The code in its entirety is

```
Sub Eigenvalue()
Range("D23").Goal Seek Goal:=0,
ChangingCell:=Range("D10")
End Sub
```

This is just Excel's Goal Seek: it adjusts the energy E (cell D10) to get the value of the wavefunction at the right-hand end as close to zero as possible. Bear in mind that the wavefunction at the right hand end is highly unstable the solution we don't want grows as $\exp(x^2)$. This means that in practice close to zero might be a huge number, but the eigenvalue might still be pretty good. Also, this macro is sufficiently crude that it won't give the same answer each time--it is often worth clicking again.

It is also important to have a good choice for the numerical step size dx, and the same step size won't be good over a range of eigenvalues. Taking $f(0) = 0$, the lowest e-values are 1, 5, 9, ... For these, it's ok to take step size 0.01. In fact, 0.01 works up to about 25, but then you should go to 0.015. And, to see the whole wavefunction, take $f(0) = 5$ instead of 10 for these values. In fact, you can always scale the wavefunction to a good size for viewing by adjusting $f(0)$. Try $dx = 0.02$ and $E = 100$, and $dx = 0.03$ with $E = 200$. For these high states, Excel may need more than one try to get a good wavefunction

By using the spreadsheet obtained eigen wave functions and energies that can be seen in Figure 1 below.

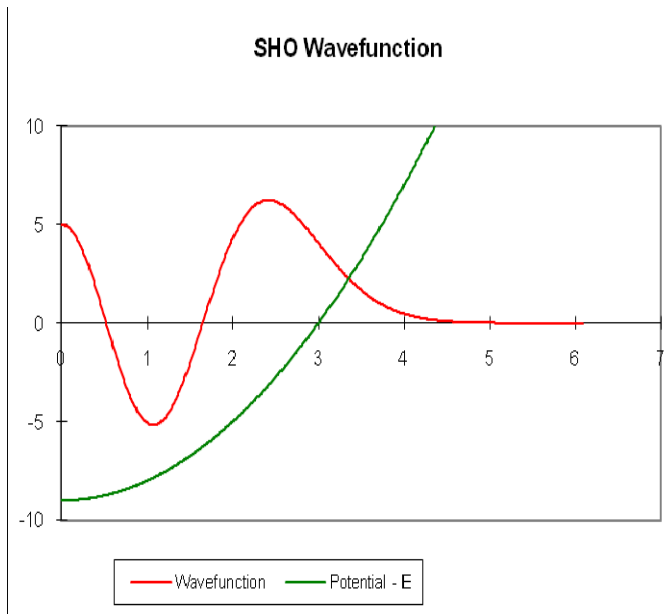


Fig. 1 Screenshot of spreadsheet worksheet developed for wave function

The wave function obtained from exponential oscillator. Where the wave function beyond the edge of the potential well so that the crest of the wave can be seen in the

graph Figure 1. The wave function of the image around 2 can be seen on the red line plotted on the x-axis with $\psi = 0$.

Spreadsheet simulation to determine the wave function can be seen in Figure 2. Figure 2 is a preview of Windows microsoft excel in snippingtool then copied so that it can be displayed on this paper.

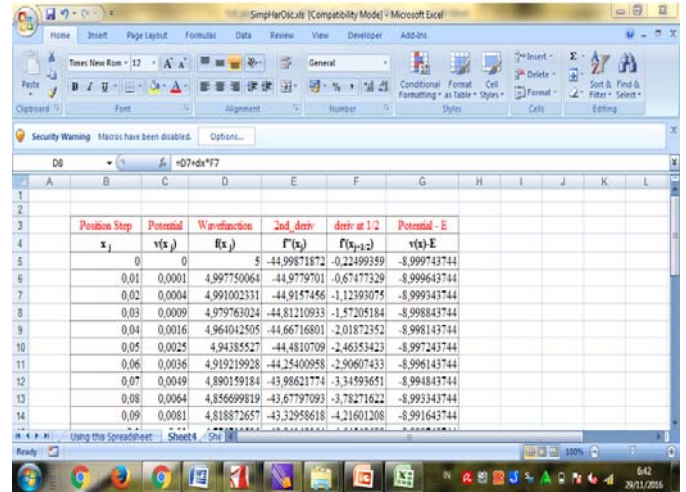


Fig 2. Screenshot of spreadsheet worksheet developed for wave function and its momentum representation.

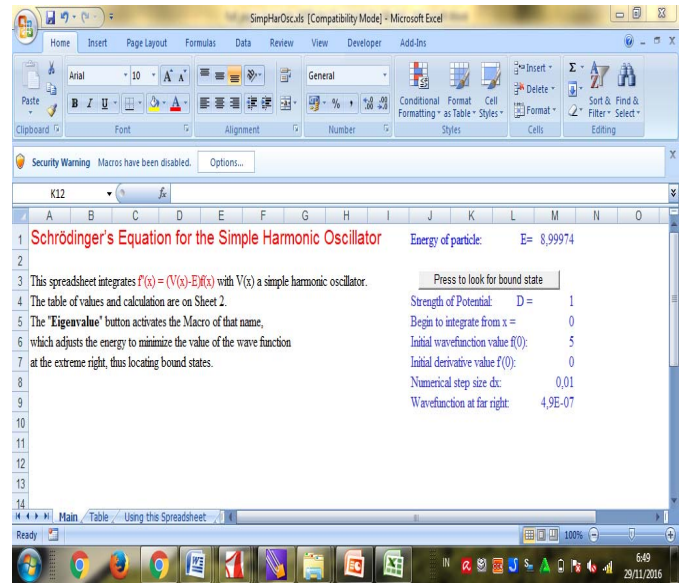


Fig. 3 screenshot of spreadsheet developed calculation for Schrodinger equation

For numerical calculations of wave functions and its eigen value counterpart the limits of integration in any state were taken from classical limit from negative values to positive values. These values also give appreciably good accuracy because of rapidly decreasing wave functions outside the classical regions. [8]

V. CONCLUSION

From the results obtained it can be concluded that, in addition to using motode theoretically, quantum physics can also be simulated numerically by using a spreadsheet. In this study obtained eigen wave functions and energies are shown in Figure 1.

In the examples discussed so far, the wave function is found by a numerical Scrodinger Equation of the analytical form of the position wave function. The proposed approach makes it possible to represent eigen functions and and eigen value.

Author expect to contribute with this approach to the development of physical insight for problems posed in the simple harmonic oscillator, to help students to understand the different features of operators in quantum physics. The spreadsheet simulation developed in this study can easily be used to represent Schrodinger equation of simple harmonic oscillator of other problems in quantum mechanics. The understanding of simple harmonic oscillator of wave functions, eigen value, and eigen function is important for the students because some complex problems in quantum mechanics are easy to study. Such problems are scattering

process, dispersion relations and the study of resonant states as solutions of a Lippmann-Schwinger equation [8].

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CONCRETE TECHNOLOGY TO SUPPORT SUSTAINABLE TOURISM INFRASTRUCTURE

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Abstract. Residential construction as well as building business in Tourism increasingly efficient use of foundation construction method of the present and friendly environment that has not been widely used. Model Foundation created is the shallow foundation and can be produced outside the project site in fabrication / precast made the concrete shape in the form of foundation sightings dimensions of today which so far as we know the foundation that provides full and thus require the usage volume stone large, uneconomic at once not environmentally friendly. The purpose of this study was to design a model foundation of today's best able to compressive force and a horizontal force, condition assessment model of connection between the foundation and the foundation meeting the condition of the foundation column section. Application of this model is expected to contribute to the advancement of environmentally friendly foundation construction without reducing the strength needed. Sustainable Concrete Technology has also become part of the solution infrastructure regional tourism a viable and efficient.

Keywords: tourism infrastructure of the area, the foundation precast, sustainable concrete technology

I. INTRODUCTION

Construction of residential and business building in the area of Tourism more efficient use of the method of construction of the foundation of the present and friendly an environment that has not been widely used. Model Foundation created is the shallow foundation and can be produced outside the project site in fabrication / precast made the concrete shape in the form of foundation sightings dimensions of today which so far as we know the foundation that provides full and thus require the usage volume stone large, uneconomic at once not environmentally friendly. Precast concrete construction has been progressing very rapidly in the world, including in Indonesia in the last decade, because this system has many advantages compared to conventional systems. Types and forms the foundation described above is reinforced concrete foundation with a trapezoidal shape in which the middle part of the present with the reinforcement thickening dimension to the side of the corner.

II. METHODOLOGY

The research objective is to design a model foundation precast simple monolith or present so that the weight per unit m³ reduced but were able to meet the terms of loading desired. Besides, long precast foundation is per 1 m 'so that the mobilization is easy and can be done without a lot of mechanical work tools but if using a mechanical work will be faster in its implementation. With the design of the design is different in terms of the top surface and the bottom will be obtained models foundation precast present the best and most practical.

III. RESULTS AND DISCUSSION

From the results of the design of this model acquired the foundation of today using reinforced concrete with concrete quality K-200, the iron reinforcement concrete 6 mm with steel quality U - 28 (BJTP - 28). Reinforcement made a

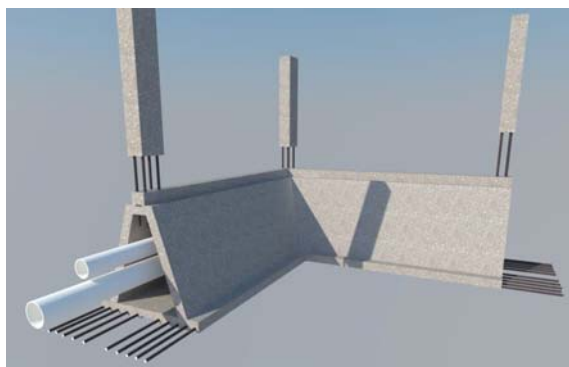
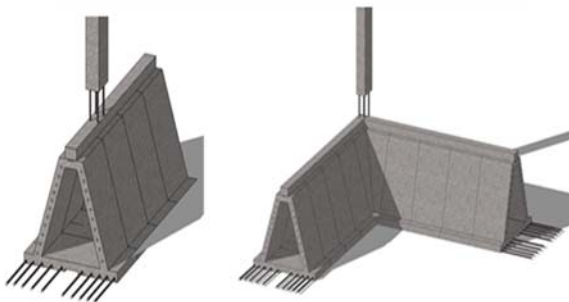
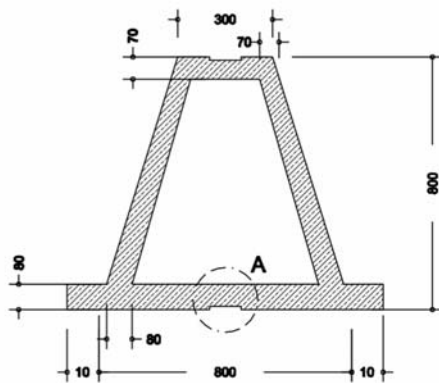
duplicate with varying distances between 14-19cm for vertical and horizontal reinforcement. Concrete cylinder test specimen was tested at ages of 7 and 28 days with the number of 10 pieces each. Models present precast foundation including the foundation segment longitudinal direction in the form of a connection segment on the foundation dimensions 30cm width, 80cm high, 80cm wide tread foundation and 10cm extra wide tread left or the right side. of connection on the side walls and also on the top and bottom made for the top notch as placement sloof and columns while the notch on the bottom for sliding tackle foundation. At the bottom of the pedestal placement side also added part right 10cm left. On the walls were made along the slip connection 8cm. This connection is expected to ease in implementation in the field. The foundation is expected to receive the vertical loads and moments acting on the foundation largely retained by the carrying capacity (bearing capacity) of the soil at the base of the foundation, and a horizontal load largely retained by the shear resistance (sliding resistance) of the basic foundation. If the foundation is embedded under the ground, friction or pressure soil upfront foundation also withstand the load, but if the foundation is embedded shallow, style retention is generally small and the land upfront foundation will sometimes erode and exposed to the effects of weather, so in planning the style of anchoring this overlooked. From this design is expected to have a maximum load capacity up to 17 tons with concrete quality K200, standard deviation, 50 kg / cm² compressive strength is expected to reach 275 kg / cm². Concrete material per M3 is used for the manufacture of 1 m³ of concrete (concrete weight 2380 kg) is the water as much as 219 liters / m³, Semen much as 457 kg / m³, Sand as much as 563 kg / m³ and Gravel as much as 1142 kg / m³. The comparison = 1pc: 1.23 ps: KRL 2,5: 0,48 Slump test the water with 80 kg / m. For Cylinder Concrete Compressive Strength testing is expected in 28 days could reach 175 kg / cm².



Figure 1. Precast foundations
 Source: http://terradrive.ie/wp-content/uploads/2014/04/accordion_house.jpg



Figure 2. Model and testing Precast foundations



IV. CONCLUSION

From this study it can be concluded that the foundation in the design is expected to hold 17 tons with concrete quality K-200 and for the testing of concrete Compressive strength Cylinder is expected in 28 days could reach 175 kg / cm². This alternative design of precast foundation has economic value that is less than the foundation stone and environmentally friendly in because not require excess material and part of the foundation can be made for other utilities. Precast foundation of today can be produced in manufacturing so as to suppress the price per unit foundation especially in terms of labor costs. The need for labor does not need too much use of the master craftsman. The use of heavy machinery can simplify application precast foundation whose weight is large enough. Sustainable Concrete Technology has also become part of the local tourism infrastructure availability solutions are feasible and efficient.

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DOMESTICATION OF LAIS (OMPOK HYPOPTHALMUS) IN THE FISHPOND AS A SUSTAINABLE CONSERVATION EFFORT

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Abstract. This research was aimed to do a domestication of Lais (*O.hypoptthalmus*) in the fishpond as a sustainable conservation effort. The study was done in March – July 2016 on Fishpond Laboratory of Faculty of Fishery, Christian University of Palangka Raya. The result of the study has shown that the viability of Lais is 40% during the 5 months study, the mortality is 60%, the length of the fish is about 10-25 cms and the weight is 20 – 200 grams, out of the 200 fish stocked. The maturity level of gonad III and IV is on May-July where the Lais started to mature and ready to conception. The feed used in cricket. Quality of fishpond : Dissolve oxygen (DO) 7,8 -7,9 mg/l, temperature is 26,9oC – 28oC, pH 5,4 – 6,8, visibility is 25 – 32,50 cm.

Keywords: Domestication, Ompok hypoptthalmus, conservation

I. INTRODUCTION

Lais is one of the fish that live in inland fisheries especially in lakes, rivers and flooding swamps. The spread of Lais in Indonesia are commonly in Sumatera, Jawa and Kalimantan, but the major distribution is in Sumatera and Kalimantan. According [1] the inland fish in Asia is dominated by the families of Cyprinidae and Siluridae.

Central Kalimantan is one of the biggest fishery resources in Indonesia. The total fishery production per year of this province is reaching 42,000 tons including Lais. Therefore, fishery resources is not only important as the protein supply but also the significant income for the inland fishermen in this region.

Floodplain in tropical Asia is one of the hot spot of global biodiversity [2]. Lais (*Ompok hypoptthalmus*) is one of the fish that live in Central Kalimantan inland fishery especially in floodplain along the banks of the river where the swamp condition is always fluctuated in terms of its depthness. The conception pattern of Lais is one season conception in one year applying total conception spawner [3].

According to [4] the food composition of Lais that caught on the floodplain of Rungan river in October 2013 through January 2014 consist of shrimp (61%), fry (44%), insects (54%). The water table of the swamps as the effect of the dry and rainy seasons will influence the production of Lais and their availability in the nature. The other factors are the human activity of fishing the Lais, the land use changes in the river area as the result of illegal logging will directly influence the life cycle of the fish, the behaviour of fish, and the population of the fish. Besides, the practice of inbreeding to the environment also affect to the durability of the Lais which possible reduce the population of Lais. According to the Yearly Report Fish Catchment especially in Palangka

Raya there has been the decreasing of Lais catchment every year. Therefore before Lais will extinct as the result of the changes of water environment, fish catchment activity. and inbreeding, Lais needs to be conserved.

One conservation activity that can done by applying the domestication or adapting Lais into a place where the fish can be kept and possible to breed. According to [5], species domestication is to change the wild species to be aquaculture species.

Domestication and introduction of new species are done to increase the number of species (diversification) of the aquaculture commodity. The species chosen for the domestication and introduction have the strong potency as candidate of aquaculture commodity based on consideration of biology, economy, and market. The aim of the research was to do a domestication of Lais in the concrete fishpond, environmental engineering, and fish food engineering.

Based on the explanation above the study of domestication of Lais (*Ompok hypoptthalmus*) in the concrete aquaculture was done as an effort to do the sustainable conservation.

II. METHOD

The research was done in concrete fishponds owned by the community and the other owned the Laboratory of the Faculty of Fishery of the Christian University of the Christian University of Palangka Raya Central Kalimantan. The Lais were domesticated coming from the Rungan river of Palangka Raya city. The research was done in March through July 2016.

The steps of the research were following: 1). Engineering the concrete aquaculture environment which had several activities : built 4 concrete fishpond 1.2 x 2 meters, arranged

the water circulation using aerator. The water resource was from the well. Filled the water from the well until 150 cms high, and the water was precipitated for 3 days and installed the aerator into the water. Next was to place the Lais caught from the nature into the concrete fishpond with the density 50 fishes per pond, the average weight 10-50 grams, and length 20-30 cms. 2). In terms of engineering the fish food it was impossible to feed them by giving the pellet but feeding them using insects that could be found easily in the market. The feeding were done 2 a day. Meanwhile the measurement of the water quality was firstly done when the fish placed in pond which including : temperature, depth, pH, DO, and water clarity. The level of water was adapted to the water quality of the origin habitat of Lais.

III. RESULT AND DISCUSSION

A. The Viability of *O.hypophthalmus*

The viability of Lais in the breeding place is part of the first phase where the Lais being kept would survive among the Lais in not origin habitat. Lais were kept in concrete fishpond of the size 1.2 x 2 meters and the height 50-70 cms. Lais were domesticated coming from floodplain of Rungan river by the amount 200 fishes, collected from the fishermen in the area. Before the fish were loaded to the concrete fishpond, the fish were kept in the fishcage for one day and not given the food – it was done to make the fishes not stress and strong during the load. In the process of loading, the fishes were placed in the big bag and given the oxygen. The loading used the motorboat in the river and car in the land and took about 1 hour to reach the place. The bad road condition really influenced loading process and weaken the fish and made them stress.

Lais were about to keep then gradually placed into the 4 concrete fishponds where one fishpond was received 50 fishes. The length of the fishes were 10-25 cms and weight about 20-200 grams just before the placement. The depth of the ponds is 50-70 cms. The breeding was 5 months.

Table 1. The Viability of Lais in the Concrete Fishpond in 5 Months Breeding

Number of Pond	Number of Fish on Initial Placemnet	Number of Fish at the End of Monitoting	Viability(%)
1	50	20	30
2	50	18	32
3	50	20	30
4	50	22	28

From Table 1, it was seen that the viability of Lais in pond number 1, 2, 3, and 4 were about 28-32% out of the 50 fishes placed in every pond.

B. The Mortality of Lais

The initial number of Lais breded in the concrete fishpond were 200 fishes and at the end of the research were just 80 fishes which means the percentage of viability was 40% and the number of dead fishes were 120 (60%). The mortality of the fish monthly is displayed on Figure following:

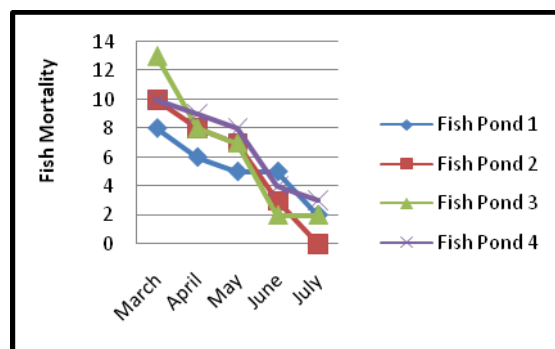


Fig 1. The Mortality of Lais Breded During the Research

From the mortality data during the domestication, the mortality number was on March which reaching 41 fishes, April 31 fishes, May 31 fishes, June 27 fishes and July 7 fishes. While August and September no fishes found dead (0 mortality), this data show that Lais being breded has already adapted to the aquaculture environment and the fish appeared healthy. The high mortality number of Lais in March was caused by the exhaustion of the fish during the loading process, sensitive character of the fish, agility, and easily stress, low pH of the water compared to March though May and also still adapting to new habitat environment.

C. Gonad maturity level of *Ompok hypophthalmus*

Based on the fish picking from the nature and the breeding in concrete fishpond in March – July 2016. Fish domesticated was adult Lais or on the maturity level of Gonad I - IV. The comparison of Gonad maturity level of Lais have been domesticated and Lais in the nature was not

March – July (Gonad Maturity Level was taken from the dead Lais) shown that the distribution of Gonad Maturity I and II found more different. Observation result on the Gonad Maturity Level have been domesticated on March and April. For May – July also found Gonad Maturity III and IV. According to Minggawati I, et al, Gonad Maturity Level I – IV of Lais in the nature is on October – April.

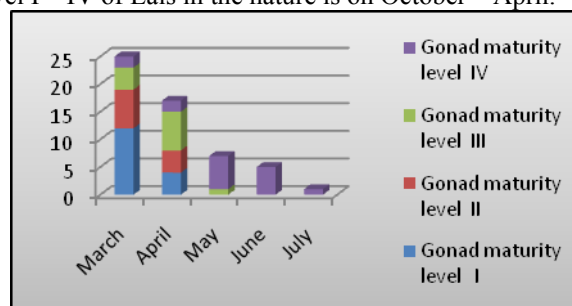


Fig 2. Gonad Maturity Level in the Fishpond

Based on the observation, Gonad Maturity Level of Lais also happened on the Lais have breded in the fishpond. It was started from Gonad Maturity Level I – V on March until July 2016 and the conception (Gonad Maturity Level IV) on May and June. [6] stated that most tropical fish hatch or concept on the rainy season because there are stimuli from the nature: temperature, chemical water changes, and flooding. An effort to domesticate Lais in a certain fishpond can also be done on May – July where Lais is the status of gonad maturity level.

D. The Food for Lais

During the breeding of Lais in the fishpond, food feed was alive cricket that directly given to pond. The nature food was given because Lais breded was not able to consume pellet or artificial food. Cricket is easily found because it is commercially sold. According to Minggawati [7], Lais is classified as carnivore which it consumes adult insects, fry and shrimp.

Lais takes food which the motion organism in the surface of water. Therefore for the breeding of Lais it is advised to give the floating food.

E. The Water Quality and Food for Breeded

The measurement of water quality was done every month during the research. The water measurement result of temperature, clarity, depth, DO, and pH in 5 months of adapting to the new environment which was in March 2016 until Junly 2016 where Lais already have the ability to adapt can be seen on Table 2.

Table 2. Average of Water Quality Data in Concrete Fishpond During the Research

No	Month	DO (mg/l)	Temp eratur e	pH	Clarity (cm)	Depth (cm)
1	March	7,8	28	5,4	50	50
2	April	7,8	28	5,9	50	60
3	May	7,8	27,9	6	40	60
4	June	7,9	27	6	40	50
5	July	7,9	26,9	6,6	40	60

Dissolve oxygen (DO) in the fishpond is 7,8 -7,9 mg/l. In the nature dissolve oxygen 7,8 -7,9 mg/l for Lais is about 3,28 – 3,75 mg/l. According to Wardoto (1982), good dissolve oxygen for fish (DO) is 2 – 10 mg/l. The temperature of fishpond is 26,9°C – 28°C, while in the nature the temperature for Lais is 26°C – 28,75°C. Rustija (2004) said that optimum temperature for fish in inland fisheries is 25°C – 30°C. pH of the water in the fishpond is 5,4 – 6,8, while in the nature is 5,5 – 6,0. [8] said that Lais have the ability to live in the water pH 5,5 – 6,0. Water clarity in the fishpond is 40-50 cm, while the clarity in the nature is 25-32,50 cm. The depth of the fishpond is 50-70 cms. The quality of water in the fishpond is still tolerated by Lais or not too far from the origin habitat. The good water quality for Lais breeding is DO 3 – 7 mg/l, temperature 26 – 28°C, pH 5 – 6, clarity 40 cm, depth 50 – 100 cm. Minggawati *et al* (2015) said that water quality is depthness 0,5 meter, temperature 26,9°C, pH 4,6, DO 3,4 mg/l, and clarity 27,6 cm.

If the environment factors are appropriate, the living things will live well. But, when the environment factors have changed then only the the living things who have the high level of tolerance will survive. [9] said domestication is not perfect yet when part of the life cycle can happen in the cultivation system.

Following are the figures of the placement of Lais and the measurement of quality water in the concrete fishpond during the research.



Fig 3. Placement of Lais and Measurement of Water Quality in the Fishpond

IV. CONCLUSIONS

The quality of water in the fishpond for the domestication of Lais: Dissolve oxygen (DO) 7,8 -7,9 mg/l, average temperature 26,9°C – 28°C, average water pH 5,4 – 6,8, water depthness 50-70 cm dan water clarity 40cm. Initial number of Lais is 200 fishes, the viability is 40%. Gonad Maturity Level I – V happened on March until July, that Gonad Maturity Level IV is very dominant in May - July. Food for Lais that given for 5 months is crickets (insects). Domestication of *O.hypophthalmus* that has been done is an effort to do a sustainable conservation.

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REDESIGN OF ENVIRONMENTAL WORK WITH ERGONOMIC INTERVENTION TO REDUCE FATIGUE AND INCREASE OUTPUT PRODUCTION

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Abstract. Experiments in this research carried out as follows: Tailor totaling 12 people were divided into two groups, Group "A" = 6, group "B" = 6. At first the group "A" work in the room of "condition sold" (the condition of the room before the ergonomics intervention) for 6 days, and the group "B" work on the room "new conditions" (conditions of the room after the intervention of ergonomics) for 6 days, then each group were closed for 1 day. Furthermore, the group "B" work on the room "old conditions" for six days and the group "A" work in the room "new conditions" for six days. To obtain research data to judge the research variables are: 1. Wind speed and light intensity, 2. Pulse Work (PW) and Pulse Rest (PR) as an indicator of the level of fatigue objectively. Collecting data subjectively exhausted with fatigue questionnaire. The results of ergonomics interventions are: (1) Increase the intensity of light becomes 354.59 Lux to 166.96 Lux, (2) Lowering the humidity from 72.35% to 57.81%, (3) Lowering the temperature of 26.36 ° C becomes 25.48 ° C, (4) Improve the wind speed of 0.10 meters / sec to 0.16 meters / second, the impact of ergonomics interventions are: 1. Lowering fatigue of work subjectively exhausted be tired, and decrease fatigue objective of becoming tired very tired, 2. Increasing production output 24.42%, from an average of 9.42 clothes / day to an average of 11.72 clothes / day. The novelty of this study is the ergonomics intervention on workplace environment, especially the workplace environment Tailor. The advantages of novelty this is the creation of collaboration and commitment of all parties, both employees as a tailor and the owner of the business as management. Besides the novelty mentioned above in this research requires a bargain (compromise) which is of mutual benefit, so as to improve the quality of interaction between the business owners and employees.

Keywords: Ergonomic, Fatigue, Output of Product

I. INTRODUCTION

The problem in this research are: (1) How much influence ergonomics intervention to decrease fatigue?, (2) How much influence ergonomics interventions to decrease musculoskeletal disorders?, And (3) How much influence ergonomics interventions to increase production output?. Based on the formulation of the problem in the studies above, the purpose of this study are: (1) To determine the effect of interventions ergonomics to decrease fatigue, (2) To determine the effect of interventions ergonomics to decrease musculoskeletal disorders, and (3) To determine the effect of intervention ergonomics to increase labor productivity.

II. METHOD

Old work space conditions: 12 meters long and 6 meters wide, there is 1 (one) door on the south, 1 (one) window on the north, and two (2) lamps, as well as in the working position Fig.1 below this:

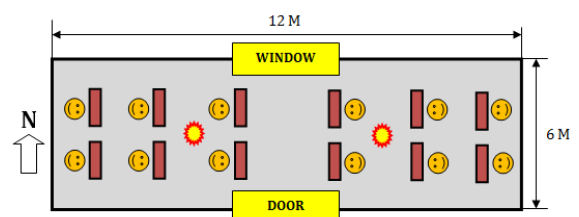



Fig.1 Old Condition Workroom

 = sewing machine position

 = Tailor position

 = Lamp Position

In this study of ergonomics interventions include the following: (a) the installation of four (4) exhaust van; (b) the installation and setting of 4 (four) position lights; (c) setting the working position as the figure 2 below:

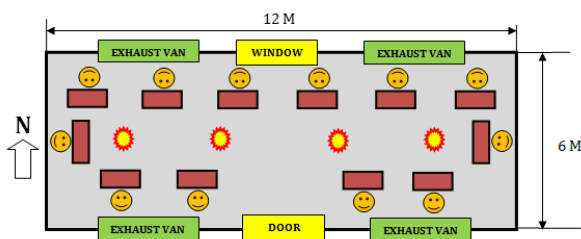





Fig.2 New Condition Workroom

-  = sewing machine position
-  = Tailor position
-  = Lamp Position

III. PROBLEM AND RESULT

A. Light Intensity

The average intensity of light on the conditions of the working space of time (before the intervention ergonomics) is 166.96 Lux, intensity of light is suitable for the low level of precision work. And the average intensity of a new light on the working conditions (after an ergonomic intervention) is 354.59 Lux, light intensity is suitable for employment with high accuracy. Whereas batik artisans work including job categories with high accuracy. Thus ergonomics interventions can improve the intensity of the light in accordance with the level of accuracy of the work.

B. Humidity

Average relative humidity at ambient conditions of work a long time (before the intervention ergonomics) is 72.35%, the humidity is very high does not comply with the recommended ergonomics ie a maximum of 60%. And average humidity on new working conditions (after an ergonomic intervention) is 57.81%, the moisture in accordance with the recommended ergonomics is 40% - 60% in the rainy season, and 40% - 50% in the dry season.

C. Air Temperatures

The average temperature of the air at ambient conditions of work a long time (before the intervention ergonomics) is 26.35 ° C, the air temperature is very high not in accordance with ergonomics which is the recommended maximum of 26 ° C. And the average temperature on the new working conditions (after an ergonomic intervention) was 25.48 ° C, the air temperature in accordance with the recommended ergonomics is 20 ° C - 24 ° C during the rainy season, and 23 ° C - 26 ° C during the dry season.

D. Free wind

The average wind speed at the old work room conditions (prior to the ergonomic intervention) was 0.10 meters / second, the very low wind speed does not match what is the recommended ergonomics is minimal 0.15 meters / second. And the average wind speed in the new working conditions (after an ergonomic intervention) was

0.16 m / s wind speed in accordance with the recommended ergonomics 0.15 meter / second during the rainy season, and 0.25 meters / sec at dry season.

E. Fatigue subjective :

The results of the data analysis subjective fatigue are: (a) the average score of subjective fatigue when working on old work room conditions (before the intervention ergonomics) is 3.22, shows workers in conditions of "extreme fatigue". The average score of subjective fatigue while working on new working conditions of the room (after intervention ergonomics) is 1.91, indicating "not tired". Means the condition of the workers is not tired while working on a new work space conditions strongly influence of ergonomics intervention.

F. Pulse

Average pulse work (PW) on the condition of the working space of time (before the intervention ergonomics) is 148.00 beats / minutes showed "very heavy work load". The average pulse work (PW) on new working conditions of the room (after intervention ergonomics) is 112.88 beats / minute show "work load being", so changes in the workload of "very hard" on the condition of the workspace long been "being" the new working conditions of the room really a result of ergonomics interventions.

Average employment increased pulse rate (EIPR) on the condition of the working space of time (before the intervention ergonomics) is 57.66% showing the condition of workers "tired", and the average of employment increased pulse rate (EIPR) on new working conditions of the room (after intervention ergonomics) is 28.76% indicates that workers in a state of "no melting". So change "tired" when working on the conditions of work space of time, become "not tired" at the time worked at the room condition new work strongly as a result of ergonomics intervention

G. Musculoskeletal Disorders

Average score of musculoskeletal disorders while working at the room condition of old work (before intervention ergonomics) was 3.25 showing that the worker was "very disturbed". The average score of musculoskeletal disorders while working on new working conditions of the room (after ergonomic intervention) was 1.29 indicating "not annoyed". Change of very disturbed while working on the conditions of work space of time, and not annoyed at the condition of the new workspace, really a result of the intervention of ergonomics.

H. Output Production:

Average production output at ambient conditions of work a long time (before the intervention ergonomics) is 9 , 42 clothes / person / day, and average production output on a new working ambient conditions (after intervention ergonomics) is the clothes 11.72 / person / day. It shows that ergonomic interventions can increase the production output from an average of 9.42 clothes / person / day becoming clothes 11.72 / person / day. The average increase in production output after an ergonomic

intervention was 24.42%, an increase in the production output is actually a result of ergonomics intervention

IV. CONCLUSION

Redesign Work Environment with Ergonomics approach can reduce fatigue of the category of "Very Tired" to "Not Tired", lowering of musculoskeletal disorders "Severely Impaired" to "Not Bothered", and can increase the production output of 49.01%. To further improve the efficiency and productivity of batik makers, need to do further research on the design of sewing equipment, among others: the design table sewing machines, and a sitting chair tailor.

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SMART CITY : E-SERVICE HOSPITAL IN PONTIANAK

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Abstract. The concept of smart city is a concept designed to improve the quality of life of the residents of the city that includes the various areas of which are government, education, transportation, health, energy, security, environment, society, finance, and trade. Pontianak is one of the major cities in Indonesia with a population in 2014 as many as 598 097 lives and the number continues to increase each year which is accompanied by the need for health services. Therefore, hospitals are required to provide quality services in accordance with the required standard and within reach of the whole society. The E-Service Hospital application was built with web-based mobile by using JQuery framework. This application is used to facilitate the patients in the inpatient room bookings in Pontianak City Hospital (Rumah Sakit Kota Pontianak). The patients, whether they have insurance or not, can choose the room through the application of E-Services Hospital and get a booking code that is sent through the SMS gateway technology.

Keywords: Smart City, Reservation, Hospital, Web-Mobile.

I. INTRODUCTION

Total world population now have reached 7 billion people. 50% of that population or 3.5 billion lives in the city (urban area) [5]. In 2050, it is estimated that 9.6 people will reside in urban area. Along with this population growth, many problems will arise and need to be anticipated. Pontianak is one of many major cities in Indonesia. Each year, population in Pontianak continue to rise. On 2013, Pontianak has 587.169 people living within the city which increased into 598.097 people in 2014.

A smart city concept is expected to be able to provide solution for many urban city problems and give benefit for people that live in the urban area. Smart city is a concept of a city that designed to improve living quality of its citizen by managing available resources efficiently and providing accurate information by using information technology. Smart city implementation encompass many areas namely government, education, transportation, health, energy, security, social environment, finance and economic market.

With increasing urban population, the need for health services is also become higher and higher. Health facilities such as hospitals and medical clinics are required to provide effective and efficient services to all levels of society. Hospital service that most impacted by population growth is patient registration for inpatient treatment. Case example of ineffective patient management can be seen when there is an epidemic break out for a specific disease (e.g. dengue fever). When the epidemic happened, a lot of patient could not be treated due to hospital overcapacity.

Emergency treatment for patient with severe condition need to be done quickly. Lack of available hospital room can lead to patient mortality. The application of information technology in management and treatment in hospitals can help the hospitals treating patients quickly. Likewise with information technology, patient will be able to monitor the availability of hospital room easily and quickly. In this case if there are no more rooms available, patient can quickly find alternatives hospitals that are still available.

Based on these reasons, it is necessary to build an application regarding hospital e-service. E-service hospital is a mobile application that can help patient to make hospital room reservations. With this application, patient will be able to monitor hospital room availability for all hospital in Pontianak. Patient also can reserve hospital room using this mobile application. For hospital management, this application can be used to monitor how many room are available, which in return will provide the hospital with ability to rely correct information to patients quickly which will improve quality of hospital service.

II. TECHNOLOGY USED

This section explains the technology and equipment we will use in this research, and the results of other work-related research.

II.1 Web-Mobile

Applications E-Services Hospital is a mobile web applications which can be used in a variety of mobile-device platforms. Applications for mobile web is intended for regular users (client side), while for the admin (back-end user)

application can be accessed using a personal computer display (desktop) using commonly used browsers.

II.2 PHP

The programming language that used for web development is PHP. PHP is also called server programming it means that the program is run on a server. PHP is a scripting language that installed in HTML. PHP syntax is owned by largely similar to language C, Java and Perl, plus some PHP specific functions. The main purpose is to allow the use of PHP web designer to write dynamic web pages quickly.

II.3 JQuery

Framework that used in the development of mobile web applications are JQuery Mobile Framework. JQuery Mobile is a JavaScript library's that enable and support in designing a wide range of smartphone devices to make the look and function like a native application [4].

II.4 SMS Gateway

SMS Gateway is a platform that provides a mechanism to deliver and receive SMS from mobile devices (HP, PDA, etc.). SMS Gateway is a connecting device between the SMS sender with the database. This device comprises a set of PC, phone and application programs. This application program will forward any request from any incoming SMS by querying the database, then given the response of the query results to the sender [2].

By using the SMS Gateway can spread the message to hundreds of numbers automatically and quickly that connected directly to the database of cell phone numbers without typing hundreds of numbers and messages on mobile phones because all the numbers will be automatically retrieved from the database so as to minimize time.

In principle, SMS Gateway is a software that uses the help of computers utilizing cellular technology integrated to distribute messages generated through the information system via SMS media handled by the mobile network [3]

II.5 Gammu

In building applications based e-service is needed Gammu SMS Gateway that is one of library or opensource library created as a gateway or link between the mobile phone with computer devices. Gammu as the application will work when Gammu command shell environment and its orders are included in accordance desired function. Meanwhile, as daemon, characterized by the exercise of command gammu smsd on the shell. In principle the workings gammu which connects the modem / phone with a PC. SMS received on the modem / phone will be taken by gammu to be moved into the database prearranged [3].

II.6 TECHNOLOGY ARCITECTURE

Technology arcithecture on this research shown on figure 1.

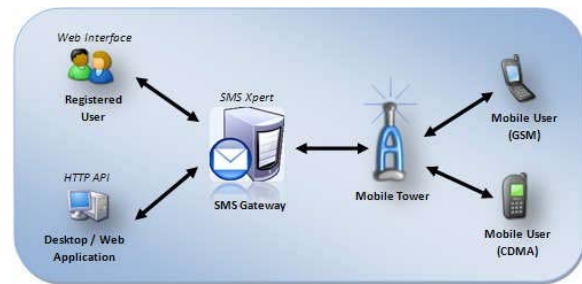


Figure 1. How SMS Gateway Works
Source: <http://sms-gateway-php.blogspot.co.id/>

II.7 ARCITECTURE SYSTEM E-SERVICES HOSPITAL

System Architecture E-Service Hospital on this research shown on figure 2

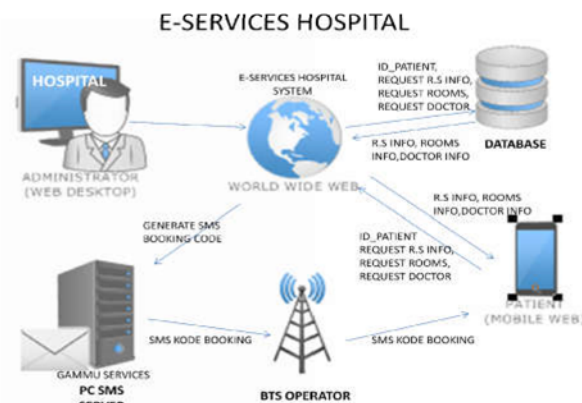


Figure 2. Arsitektur Sistem E-Service Hospital

II.8 DFD (Data Flow Diagram)

On this research is using DFD that shown on the figure 3

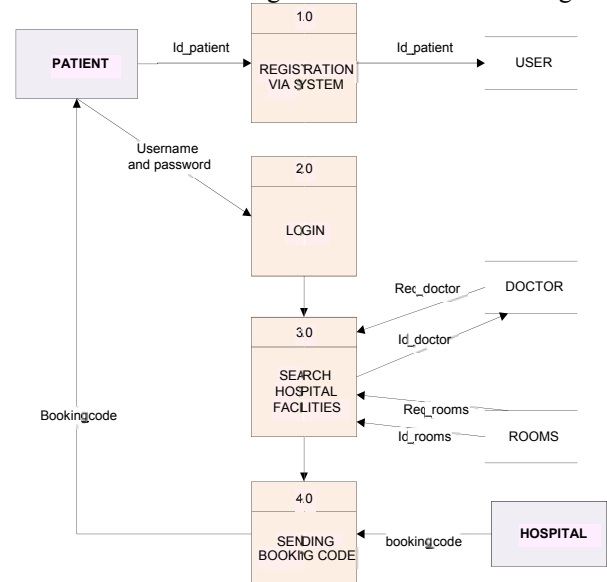


Figure 3. Data Flow Diagram E-Service Hospital

III. REVIEW SYSTEM

At this time, the system of booking rooms in the Hospital are shown in Figure 1, starting from the patients who received a letter from a doctor or emergency patients without getting a refferal from the doctor. Patients who received a refferal from the doctor can be classified as an emergency patient or not. For emergency patients will go directly to the emergency

room and examined by the ER doctor to be delivered to the treatment rooms. for patients who are not classified as emergency patients will be taken to the outpatient unit and examined by outpatient's doctor. Outpatient doctor will decide whether the patient to be treated or discharged. For treated patient it will deliver to the treatment room.

1. Patients will directly get information about the availability rooms by online and accurate
2. The hospital can also get prospective patients more quickly.

IV. CONCLUSIONS

From the analysis and literature study conducted, it can take some conclusions are:

1. Applications E-Services Hospital would become a solution for the city of Pontianak in getting access to health services is easy and quick to take advantage of mobile web technology, so that the process of reservation of hospitalization can be done anywhere and anytime via smartphone devices.
2. Pontianak's society find it easy to see the number of room availability inpatient at a hospital in the city of Pontianak by utilizing the application of E-Service Hospital.
3. Applications E-Service Hospital can be utilized in promoting the hospital room facilities, so that patients can know facilities provided by each hospital and to improve the quality of hospital services
4. Application of E-Services Hospital to improve the quality of health services in the smart city concept plan in the city of Pontianak efforts.

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Based on the problems described in the background, and observe the room booking system at the hospital, the authors propose solutions and system design as follows:

1. Every patient that who already examined and receive a referral letter from the doctor to be hospitalized, then the patient can register through E-Service Hospital to complete the requirements include:
 - a. Complete identity
 - b. Complete the name of the doctor and the disease
 - c. Choosing the type of insurance that the patient used
2. When the patient is already complete the doctor's name, the type of disease and the type of insurance that is used, then the E-Service Hospital will provide further information on the form of hospital where the doctors work.
3. After patients get information about hospital and treatment rooms, patient can instantly book a room.
4. Patients will be given a booking code via text message to their mobile phone number.
5. Once a treatment room is already booked, rooms will be available to subscribers for 4 hours until then used his room or reconfirmation by the concerned

E-Service Hospital Service also provides information such as the doctor profiles, drug availability, number of available wards, providing features in every hospital ward picture and contains information about the condition of the ward and the ward price. For the emergency patient, the patient can immediately book a room at the hospital. If the ward is full, then the patient will be placed in the waiting list and will get more information about an empty room.

With E-service Hospital, it is expected that the people especially the poor people no longer need to wait long to get treatment rooms. The advantage of this service are:

STUDY AND ANALYSIS OF AGRICULTURE SPATIAL PLANNING IN PENAJAM PASER UTARA, EAST KALIMANTAN, INDONESIA

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Abstract. The need for food continues to increase in line and directly proportional to the number of people, in addition to the development activities in the area of new autonomy which became a magnet for newcomers to try their luck, which requires efforts to increase food production continually and sustainably. In RTRW Penajam Paser Utara has clearly emphasize one of its policy to develop the agricultural sector. The desk study and analysis in hydrology of the two alternatives would plan the body of the dam and do more overlay two locations on the Location Permit in Penajam Paser Utara then obtained as follows: (1) For the dam Tunan alternative one looks inundation alternative 1 is in the area of PT. Harum Mukti Lestari, while the second alternative dam body plan of the Sar-free area business licenses; (2) The nature of the business license of PT Harum Mukti Lestari to plan Tunan dam catchment area is clearcut there should be a review of the permits for the Mukti Lestari PT Harum time to harvest it will affect the sustainability of the dam Tunan conditions.

Keywords: food production, hydrology, sustainability

I. INTRODUCTION

The need for food continues to increase in line and directly proportional to the number of people, in addition to the development activities in the area of new autonomy which became a magnet for newcomers to try their luck, which requires efforts to increase food production continually and sustainably. Field irrigation as one of the important factors can contribute to a comprehensive and in increasing food production, especially rice, becoming elements that need to be developed further. In addition, in the era of regional autonomy, each region should be able to manage their own potential in their respective regions so that the new autonomous regions are able to compete and become self-sufficient in the area of subsistence communities, especially of food and clothing and shelter.

In the RTRW Bylaw Penajam Paser Utara Article 3 Paragraph 2 formulated the following policies: (1) development of agribusiness region based on local potential; (2) The development of local industry and agro-competitive and potentially environmentally sound; (3) Development of fisheries by taking into account ecological aspects; (4) The development of mining potential, which is based on the aspects of the ecological balance and socio-cultural environment; (5) Development of risk regulation in disaster-prone areas; (6) The development of regional infrastructure and environmental infrastructure; (7) Control of strictly protected areas based on sustainable development; (8) Improved function of the region's defense and state security. Policies in the field of agriculture is one focus of spatial planning policy in Penajam Paser Utara namely in Article 3 Paragraph (2) a, of this policy drawn up strategies, namely: (1) Develop regional economic development centers based integrated agribusiness and agro-industry; (2) Improving the infrastructure to support regional economic development

centers based integrated agribusiness and agro-industry; (3) Establish technical irrigated rice farms into sustainable food; (4) Develop new fields in the area of potential; (5) Optimizing dryland farming area; (6) Develop and revitalize the irrigation network.

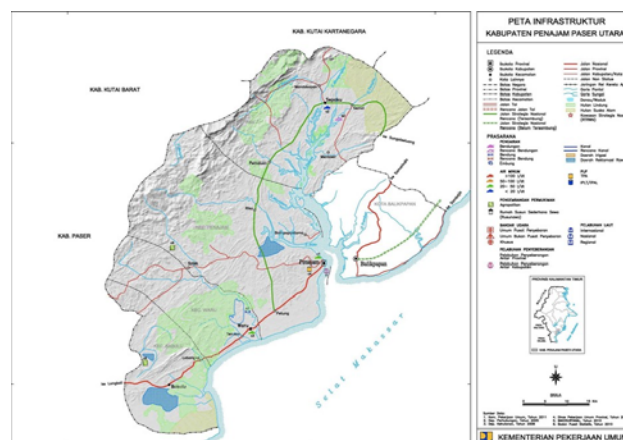


Fig.1. Penajam Paser Utara Region

In RTRW Penajam Paser Utara has clearly focused one of its policy to develop the agricultural sector, but Penajam Paser Utara which has several large watersheds that one of them is the River Tunan, the condition of the flow of the river in the rainy season has discharge enormous and often times be a problem either along the river channel itself or the surrounding area. Whereas in the dry season the river flow has a discharge is minimal, the area surrounding the form of settlements, agricultural land and plantation water shortages. One approach to solving this problem is necessary to make a building a container of water in the river channel so they can be used for various purposes both in the rainy season and the dry season, the early planning stages need to be planning to

support the feasibility of solving the problem of water scarcity is to be achieved the optimal goal.

II. METHODOLOGY AND ANALYSIS

The research location is situated in Penajam Paser Utara Waru precisely in the District and District Shaper. From the middle to the upper end Tunan River bisects the District of Waru and Penajam well as the boundary of the two districts as well as downstream. Only a few of the middle part of the river which is Tunan districts of hibiscus. Research locations can be reached by road from Penajam that is the capital of Penajam Paser Utara. The condition of the road has been very good with hot mix pavement and a provincial road. The journey from Penajam to the location of the research distance of about 22.3 km within \pm 30 minutes. The administration is the location of activities that are watersheds located in two administrative regions yaitu District of Waru and the District Shaper. The location of activities that are parts of the District and the District Waru Penajam to administrative borders with: (1) North: Village Rico, Sepan, Fur Minung, Desa Giri Mukti, Lawe-lawe, palm-NYPA and mountain exhibition; (2) South: Village Sesulu and Paser; (3) West: Paser; (4) East: Makassar Strait

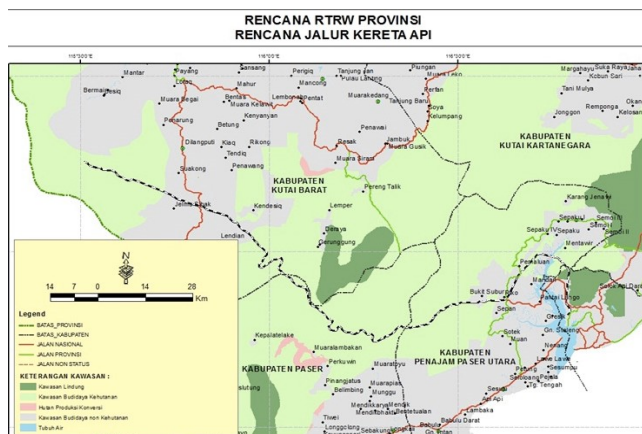


Fig.2. Infrastructure Integration of East Kalimantan

Difference in height of a region has an influence on the temperature and air pressure. Therefore, the height is one important factor in determining land use patterns both agricultural and industrial. Based on the height of the sea surface Research Area has sufficient height varied from 1 m above sea level to 472 m above sea level. The slope of the land/slope is the angle formed by the surface of the soil/earth with the horizontal plane as α° or degrees. The slope of the land/slope affect the rate of erosion, drainage effective state land and land development level of a region and is one of the limiting factors for its use, slope in the study area varies with the dominant slope of 0-2% and 2-15% there is also a 15-40%, but only a small fraction.

Soil is a natural resource that is essential for human life, animals and plants. Physiologically, soil formation is the result of several factors, namely, climate, organism's parent material, topography and time, while the potential for soil fertility is determined by the physical and chemical fertility is the result of the manifestation of its properties. At the study site is order ultisol type that are lands that accumulation in the lower horizon, is acidic. Base saturation at 180 cm of the soil

surface is less than 35%. Matching with the old classification is including the red-yellow podzolic soil, latosol and hydromorph gray. Other properties of Ultisol yellow or red Podzolic are structuring pretty good but not steady. Kaolinite clay mineral content is high, so the amount of water available to plants is somewhat reduced. Thus, the productivity of the soil is low to moderate. As an illustration of rainfall data is used rainfall data that has been presented in the data Penajam in figures, but for the purposes of further analysis will use the rainfall data from rainfall observation post choked with activity locations. Meanwhile, according to the climatological condition and ferguson schmidt assessment locations including classification into C-type climate with wet months is generally 7-8 months with dry months 4 months.



Fig.3. Rice Production of Penajam Paser Utara Region

Population is one of the basic capital of national development. As an authorized capital or assets development, the population not only as a goal or object of development, but also an object or agents of development. Residents Penajam Paser Utara when broken down by districts can be seen as follows. The largest population in the District Penajam and at least in the District Waru with details, District Penajam as many as 79 357 lives, District Babulu 33 017 inhabitants, District Sepaku 31 831 inhabitants and the District Waru 18 366 inhabitants. The population density is the ratio between the total population in a given year by the total area. The population density is used to determine which region has the highest population density and the lowest for the highest density can provide a variety of impacts including the amount of available labor. Population growth Penajam Paser Utara (2014) was 2.93%, ie from 157 944 inhabitants (2013) to 162 571 inhabitants (2014)

Penajam Paser Utara has a significant potential for food crops. In 2014 rice production has decreased. Harvested area of paddy in 2013 is 13 436 ha fell by 3.41%. The harvested area of paddy fields also decreased from 1,590 hectares in 2013 dropped to 955 hectares in 2014, down 39.94%. Rice production also decreased, rice production in 2013 amounted to 68 444 tons dropped to 64 514 tonnes in 2014 or a decrease of about 5.7%, while the paddy fields also decreased from 4,233 tons in 2013 to 2,546 tons in 2014. In addition to rice plant, Penajam Paser Utara also produce crops.

In the RTRW Bylaw Penajam Paser Utara Article 3 Paragraph 2 formulated the following policies: (1) development of agribusiness region based on local potential; (2) the

development of local industries and agro-competitive and potentially environmentally sound; (3) Development of fisheries by taking into account ecological aspects; (4) The development of mining potential, which is based on the aspects of the ecological balance and socio-cultural environment; (5) Development of risk regulation in disaster-prone areas; (6) The development of regional infrastructure and environmental infrastructure; (7) Control of strictly protected areas based on sustainable development; (8) Improved function of the region's defense and state security. Policies in the field of agriculture is one focus of spatial planning policy in Penajam Paser Utara namely in Article 3 Paragraph (2) a, of this policy drawn up strategies, namely: (1) Develop regional economic development centers based integrated agribusiness and agro-industry; (2) Improving the infrastructure to support regional economic development centers based integrated agribusiness and agro-industry; (3) Establish technical irrigated rice farms into sustainable food; (4) Develop new fields in the area of potential; (5) Optimizing dryland farming area; and (6) develop and revitalize the irrigation network.

III. CONCLUSION

In RTRW Penajam Paser Utara has clearly emphasize one of its policy to develop the agricultural sector. The desk study and analysis in hydrology of the two alternatives would plan the body of the dam and do more overlay two locations on the Location Permit in Penajam Paser Utara then obtained as follows: (1) For the dam Tunan alternative one looks inundation alternative 1 is in the area of PT. Harum Mukti Lestari, while the second alternative dam body plan of the Sar-free area business licenses; (2) The nature of the business license of PT Harum Mukti Lestari to plan Tunan dam catchment area is clearcut there should be a review of the permits for the Mukti Lestari PT Harum time to harvest it will affect the sustainability of the dam Tunan conditions.

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THE ASSESSMENT OF ECOLOGY DIMENSION SUSTAINABILITY OF RICE PRODUCTION IN WEST KALIMANTAN

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Abstract: The implementation of food security depends on food production. In West Kalimantan the food production can be identified from rice production. One of the sustainability dimensions of rice production is ecology. The purpose of this study is to investigate the sustainability of rice production and the sensitive factor the sustainability of rice production in West Kalimantan. The data used was taken from four districts in West Kalimantan which are Bengkayang, Landak, Kubu Raya and Ketapang. In this research it to applied Multi-Dimensional Scale which modified to Rap-Prorice and it use 17 attributes that are: forest area, paddy field potential, extensification, land conversion, pressure of use of paddy field, land suitability, Rainfall, The accuracy of the rainy season, the use of rice seed, the use of organic fertilizer, the use of chemical fertilizer, the use of organic pesticide, the use chemical pesticide, the potential of pest organism, dry periode, , flood, and water resources The results indicate that the sustainability of ecology dimension has less significant changes. It is evidenced by the acquisition of index score of 43.57%. This result occurs as it is influenced by six attributes that are; The accuracy of the rainy season; the use of chemical fertilizer; the potential of pest organism; the use of rice seed; dry periode; rainfall. The increase of the sustainability of ecology dimension can be conducted through intervention and improvement of performance on the sensitive attributes.

Keywords: Sustainability, Rice Production, Ecology Dimension

I. INTRODUCTION

The agricultural sector is still to be a vital sector in national economic development which is stated in Nawa Cita or priority agenda of Kabinet Kerja/Work Cabinet (2015-2019). It will direct the future agricultural development to establish food security, outlined in the form of nation's capability in terms of: (1) to meet the food needs from domestic production, (2) to regulate the food policy independently, as well as (3) to protect and to notice the welfare of farmers as the main perpetrator of food agriculture business. The food sovereignty should be start from self-sufficiency in food and gradually follow by the improvement of value-added agricultural business widely to enhance the welfare of farmers [1].

Several policies have been taken by the government to address the issue of food security by escalating the national food production and farmers' welfare through various efforts such as providing means of production, counseling and guiding activities of farming, pricing policies and others.

Talking about food, it cannot be separate from rice as the main product of the rice plant. Rice is a staple food and a source of energy for Indonesian people and as a source of income for majority of residents who derive their farming as

a livelihood. In addition, rice also serves as a political commodity since its existence cannot be replacing by other commodities and must be available in sufficient quantity. Indonesian people consume more rice than people from any other Asian countries, reaching 114 kg / capita / year, whereas the average rice consumption from Asian countries is 90 kg per capita per year. Therefore, it is logical and reasonable to make food sovereignty program as the main priority of national development.

West Kalimantan is one of the rice-producing regions within an area of about 14,680,700 million hectares covering 6,429,719 hectares area of cultivation and 8,322,448 hectares area of non-cultivation. West Kalimantan still has enough potential lands for the development of food with the amount of land area of 1,294,420 million hectares covering 542,455 hectares of wetland and 751,965 hectares of dry land. Of this amount, only an area of 105,110 hectares planted two times a year, and 217,685 hectares planted with 1 time a year. This condition indicates that the land used to grow rice is still not optimal and there is still a lot of unused land. Therefore the vast potential of wetland provided in West Kalimantan is an opportunity to be rice self-supporting in the future.

In producing rice, West Kalimantan is still experiencing a variety of problem and one of them is the low productivity. In 2013, the productivity of Dried Unshelled Rice Harvest (GKP) is at 3.1 tones hectare-1 and it is still much lower than the national productivity that amount 5.152 tons hectare-1. The threat of decline in rice production in the future is increasingly serious since the competition in the utilization of natural resources and water. The high rate of population growth that amount 1.55% / year and the raise of development activities as the effect of regional expansion have led to the higher need of land and water availability. In addition, agricultural land conversion in particular wetland into non-agriculture cannot be hindered and it influences the performance of region food production [1].

On the other hand, the new paradigm of agricultural development requires a sustainable agriculture in farming system, which is capable in keeping productivity and utility of the environment in an indefinite time. The concept of sustainability emerges as fears of ecologists about the long-term consequences of the extreme pressure of the natural support system. This concept also expresses their interconnection between natural and socio-economic-culture. The significance of this research is so important because domestic rice need to meet in a sustainable manner.

The purpose of the research is to identify the sustainability of rice production from ecology dimensions, determinants and policies for enhancing the sustainability in West Kalimantan.

II. MATERIAL AND METHOD

The study was conducted in West Kalimantan Province by taking four districts as a research site; Kubu Raya, Landak, Bengkayang and Ketapang. The determination of research site was intentionally chosen (purposive) by considering the concept of development in West Kalimantan that is divided into four (4) Regional Development (WP) covering Middle Development region represented by the district of Landak, Coastal Regional development characterized by district of Kubu Raya, Inter province Regional Development corresponded to Ketapang district, and Inter-State development region symbolized by Bengkayang district.

The data used in this study included primary data and secondary data regarding ecological aspects. The method of primary data collection was employed by survey with in-depth interviews by means of lists of questions and discussion. The selected respondents were 120 farmers taken randomly. This data used for the analysis of the sustainability index.

The analysis used in assessing sustainability was multidimensional scaling (MDS) modified from Rap-fish called RAP-PRORICE.

The analysis phase embraced the ordination analysis of RAP-PRORICE that was conducted through several stages specifically : (1) forest area, paddy field potential, extensification, land conversion, pressure of use of paddy field, land suitability, Rainfall, The accuracy of the rainy season, the use of rice seed, the use of organic fertilizer, the use of chemical fertilizer, the use of organic pesticide, the

use chemical pesticide, the potential of pest organism, dry periode, , flood, and water resources (2) assessing each attribute in the ordinal scale (scoring) based on sustainability criteria for each attribute; (3) Analyzing the ordination to determine the ordination and the value of stress using SPSS, (4) indexing the sustainability status of rice production; (5) analyzing sensitivity (Leverage Analysis) to ascertain the influencing sensitive attribute or variable, (6) Analyzing Monte Carlo to evaluate the effect of random tool (Error). Those ecological attributes are presented in Table 1

TABLE 1.
THE SUSTAINABILITY ECOLOGY ATTRIBUTES OF RICE PRODUCTION IN
WEST KALIMANTAN

No	attribute	Criteria		Legend
		B	G	
1	Percentage of forest area: Percentage of area that is still good	0	3	(0) Forest area is still good <20%; (1) Forest area is still good 20-30%; (2) Forest area is still good 30-50%; (3) Forest area is still good > 50%
2	Potential Rice fields: land potential for new paddy fields ;	0	2	(0) potential land is not available; (1) potential enough available land; (2) the potential of land is still widespread
3	Expansion of wetland: print new paddy per year	0	2	(0) print new fields do not exist; (1) print new fields is limited; (2) print new fields quite spacious
4	Intensity of Conversion of wetland: Size conversion field / year	0	2	1. High (2) Medium (3) Low
5	Pressure and industrial land use: Proximity / jarakantara wetland with industry, highways, housing complex	0	3	(0) is very close, $\leq 0,5$ km; (1) close, $> 0.5 - \leq 1$ km (2); (2) moderate, $> 1 - \leq 2$ km; (3) Further, ≥ 2 km
6	Land suitability classes: class average paddy land suitability for rice crops in West Kalimantan	0	3	(0) is not appropriate (N); (1) is marginally suitable (S3); (2) reasonably fit (S2); (3) highly suitable (S1)

7	Rainfall per year: Rainfall Data of the last 3 years	0	3	(0)	CH <1500 mm / year; (1) CH 1500-2500 mm / year; (2) CH 2500 - 3000 mm / year; (3) CH > 3000 mm / year
8	The accuracy of the rainy season every year: the last 3 years of climate data	0	2	(0)	Varied > 4 weeks; (1) Varies in 2-4 weeks; (2) Always fall down in the same month
9	The use of rice seed: based on the quality of rice seeds used by farmers	0	3	(0)	Seed local with age > 6 months; (1) Seed superior local aged ± 4-5 months; (2) Seed superior no certified; (3) Seed superior and certified
10	The use of organic fertilizer: organic liquid fertilizer, animal manure, rice field waste for fertilizer.	0	2	(0)	Not use; (1) bit / use rate lower than recommended; (2) use as recommended;
11	The use of chemical fertilizer: using fertilizer produced by the factory such as Urea, SP36, KCl, and NPK per ha	0	2	(0)	use as recommended; (1) bit / use rate lower than recommended; (2) not use;
12	The use of Natural Pesticides	0	2	(0)	Never; (1) sometimes; (2) Always
13	The use of Chemical Pesticides	0	2	(0)	Always; (1) sometimes; (2) never
14	Potential attacks OPT: based on the comprehensive development of pest attacks during the last 3 years	0	2	(0)	increased; (1) Fixed; (2) Decrease
15	The potential occurrence of drought; Based on the development of land area experiencing drought for the last 3 years	0	2	(0)	increased; (1) Fixed; (2) Decrease
16	The potential occurrence of floods; based on developments in the area of land flooded for the last three years	0	2	(0)	increase; (1) Permanent; (2) decline

17	Source of water: the average water source, especially the dry season to support rice production	0	3	(0)	water sources support; (1) The lack of water resources support; (2) sufficient water resources support; (3) the source of the water is very support
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The Indexing of sustainability status can be in four categories. Those categories are as presented in Table 2

TABLE 2.
CATEGORY INDEX AND SUSTAINABILITY STATUS

score Index	Category
00,00 – 25,00	Poor : non sustainable
25,01 – 50,00	Less : less sustainable
50,01 – 75,00	Fair : Fair Sustainable
75,01 - 100,00	Good : good sustainable

III. RESULT AND DISCUSSION

A. Sustainability of Ecology Dimension

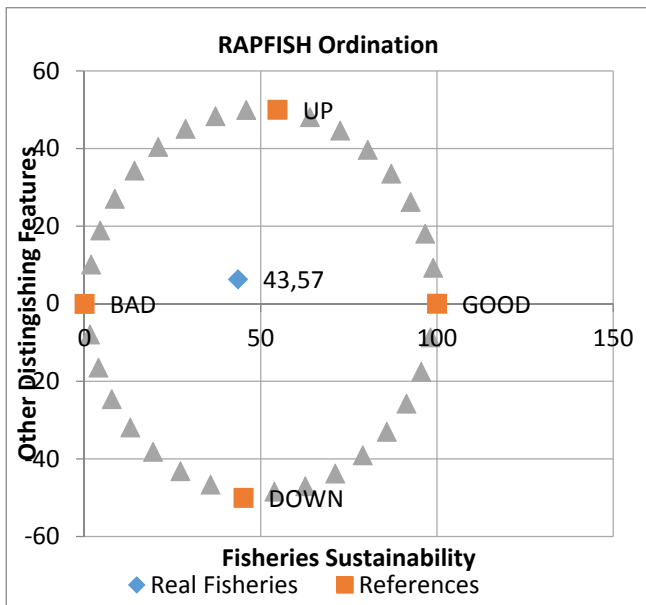
Fundamentally, Samekto [2] defines sustainable agriculture or alternative agriculture as a system of agriculture, which emphasize on environmental conservation, economic sustainability and environmental issue.

The World Bank construe the paradigm of sustainable development within the shape of Environmentally Sustainable Development Triangle, which relies on sustainability and one of them, is ecology dimension.

Ecology dimension sustainability based on the concept of sustainable development is an activity that utilizes harmless input for humans, surrounding environment and natural resources.

The assessment of sustainability status of rice production in West Kalimantan in particular ecology dimension was conducted by applying Multi Dimensional Scalling (MDS) modified with Rappfish or RAPPORICE. The analysis entailed seven most influenced attributes toward the sustainability of ecology dimension.

The results of the Rap-Prorice sustainability analysis of ecology dimension toward seven attributes as revealed in Figure 1 produces sustainability index value 43,57%, which is categorized as less sustainable. The finding signifies that the current ecological condition of field land is less supporting for enhancing the sustainability of rice production in West Kalimantan.



Source: Primary Data Analysis, 2016

Fig. 1 Ecology Dimension Sustainability Index of Rice Production in west Kalimantan

The analysis result reveals that stress value is 0,132649 and value of Squared Correlation (RSQ) is 0,9555698. According to Kavanagh and Pitcher (2004), when the stress value is less than 0.25 ($S < 0.25$) and R^2 close to 1 (100%), the model or results of the analysis is categorized into good enough. Thus, it can be concluded that the analysis model of MDS produced is accurate and sufficient to estimate the ecology dimension sustainability of rice production in West Kalimantan.

If it is identified from the comparison of analytical result of MDS with Monte Carlo at the trustworthy level of 95%, (Table 3) indicates very small value in distinction, specifically 0,01. This indicates that: the error in making a score is relatively small, the variety of scoring due to distinction in opinion relative small, the process performed repeatedly is relatively stable and the error of entry and loss data can be avoided [3],[4].

TABLE 3.

THE DISTINCTION IN SUSTAINABILITY INDEX VALUE OF ANALYSIS RAP-PRORICE (OF MDS) WITH MONTE CARLO ON ECOLOGICAL DIMENSION RICE PRODUCTION IN WEST KALIMANTAN

Dimensions of Sustainability	MDS	Monte Carlo	Difference
Ecology	43,56	43,57	0,01

Source: Primary Data Analysis, 2016

B. Sensitive Factors Influencing the Sustainability of Rice Production

Of the seventeen attributes analyzed by leverage, there are six attributes that have a significant influence on the sustainability of rice production in West Kalimantan. Of those attributes, embrace (1)the accuracy of the rainy season; (2) the use of chemical fertilizers; (3) the potential for pest organism; (4) the use of seed; (5) the dry period; (6) the rainfall. They are sensitive attributes that have significant

influence on the ecology dimension sustainability of rice production that entail serious attention or intervention to improve the sustainability status of production in the future. As it can be seen at Figure 2 for more details.

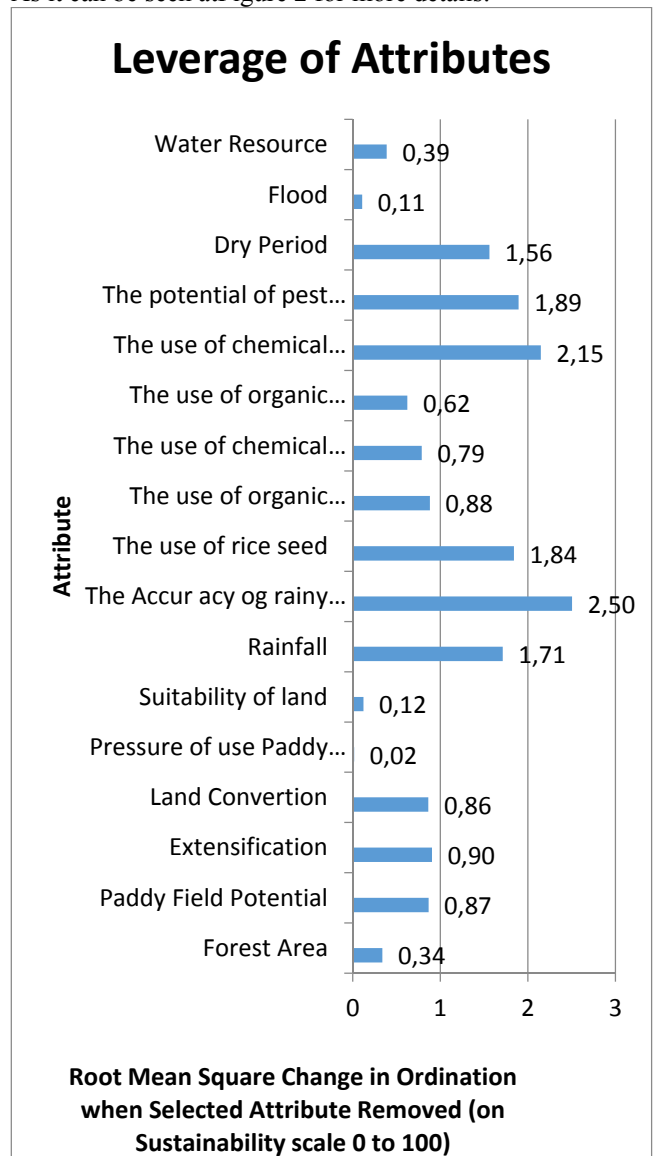


Fig. 2 Sensitive Ecological Factors Affecting Sustainability Rice Production in west Kalimantan

Among the sensitive attributes, that has a close link between the attribute with other attributes. In West Kalimantan, most of the rice plants cultivated in the rain fed and fields. Local farmers rely heavily on rainfall as a source of water to irrigate their agricultural land.

Climate change that has been happened in the last few years have an impact on the amount of rainfall, shifting the start of the rainy season and the dry season, floods, droughts and rising sea levels. Based on the data from BMKG in Siantan, that during the last three years it has been a shift in the start of the rainy season in West Kalimantan with an interval of 4-5 weeks, as described in Table 4 below:

TABLE 4.
EARLY RAINY SEASON IN WEST KALIMANTAN

Year	Normal	Early Rainy Season
2012/2013	September III	October II
2013/2014	September III	October III
2014/2015	September III	October III
2015/2016	September III	November II

Source: BMKG Siantan, 2016

The friction begin in the rainy season is very influential on the activities of farmers. It is often occur in the study area, the farmer must perform repetitions in seed nurseries to avoid the mistake in determining the commencement of the rainy season. According to [5], the climate change give the impact on the agricultural sector which is characterized by 1) changes in rainfall patterns, 2) increasing the frequency of extreme climate events (floods and drought), 3) an increase in air temperature and sea levels.

On the other hand, heavy rainfall triggered the emergence of various pests on rice plants and the incidence of flooding in various areas in West Kalimantan that ultimately affect the rice production. Based on the data from the Department of Agricultural UPTPH Food Crops and Horticulture Kalbar that during the period of 2013-2015 the number of wetland area were hit by the OPT continues to increase. In 2013 the amount of land area stricken rice pest that some 10 081 ha, increased to 15.068.71 ha in 2014, and increased to 21191.83 ha in 2015, with an area of crop failure in a row 141.3, 638, 75 ha and 104.15 ha. Pests that give the most worry among farmers is walang rice pest, rat. Blast, stem borer, brown leaf spot, white and slug pests' mulberry.

Rainfall linked to the availability of water for the rice crop. In West Kalimantan, most of the rice plants cultivated in the rain fed and fields, Local farmers rely heavily on rainfall as a source of water to irrigate their agricultural land. In setting, the planting schedule based on predictions of the month and the rainy season and in the last few years the incidence of the rainy season is often missed the estimates, and it causing risk of crop failure.

Climate change causes an increase in seasonal rainfall in the rainy season, causing flooding and it make a decrease in seasonal rainfall in the dry season, causing drought in the long period.

In addition, heavy rainfall during the rainy season flooding and inundation affects the wetland. According to the data, over the period 2013-2015 the area of land affected by floods in a row is as follows: 16121.60 ha, 6243 and 5935.3 ha. While droughts lead to a decline in harvested area and production. In addition, during that period, rice area has experiencing drought consecutive number of 393 ha, ha 33344.5 and 3747.2 ha with puso extents respectively by 144 ha (36.64%), 8268.6 ha (21.02%) and 61 ha (1.63%). The development of paddy land area experiencing drought, flooding and pest attacks during the period 2013-2015 were presented in Table 5.

TABLE 5.
DEVELOPMENT AREA OF WETLAND EXPERIENCING DROUGHT, FLOODING AND PEST ATTACKS IN WEST KALIMANTAN PERIOD 2013-2015

Year	Size Drought		Size Flood		Comprehensive pest attack	
	struck	puso	struck	puso	struck	puso
2013	393	114	16121.60	68.20	10081.41	141.3
2014	39344.5	8268.6	6243	536.5	15068.71	638.75
2015	3747.2	61	5935.35	5.5	21191.83	104.15

Source: UPTPH Kalbar, 2015

It is very necessary for water management technologies that can capture the excess of rainwater during the rainy season and take advantage of the water in order to irrigate the fields in the dry season, for example by building dams, reservoirs in surrounding farmland.

Other ecological sensitive attributes that affect the availability of rice in West Kalimantan is the use of chemical fertilizers. In general, farmers in West Kalimantan rely more heavily on the use of chemical fertilizers to boost rice production, only a fraction of farmers using organic fertilizer with a number lower than the recommended. The organic fertilizer is often use is waste rice straw and animal manure.

The use of inorganic fertilizers such as Urea, KCl which farmer has used in a long period and continuously, furthermore it has believed by farmers to increase the production of rice. Even with the various activities of government through the Department of Agriculture use of inorganic fertilizers is increasing through the help of fertilizers. In the concept of sustainable agriculture, more inorganic fertilizers use increasingly unsustainable.

In case of the use of rice seed, in general, there are still a few farmers in West Kalimantan who use superior seed certified (labelled) because the price is relatively expensive and its availability is inadequate. Certified rice seed requirements / labelled harvested area of 350 504 ha of paddy fields (Asem 2015) a number of 8762.6 tonnes of rice seed, while the production of labelled seedlings produced local seed breeders are a number of 625.59 tons, which means a deficit of seedlings of 8137.01 ton.

Finally, due to overcome the shortage of seeds that farmers use before, even the use of local varieties is still much to be done by farmers. Despite the resulting of the low production as the reason of pest resistant, produce rice that suit the tastes of farmers, and in certain areas of the rice local varieties produces is relatively high price such as brown rice and black rice (varieties of Bengkayang Belia) which has a selling price of around Rp. 20,000- 25,000 at the farm level.

IV. CONCLUSION

Based on the sustainability analysis of ecology dimension Rap-Prorice on the seventeen attributes, less sustainable with the index of 43.57% demonstrates the current wetland's ecology condition. This condition does not have significant influence to improve the sustainability of

rice production in West Kalimantan. Six attributes that affect the sustainability of rice production in West Kalimantan are; The accuracy of the rainy season; the use of chemical fertilizer; the potential of pest organism; the use of rice seed; dry period; and rainfall. These six attributes are sensitive attributes that affect the sustainability of ecology dimension of rice production in west Kalimantan. It is strong recommended that these three attributes give more attention or intervention to improve the status of production sustainability in future.

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GEOGRAPHIC INFORMATION SYSTEM (GIS) APPLICATION TO DETECT THE POTENTIAL FOR TOURISM GEOLOGY AND FOREST IN THE DISTRICT BERAU, EAST KALIMANTAN

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Abstract. Geographic Information Systems (GIS) in the form of an application to determine the location of potential Webmap Tourism Geology and Forest in Berau, East Kalimantan. This mapping system is used to display the information fields that have potential for Geology and Forest Scenic Area. Given this Webmap expected to assist in determining the Tourism Department of Tourism suitable land based on the parameters of Geology and Forest. The method used in this study using Scoring by processing the attribute data based on the criteria that have been determined, so that the preparation of this system is based on a reference and guide Local Government. Based on precision and recall every level of coal reserves, the average value obtained precision was 97%, the average value is 70% recall. The average value of accuracy, ability and success of this system is more than 50% based on the calculation precision, recall and accuracy.

Keywords: GIS; Webmap; Tourism Geology and Forest

I. INTRODUCTION

Coal sedimentary organic remains of plants that occur over several hundred million years ago. Berau regency precisely in East Kalimantan is an area that has the potential of mineral especially quarrying Coal mine to reliable, in 2015 where the district located in Berau, East Kalimantan, there are several types of coal, such as the type of Anthracite coal there are areas of the sub-district of Tanjung Redeb, Teluk Bayur, Powder Mountain, Sambaliung, and Talisayan. And for this kind of sub-bituminous coal districts there are areas of Cape Redeb, Teluk Bayur, Kelay, satiated, Powder Mountain, Sambaliung, Tabalar, Biatan, and Talisayan. As for the type of coal Lignite districts there are areas of Cape Redeb, Teluk Bayur, Kelay, satiated, Powder Mountain, Sambaliung, the Bear-Bear, Tabalar, Biatan, Talisayan, Biduk-dipper, Batu Putih, and Sambaliung. But not all regions have the potential excavation coal mines [1]. Because of the absence of applications that can help in the fields of coal, as well as lack of knowledge and information services to the public will be any parameter that supports the existence of land that could potentially be used as a coal mine. In addition to mining, the potential of Geology and Forest in Berau, East Kalimantan, can be used as Tourism Geology and Forests will be very useful for people, especially tourists, as well as the impact on increasing regional revenue. GIS has the ability to map and analyze spatial data with spatial analysis (spatial analysis) and analysis time (temporal analysis), generating an integrated analysis covering all aspects [2]. Geoprocessing on Webmap application in this study using Scoring method to determine the value of the weight and value of the priority of each

criterion for the next calculation process with Scoring method. The purpose of this study to determine the location of coal mining in the district of Berau. And to determine the potential of coal land in areas with coal based on the parameters of Geology and Forest. The benefits of this research to help the Department of Tourism in determining the coal mining areas that have the potential based on the parameters of Geology and Forest

II. METHODS

Scoring method is a method of giving a score or value to each parameter value to determine the level of ability. Scoring or scoring is done to give the effect of a trait of the parameters used in the analysis of a forecast occurrence. While the weighting method also called weighting is a method used when each character has a different role or if you have multiple parameters to determine the ability of the land or the like [3,4]. Data analysis used for geoprocessing. Weighting is a decision-making techniques in a process that involves a variety of factors together by assigning weights to each factor. The potential value of an area of the coal is determined from the total sum score of two parameters which affect the potential of coal (Geology and Forest). The results from the multiplication scores and the weights are summed in each parameter, which produces the sum by the total yield maximum and minimum. Analysis of coal reserves are divided into three classes which are very promising, potentially less, and no potential. From the analysis of these parameters can be value in the minimum and maximum values. Then process based on the minimum and maximum values, are divided into several classes.

III. RESULTS AND DISCUSSION

From the analysis results on the above map view can know which region has the potential of coal and which areas are potentially less coal, as shown in the following figure,

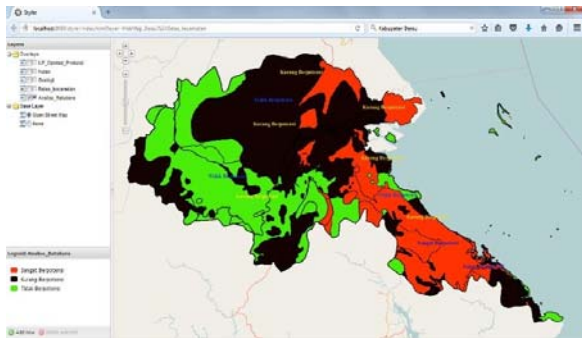


Figure 1. Potential of Regional Geology and Forest

Where:

- The red color, which is a region very potential.
- The black color which is potentially less territory.
- The green color which is a region that has no potential.

Trials to analyze potential areas of coal in the district Sambaliung. The parameters used to produce this analysis of geology and forest. This analysis is done by calculating the value of each class in each - each parameter in each district. The following system will analyze locations around the district area Sambaliung. In the "Analysis of Coal" There have been a variety of grades from the analysis of all parameters, the following picture following images display the results of the analysis of coal layer.

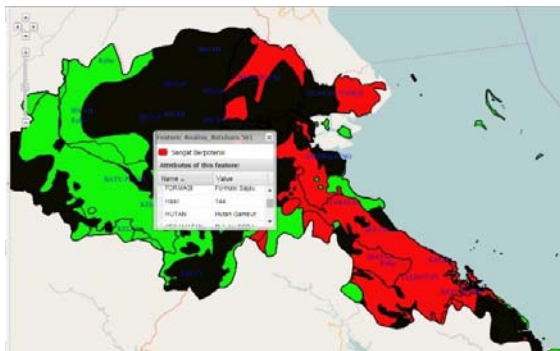


Figure 2. Results of analysis of the potential of Tourism Geological & Forest districts Sambaliung

Image above explains that the data is the data that appears click on the region in the area Sambaliung districts. The data shows 144 results, where this amount includes classes are worth 1, ie, the class which means the area is potentially serve as a land of coal mines in the formula (1) and (2). This value is classified in Table 6 where districts have Sambaliung an area that is potentially coal with a score layer as shown in the following figure,

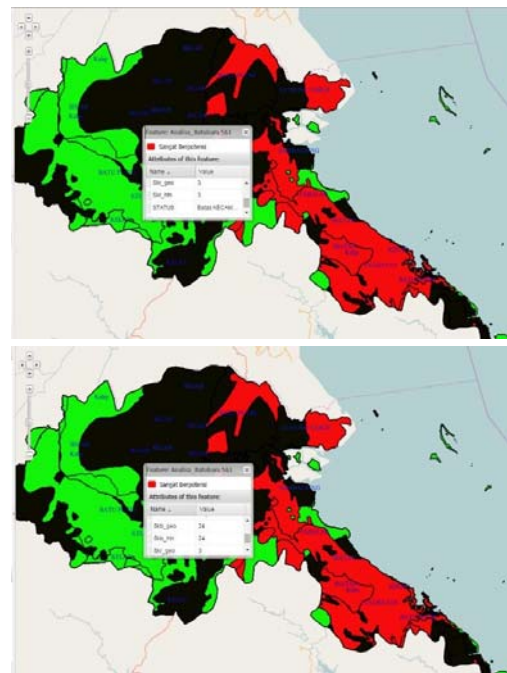


Figure 3. Parameters Score Geology and Forest

In The image above is a score in the districts Sambaliung which has a score of 3 and a score forest geology 3 . weight districts Sambaliung which has a weight of 24 and a weight geology forest 24.

IV. CONCLUSION

web-GIS applications with geoprocessing layer with Scoring method can be an alternative to facilitate the Department of Tourism in determining the potential of Geology and forest Tourism in the district of Berau in East Kalimantan. The results of the tests conducted, the average value obtained accuracy, ability and success of this system is more than 50% based on the calculation precision, recall and accuracy.

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TIDE FORECAST USING RADIAL BASIS FUNCTION NEURAL NETWORK

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Abstract. Indonesia is a country with approximately 70% of its territory is ocean areas therefore knowledge of the tide holds an important role in everyday life. Knowledge of the tide indispensable in water transportation, port activities, development in coastal areas, fishing activities, and others. Because of the periodic nature of ocean tides, it can be forecast.

Keywords: ocean tide, forecast, radial basis function

I. INTRODUCTION

Neural Networks have been widely used as time series forecasters: most often these are feed-forward networks which employ a sliding window over the input sequence[1]. Artificial neural networks are commonly used in identifying patterns or trends in data, prediction or forecasting, clustering, and classification. Optimization potential marine resources affected by the phenomenon of the tide. Tide each day is not always the same, so tidal predictions is needed for the achievement of the utilization of marine resources. Optimally prediction tides can forecast based on the previous data.

II. ARTIFICIAL NEURAL NETWORK

An Artificial Neural Network (ANN) is an information processing paradigm that is inspired by the way biological nervous systems, such as the brain, process information. The key element of this paradigm is the novel structure of the information processing system. It is composed of a large number of highly interconnected processing elements (neurones) working in unison to solve specific problems. ANNs, like people, learn by example [2].

ANNs were originally introduced as very simplified models of brain function, so it is initially instructive to consider the broad analogies between artificial neural networks and biological ones. [3].

A technical neural network consists of simple processing units, the neurons, and directed, weighted connections between those neurons[4]. Artificial neural networks have been developed as generalizations of mathematical models of human cognition or neural biology, based on the assumption that:

- Information processing occurs at many simple elements called neurons.
- Signals are passed between neurons over connection links.
- Each connection link has an associated weight, which, in a typical neural net, multiplies the signal transmitted.

- Each neuron applies an activation function (usually nonlinear) to its net input (sum of weighted input signals) to determine its output signal.

A neural network is characterized by its pattern of connections between the neurons (called its architecture) Its method of determining the weights on the connections (called its training or learning algorithms) Its activation function.[5]

A. Architecture of Neural Networks

The basic architecture consists of three types of neuron layers: input, hidden, and output layers. In feed-forward networks, the signal flow is from input to output units, strictly in a feed-forward direction. The data processing can extend over multiple (layers of) units, but no feedback connections are present. Recurrent networks contain feedback connections. Contrary to feed-forward networks, the dynamical properties of the network are important. In some cases, the activation values of the units undergo a relaxation process such that the network will evolve to a stable state in which these activations do not change anymore. In other applications, the changes of the activation values of the output neurons are significant, such that the dynamical behaviour constitutes the output of the network. There are several other neural network architectures (Elman network, adaptive resonance theory maps, competitive networks, etc.), depending on the properties and requirement of the application.

A neural network has to be configured such that the application of a set of inputs produces the desired set of outputs. Various methods to set the strengths of the connections exist. One way is to set the weights explicitly, using a priori knowledge. Another way is to train the neural network by feeding it teaching patterns and letting it change its weights according to some learning rule. The learning situations in neural networks may be classified into three distinct sorts. These are supervised learning, unsupervised learning, and reinforcement learning. In supervised learning, an input vector is presented at the inputs together with a set of desired responses, one for each node, at the output layer. A forward pass is done, and the errors or discrepancies

between the desired and actual response for each node in the output layer are found. These are then used to determine weight changes in the net according to the prevailing learning rule[6].

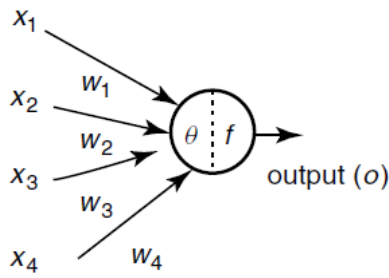


Fig 1 Artificial Neuron

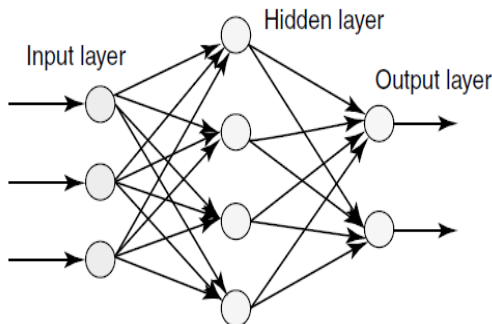


Fig 2 Multilayered Artificial Neural Network

B. Time Series Prediction

A time series is a sequence of vectors, $x(t)$, $t = 0, 1, \dots$, where t represents elapsed time. For simplicity we will consider here only sequences of scalars, although the techniques considered generalise readily to vector series. Theoretically, x may be a value which varies continuously with t , such as a temperature. In practice, for any given physical system, x will be sampled to give a series of discrete data points, equally spaced in time. The rate at which samples are taken dictates the maximum resolution of the model; however, it is not always the case that the model with the highest resolution has the best predictive power, so that superior results may be obtained by employing only every n th point in the series. Further discussion of this issue, the choice of time lag, is delayed until section 3, and for the time being we assume that every data point collected will be used. Work in neural networks has concentrated on forecasting future developments of the time series from values of x up to the current time. Formally this can be stated as: find a function $f : \mathbb{R}^N \rightarrow \mathbb{R}$ such as to obtain an estimate of x at time $t + d$, from the N time steps back from time t , so that:

$$x(t + d) = f(x(t), x(t-1), \dots, x(t-N+1))$$

$x(t + d) = f(y(t))$ where $y(t)$ is the N -ary vector of lagged x values Normally d will be one, so that f will be forecasting the next value of x [7].

C. Radial Basis Function Networks

The goal of RBF is to approximate the target function through a linear combination of radial kernels, such as Gaussian. Thus the output of an RBF network learning algorithm typically consists of a set of centers and weights for these functions. The key aspect of any RBF network algorithm is capacity control. It is easy to see that any input data (x_i, y_i) can be fitted exactly by allowing every data point to be a center and choosing appropriate coefficients[8].

In an RBF network the output neurons only contain the identity as activation function and one weighted sum as propagation function. Thus, they do little more than adding all input values and returning the sum.

Hidden neurons are also called RBF neurons (as well as the layer in which they are located is referred to as RBF layer). As propagation function, each hidden neuron calculates a norm that represents the distance between the input to the network and the so-called position of the neuron (center). This is inserted into a radial activation function which calculates and outputs the activation of the neuron. RBF neurons process information by using norms and radial basis functions[4].

III. ANALYSIS AND RESULTS

A. Data Preparation

In this research used a dataset containing tide variables recorded every 1 hour over a year. The data is transformed to daily data using average since the purpose is in making daily forecasting. Data normalization was applied to this dataset. The data in the table 1 are the data examples for the research.

TABLE I
EXAMPLE OF TIDE DAILY DATA

Data	Time			
	01/01/2013	01/02/2013	12/31/2016
1	0.292	0.324		0.132
2	0.324	0.42		0.196
3	0.42	0.484		0.292
4	0.484	0.484		0.356
5	0.484	0.484		0.356
6	0.484	0.484		0.356
7	0.484	0.484		0.356

B. RBF Architecture for Tide Forecasting

In this research 7 input neuron, 1 hidden layer with 10 node, and 1 output node are used. Seven neuron in input layer represent number of day in a week and 1 node in output layer represent the day after 7 days .

C. The Results

To measurement the result of RBF Minimum Mean square error (MSE), Mean Absolute Deviation (MAD), and Mean Absolute Percent Error (MAPE) are used. The result are shown in table 2.

TABLE 2

RESULT

Error measurement statistics		
MSE	MAD	MAPE
2.03	0.000544588	0.017392

IV. CONCLUSIONS

From the results obtained it is concluded that RBF with using 7-1-1 architecture with 365 tdata can predict tide data almost accurate with error is 2.03 using MSE, 0.00054445888 using MAD and 0.017392 % using MAPE.

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URBAN AGRICULTURE TECHNOLOGY TO SUPPORT URBAN TOURISM

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Abstract. Urban Farming (Urban Agriculture) is farmed by a narrow land use or intensification of land, in order to meet the needs of vegetables and fresh fruit daily for the public residential / housing in urban areas. Air inflated Structure technology as a support facility to increase production of Urban Agriculture, with Greenhouse portable system can be built and transferred to a specific location is convenient, safe, fast, lightweight structural materials (PVC 0,55mm Terpaulin) so that the Urban Agricultural products closer to residential customers in urban, impact prices getting cheaper, but quality. The objective is to plan, build and test the tent prototype Air inflated Structure Urban Farming as a facility to meet aspects of strength, speed, effectiveness, and comfort Greenhouse. Methods using methods Experiment, beginning with the design, manufacture and testing of prototype tent includes (1) a test of strength and endurance of materials to the weather (2) evaluating the materiality of the most effective use of structural components (3) test the speed of manufacture, transport, assembly, installation, demolition (4) test comfort. Tests conducted at the Laboratory of Narotama University and Merdeka University, proven to provide reliable results and satisfactory covering Strong tensile test up to 218.3 kg, durability of materials to > 70°C, the speed of installation and dismantling installations become more effective and efficient and comfort indoor maximum temperature of 35°C. Technology inflated Structure as facilities to support increased production of Urban Farming, also worth utilized as Agritourism (Agriculture Tourism)

Keywords: Air inflated Structure, Urban Agriculture, Agriculture Tourism

I. INTRODUCTION

FAO (Food and Agriculture Organization) describes the Urban Farming as an industry that produces, processing and marketing of agricultural products, mainly meet the daily demand of consumers in urban areas, with intensive production methods, utilize and recycle resources and urban wastes to yield a variety of crops urban people's food needs (Smit, J, A. Ratta, J. Nasr , 1996), the Council of Agriculture, Science, and Technology (CAST) said Urban Farming covers aspects of environmental health, remediation, and recreation (Butler, L, Moronek, DM, 2002). In many cities, Urban Farming supporting aspects of the beauty of the city and the feasibility of the use of spatial sustainable. Urban agriculture is also done to increase revenues or event produce food for family consumption, and in some places is done for the purpose of recreation and relaxation (Fraser, Evan DG, 2002). Urban Farming provide optimal results with facilities Greenhouse and technology Hydroponics, Greenhouse improve crop protection from the intensity of the rain, the sun and the microclimate, as well as optimizing plant maintenance, fertilization and micro irrigation, so as to increase the production of vegetables, fruits and flowers of quality, regardless of the season (G. Thiyagarajan, R. Umadevi & K. Ramesh, 2007). Greenhouse easier with technology Structure Air inflated to qualify the strength, comfort in the room and speed in the development of Greenhouse. the membrane material Structure Air inflated can withstand the weather for more than 10 years, depending on the type of material coating (Ikhsan, M, 2014).



Figure 1. Greenhouse and supporting tools
Source: greenestcity.ca

II. METHODOLOGY

This research used experimental method was the production of prototypes structure, conduct a test application to a variety of variables, such as testing the effect of the membrane material to various weather conditions (variable strength structural material to sunlight and rain), testing against various types of connections variable and variable thermal comfort for the people who occupy it. Implementation research begins with a literature review and then making the design (shape structure, the basic pattern sheet membranes, components and structural elements) are implemented in the Lab. Computers continued the design and fabrication of prototype structure with the scale to the choice of materials and the most efficient connection system. This prototype was tested (for 1 month), especially the aspect of comfort. Research and testing of the structural system of pneumatic, among others, in a test model of the structure of the pneumatic in 1992 has been carried out in the paper "Study and Design Building Concept Structures Pneumatic who

emphasized on aspects of Engineering and Methods Construction, Case Study: Roof Structure Pneumatic Membrane Single the air in the Gymnasium"(Budyanto, 1992). The experimental model of the structure is necessary to know the behavior of the real structure (prototype) using replica (model) structure on a smaller scale. One of the recommendations of the study is a pneumatic structure has several advantages compared with the conventional structure, ie less initial investment, speed and ease of construction, easy maintenance, the structural elements can be folded (quick) so it can be stored in a warehouse with a size of 3x3 m². Experiments continued with Higher Education Competitive Research Grant Year 2008-2010 which resulted in a prototype pneumatic structure is riveted by air. This prototype can be built in just 30 minutes, the building area of 150 m² ready to accommodate 50 people. The downside of this prototype is the use of rigid doors that must be airtight so difficult for the lay population relative to familiarize themselves out of the tent bubbles. The research results Purwanto as outlined in the article entitled "The Development of Structures Pneumatic Enriching Architectural Design" (Purwanto, 2000) expressed the possibility of applying and developing the structure of pneumatic in Indonesia, among others climatic conditions in Indonesia, especially the problem of the wind, not a significant problem and can be reckoned with calculation pressure in structure. the pneumatic Things that need to be considered in the use of pneumatic structure in Indonesia, among other behavioral, social conditions Indonesia needs to be improved, especially in the maintenance of the building. Aspects fad view and treat people in the building / public facilities often cause damage. However, people need to get used to the system and introduced new structures so that they can learn on one condition, form, behavior or a new civilization. Alain Chassagnoux and comrades in the "Teaching of Morphology" (Chassagnoux et.al., 2002) explains that in order to study the forms of contemporary architecture that use non-conventional structure. The teachers could ask students to conduct experiments model so gain experience "to form" buildings use elements / components designed by students. With the study of building form through the study of geometry and science will provide the experience formation of structures is difficult and mathematically. Urban Farming raises community as "foodies", "Locavores", "organic growers" that serves as a means of sharing information and facilities and selling products of local, thus generating income, reduce the risk of pesticides and chemicals excess in private consumption, thereby increasing food security, for closing the distance between producers and consumers so that preservatives and additional process is not required. This makes consumers get a guarantee of foodstuffs obtained so fresh (Thornton, A, 2011). Studies show that by moving from food grown locally can save on emissions from the transport of foodstuffs as much as 50,000 metric tons of carbon dioxide, which is equivalent to removing 16,191 cars from the road. As the effects of reduced energy usage, the carbon footprint of a city as a result of Urban Agriculture business also reduced. (Xuerreb, M, 2005), (Delta Institute, 2013). Technology Inflated Structure Greenhouse in Urban Farming qualified strength, comfort in the room and speed of construction, the membrane material Air inflated Structure can be weather resistant up to more than 10 years, depending on the type of material coating (Ikhsan, M, 2014).

III. RESULTS AND DISCUSSION

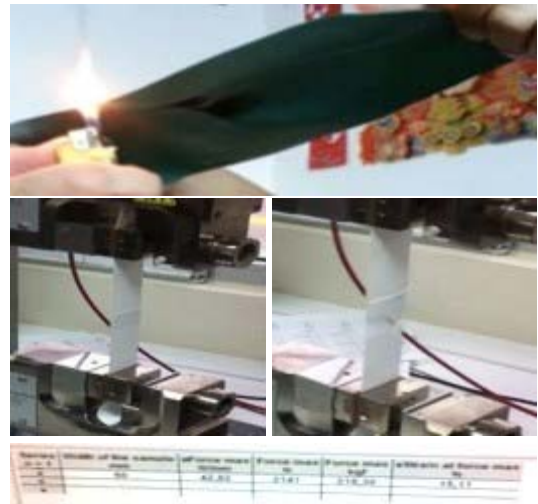


Figure 2. Laboratory Test



Figure 3. Fabrication Tent 21 Days



Figure 4. Installation & Setup



Figure 5. Unloading & Packing

IV. CONCLUSION

Greenhouse to function Urban Agriculture very appropriate, due to the speed, ease, and convenience of building such structures. Proven in the Field Test Laboratory Test and obtain reliable results include strong tensile test up to 218.3 kg, the durability of the material of $> 70^{\circ}\text{C}$, 3menit installation, installation, and dismantling 3menit 3menit as well as the indoor temperature $< 35^{\circ}\text{C}$. Building Structure inflated can be a national prototype as Greenhouse Urban Farming. PVC tarpaulin material use and very flexible and strong so as to facilitate the process of transportation, installation and dismantling back, in packaging that is simple and easy to use. However, the use of materials in the PVC tarpaulin and inflated structure need information or sign in order to avoid the danger of fire due to leakage and goods flammable, smoke and welding activities near the tent area. Technology Greenhouse for function Urban Agriculture also worth utilized as Tourism Urban Farming (Urban Agriculture Tourism)

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A STUDY OF ESSENTIAL BASIC VALUES WHICH SUPPORT SOCIAL HARMONY IN CONFLICT-PRONE AREAS (A profound Study at Primary Schools in Sambas Regency, West Kalimantan)

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Abstract. Basically this study intended to find out essential basic values which support social harmony in conflict-prone areas, with a profound study at primary schools in Sambas regency, west Kalimantan. As revealed by a number of data sources, west Kalimantan is one of the areas which is prone to conflict. This is evidenced by the happening of several ethnic conflicts including in Sambas regency so that it is an important policy of the regional government to find a solution in order to prevent similar conflicts from happening again in the future. The profound study at primary schools is deemed highly essential since social harmony values should be instilled among the students at an early age. In addition to that, teachers are knowledgeable about the foundation which creates an attitude of harmony among their students. The method used in this research is a qualitative one, with primary school teachers as the subject of the research. They represent three characteristic areas, namely: the urban area, the suburban area and the remote area of Sambas regency. Primary data collection was carried out through interview and focus group discussion (FGD), with the interactive model proposed by Miles & Huberman as technique of qualitative data analysis. The findings obtained from data collection and analysis revealed that social harmony has an important and profound meaning for society in Sambas regency. Basically there are three pillars of essential basic values which serve as the framework of social harmony, namely: (a) the basic values of mutual respect, (b) the basic values of tolerance and togetherness, and (c) the basic values of freedom and responsibility. Internalization of these basic values happen intensively especially in families through custom formation at households and society in Sambas regency. Meanwhile at schools these basic values are developed and reinforced through more formal custom formation by the teachers and school regulations.

Keywords: Essential basic values, social harmony, conflict-prone areas.

I. INTRODUCTION

West Kalimantan is one of the areas prone to conflict, particularly ethnic conflicts. Results of research conducted by Alqadrie (2000) [1], and refers to a note from the police Resort Sambas, West Kalimantan in 1999 there were at least 11 times had been conflicts between communities in West Kalimantan since 1963 until 1999.

Research and development of designed models through this research is one of the solutions offered in order to solve social problems often faced by the nation, particularly in the area of West Kalimantan is often a social conflicts between ethnic groups. By planting the values of social harmony at an early stage in the students is expected to grow an understanding of the reality of the differences in the various dimensions of life which in turn can drive awareness to respect each other, appreciate each other in a climate of harmony of life. Fertilization social harmony firmly impossible can be done instantaneously and partial. These efforts should be carried out within the framework of the program of planned, systematic, effective and sustainable in the long span of time. Paths are considered the most strategic to foster and develop these values in a planned and purposeful is through the role of educational institutions. UNESCO put great attention to the existence of education to realize the life of harmony and cultivation of strategic value contained in the framework APNIEVE by publishing a book "Learning to live together in peace and harmony: values education for peace, human rights, democracy, and sustainable development for the Asia-Pacific Region ", the point reveals that cultural values that ensure harmony of living together is necessary continually endeavored to be planted, nurtured and developed in self-learners, in order to ensure coexistence in the future of peace and harmony which ensures a favorable climate for the renewal and development of our nation-states [2]

Internalizing values harmony through the integrated character education is important since the basic education level. Basic education is a basic framework in order to encourage students to begin intensively involved to get to know their environment, learn to understand things substantive in life, such as living together, the importance of harmony, the importance of being a good citizen and forth hereinafter increasingly explored on the ladder The next education. The basic framework is what is expected to be positive seeds to be nurtured within the family, the community so that one day he used to see the differences in their environment and how to address these differences in terms of the reality of pluralism which can not be avoided.

The function of education as a process of building character and personality of this nation must be understood in practice. Do not get the education that just uprooted. "This is a result of government policy in the field of education today. Standard graduates, for example, is still a test group of specific subjects, especially exact science. There are still many educators who stated that educational success is only measured of achieving the target of student academic [3]. The emphasis is still heavy on individual goals. Not to collectively shape the character of civilized, character, emotion, and communication skills of Indonesian society

today is still aligned with countries in Africa, such as Nigeria, Ethiopia, or Uganda. "The education we need a therapy culture." The values of ethnographic roots of local culture, such as hard work, honest, democratic, should have a place in the national education. According to Brian [4], schools should ideally also helping students to seek the truth and not just teach something that they love. Because otherwise would cause the child does not have principles, but only a momentary taste, so it could mold them into creatures subjective.

Social collisions will occur when the lack of mutual understanding and togetherness. What is needed in the community not just looking for similarities and agreements that are not easy to achieve. Indeed, it is most important in a diversified society is the understanding [5]. If physical violence is to sacrifice the lives of these can not be eliminated, it is clearly linked to the persistence still "structural violence" (structural violence) at a certain level. This causes the liver peace is intrinsically impossible successfully realized. Even Buchori (2010), if the character of a nation can not rebuild it is highly likely this nation will experience even greater crisis, including the crisis of authority that will make all the institutions and social order which we have built together have become paralyzed [6].

in another analysis Nurokhim (2000) [7], suggests that the character of children and adolescents are also worrying, especially when viewed from 9 indicators; (a) the increasing acts of violence, such as fighting between students, (b) increasing the use of words that are not polite in speech, (c) increasing the negative influence of peers, (d) increasing self-destructive behavior, such as the use of illegal drugs , (e) the blurring reference morality replaced by morality "slang", (e) declining work ethic, such as low motivation to learn, (f) the decline of great respect towards parents, (g) an increase of dishonest behavior at school and lying to parents [8]. [9].

In various studies and research results revealed that efforts to foster positive character among children is an important and strategic step. Children are witnesses who always pay attention to the morality of adults. Children see and look for sign of how people should behave, making choices, greet people and show action [10]. In this state the importance of the role of parents and teachers to make their children even become successful and be able to actualize their potential optimally, including in support of the flourishing of shared values, tolerance, care and affection in order to realize the ideals of their lives in the future [11].

Efforts to foster shared values, mutual respect, responsibility should be the responsibility of all teachers. There are still many educators who stated that educational success is only measured by student academic achievement of targets [3]. "The emphasis is heavily on individual goals. Not to collectively form a civilized character,"

Based on the background as described above, the purpose of this research is

1. Obtain information or clarity about the fundamental essential values to support the growing social harmony in society Sambas district as one of the conflict region.
2. Obtain information about the ways of planting the basic values of social harmony in the family and in schools

3. Generate framework integrates character education for students of schools in conflict-prone areas based on the perspective of primary school teachers.

II. METHOD

To achieve the objectives that have been formulated previously required work procedures or the exact method includes the steps are interrelated. Some steps are interrelated, namely; (1) review the results of previous research related to this research theme; (2) conduct field data collection through interviews and focus group discussions in particular with regard to the fundamental values essential to support the growth of social harmony among people prone to conflict with in-depth study on elementary school teachers Sambas; (3) the preparation of the integrated character education learning model for the cultivation of basic values of social harmony to conflict-prone areas, hereinafter discussed with primary school teachers.

The subject of this research is the principal and teachers of an elementary school in Sambas district. Determination of schools sampled based on the representation of the three characteristics of the location of the school, the school is located in the city districts, suburban school districts and sub-districts inland. After the initial study it was determined the three districts in Sambas district that represents the characteristics, namely Sambas sub district, Teluk Keramat and Jawai District.

The collection of data is done using interviews and focus group discussions (FGD). Implementation of the interviews are more flexible by taking into account the availability of time teachers. Qualitative research strategies are flexible using various combinations of techniques to obtain a valid data [12].

The data analysis is intact and interconnected ranging from data collection to the verification. Observing the opinion of Miles and Huberman (1992) [13], therefore according to the analysis of qualitative data is interactive analysis is a cyclical process interactive between four interrelated components: (1) data collection, (2) data reduction, (3) the presentation of the data, and (4) conclusion / verification. The interconnections between these components is described in the following pages;

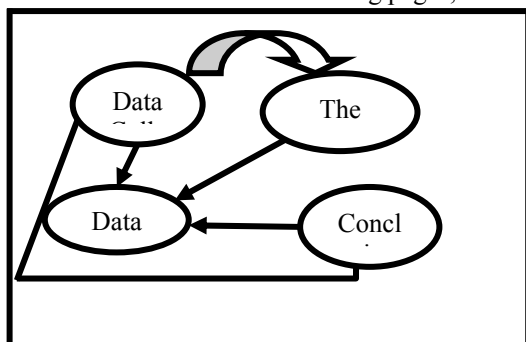


Figure 1: Components of Data Analysis: Interactive Model

The collection of data as discussed earlier is an activity to collect a variety of information and data both from the events or events directly, or through the subject and various documents available. The data were collected or obtained from the field in general very much, so it needs to be sorted and simplified. Simplification activities, selection and sorting the raw data is called data reduction. Reduced data further analyzed to further presented in detail and specifics. In this step the information will be arranged, and in doing so gives the possibility of drawing conclusions and taking action [13]

Inference is a further step of presenting the data, with emphasis on activities such as giving the meaning of all the information before it is presented. Although efforts have been made in granting the meaning of any information presented, but the conclusions are presented is also not a final, but still loose, open and skeptical, so it is open to verification. Nevertheless, the expected conclusion that departs from previous obscurity will increase to more detailed and rooted firmly.

III. RESULT AND DISCUSSION

A. Core Values Essential In the Community Life Support Social Harmony in Sambas district

1) The Core Values Mutual Respect and Respect Sambas in society in general, the habit of mutual respect and respect to both parents, to relatives or people older since time is of note. Within the family this habit nurtured since the age of the children until adulthood, this habit continues to be a concern that is manifested in various forms of activities.

Specifically address this greeting is fundamental in measuring respect especially within the family. In everyday family relationships, almost no mention to the brothers. The older brother, had a different greeting with brother second, third and so on. Similarly greetings to the brothers of the parents, to the families further. All illustrates the respect and appreciate each other.

In public life there is also the habits that until now continues to be applied in relation to respect and appreciate the example of ordinances eat in one particular event. For example, when an event is married, then the first meal there at the end. If you are under the unfinished meal, so that in the end may not come out first in honor still eating.

Over time, pristine values in public life have a lot to fade. It is not free from the influence of mass media, communication technologies and extensive interaction with various parties outside the public system.

2) Core Values of Tolerance and Mutual As the values of mutual respect and cherish, the values of tolerance and togetherness in the community in Sambas district grew from within the family. The basis of the growth of these values a sense of strong affection in family life and has become a habit for a long time. Togetherness in the household, for example embodied in learning activities together. Children accustomed to studying in a room together, did not learn in different rooms. Shared values are also embodied in the use of facilities, such as in a room

shared use of facilities (if the children of the same sex). Likewise, children accustomed to when watching TV as much as possible together.

In the performance activities, habituation do the job with a clear division of responsibilities is also a factor to consider. For example always together doing homework, sometimes they share who swept the house and yard, mopping, washing dishes, ironing, taking care of his sister and help parents.

Sambas in public life, the living habits of tolerance and togetherness has been growing since long. The forms of life tolerance and solidarity not only in one particular aspect, but also includes various aspects or dimensions of life. When someone wanted to hold a wedding for example kinship ties are still high. This is evident from always held deliberations from establishing tarup, patio-porch, who is part cookbook, part greet guests, part berampah (dispensing Rampah) and part washing dishes. Which ngantar pact (give host having a party) such as chickens, ducks, eggs and others with sincerity. Do not take into account how many kilos and how much money is given. However, according to some teachers, kinship, togetherness, sincerity begun to fade.

Tolerance and mutual cooperation in terms of Sambas languages borrow words (ie the relevant request help in completing the cultivation fields) it is very rare at all. So also help people less able to build a house, the value of togetherness almost faded, although there was simply no such family ties.

Gathering held in the village in general is in order to maintain the values of togetherness. By gathering is expected to meet each other and chat increase familiarity. The food was prepared and does not require to eat complete rice. Quite a cake that is important is the value of togetherness and participation.

Togetherness and tolerance within the overall social essence in Sambas district still survive, although there are in some villages began to decrease. Therefore, society expects education professionals, community leaders who can become role models by communities to disseminate to the citizens of the concern, tolerance, togetherness in order to continue to be maintained, given the value of togetherness is very important in supporting social life.

Overall of participants said that for religious common values will be maintained, especially in certain aspects such as respect when Christianity Protestant, Catholic Christians celebrate Christmas and the Chinese celebrate the Lunar New Year. As concrete examples is to go to his house. Likewise, when Muslims celebrate Idul Fitri and Idul Adha they visit our homes. If for weddings, events tepung tawar, events circumcision salvation of Muslims invited them though different religions and beliefs. Muslims still come if they also invite weddings. But specially for the sacred as the marriage ceremony, read a prayer / salvation for pilgrimage, prayer packaging bodies and their bodies not be involved given the many differences.

The fundamental values of tolerance and togetherness in school life to be realized in the form of habituation tolerate each other with their peers and foster common values in schools. Indeed there are already internalized such as group work, but some are not yet built up well as the maintenance and care of school property as belonging together

3) Core Values Freedom and Responsibility

Granting freedom and responsibility in everyday life is a reflection of the partial pattern of education in community life and in family life. The pattern of education that can provide a good space for the growth of responsibility in turn encourages a person to always be able to control themselves in a variety of action in accordance with the values espoused.

Granting freedom and responsibility is also done by asking the child's view of what the choice, especially in selecting education / school that would be attended. Parents facilitate the child's choice. Likewise, in the things that others in the family life, as in duty / job, free time or time off, choosing friends / hang out in the community and use the facilities there, I always discuss with the children, asking their views, and determine her own choice.

To foster freedom and a sense of responsibility both in issuing opinions/advice, carry out the task / job and use the facilities there are, in general, parents should certainly seek to give complete confidence to children, to open ourselves to the communication / dialogue with children, giving examples / concretely exemplary not just words, conduct surveillance, provide rewards and sanctions that educate and be able to show the mistakes made by the child and show the truth.

In an effort to foster the freedom and responsibility of children in public life indispensable complementary cooperation between families (parents), the community (community leaders, religious leaders, traditional leaders and cultural figures) and the school (teachers). Programs that can be done jointly by parents, religious leaders / community and the school is through religious activities, games by sports or other social activities. Various activities are often done for example, boarding lightning, celebration activities involving children in the great days of religious and national activities. While social activities such as mutual cooperation help family members in preparing for the wedding of his son, as well as other community members who will hold the wedding.

B. Planting Core Values Social Harmony In Family Environment

Education to cultivate the habit in order to respect the parents in the household, as well as to other people that age in the older communities of Sambas district more associated with religious teachings. What-what is the guidance of religion, for the parents also become the basis in educating children, such as how religions teach manners, manners towards parents, how to say hello and so forth.

In principle form of guidance given by parents in the home remains always maintain harmony in tolerance and always fostering unity within the family, between brother with sister, brother with sister, children with parents or grandparents who lived together in one house. By way of fostering tolerance and togetherness of the house is expected when I grew up a child can maintain tolerant attitude to the environment in which the child resides. Sambas in society, the family is the main venue for the development of the child in developing his character. By learning together, doing activities or homework together, using the means and

facilities in the house together intended that the family remained close and get along so that one day even older adults. Shared values is maintained, is not undermined by foreign cultures and not decayed despite constantly changing times.

According to some respondents, parents generally provide guidance to children to cope with her problems by promoting educational aspects, such as providing an opportunity to carry out the duties and obligations which it is responsible outright. Freedom and responsibility given to the child adjusted to the age level. For elementary and middle school age children giving freedom and responsibility is done in a manner embraced, directed. while for high school aged children conducted through discussion, because it was entering adulthood. Granting freedom and responsibility in family life conducted through habituation and emphasis on certain activities. For example in terms of running the teachings of religion, especially Islam, parents get children to pray the right time, the congregation in the mosque at a certain time (Maghrib and Isha). Then the parents give an example. Three things that parents should do in terms of providing freedom and responsibility is a "caring, exemplary and control".

C. INTEGRATION OF CHARACTER EDUCATION IN LEARNING

Character education is integrated to the planting of the basic values of social harmony to the conflict region is an educational model that integrates learning and teaching character education into a number of subjects in an integrated manner. In developing the values of social harmony as a form of character education through this model, teachers are not fixated on learning a specific subject areas, but can be delivered in all fields of study. The values taught or internalized through a learning process with regard to the basic values of social harmony to prevent or anticipate the behavior that can lead to conflict as a result of a lack of understanding of the various dimensions of difference in the life of society.

In order of presentation is more systematic, relevant and measurable achievement of competence, the teachers have to do the preparatory steps (set out in the draft study prepared teachers) by first finding the subject-subject related to the values that will be developed on a wide variety lesson. Furthermore, in order that the values developed in the learning process can be fused to student life, the learning module is provided in the form of discourse reading cargo hook, or associated with habits of life that occurred in the community in which the student resides. Thus, students will feel familiar with what is presented, in addition to efforts to strengthen as well as students' familiarity with the values of his own culture.

Step-by-step development and implementation of an integrated character education model to instill basic values of social harmony is as shown in the figure on the following page:

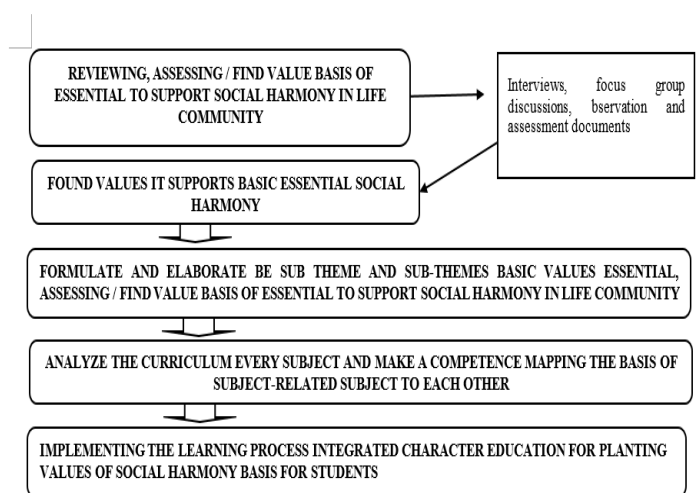


Figure 2. Integrated Framework for Character Education for Planting fundamental values of Social Harmony For Students

To help teachers so that every teacher who will make the preparation of teaching or learning plan must first perform some steps of activities, namely; (A) analyze the curriculum of every subject and create a mapping core competencies of subjects-subjects are interlinked, (b) selecting material from several fields of study that have relevance. Once the materials are interrelated found, then the teacher put them in the syllabus to enable the overlapping material, (c) develop learning plans that are integration, (d) the search for methods and approaches suitable / appropriate to the learning that is integration. The lesson plan prepared by the teacher should refer to the achievement of competencies (both the standard of competence and basic competences) thoroughly on some subjects are integrated.

IV. CONCLUSIONS AND SUGGESTION

A. Conclusions

Based on the data analysis can be summed up some of the following:

- a. The essential values of social harmony that exist in people's lives in conflict-prone areas (especially the first year of study in the area of Sambas district) is very broad and diverse. The values form positive habits that support life evolved from a harmony of life in the family, school and community. Fundamentally, there are three pillars of core values into the framework of the life of social harmony, particularly in conflict-prone areas, namely; (a) the values of mutual respect and appreciation, (b) the basic values of tolerance and togetherness, and (c) of the basic values of freedom and responsibility.
- b. Planting of the basic values of social harmony in the family in society kalangana Sambas district in general is almost always associated with religious values and customs that have been grown for a long time in the life of society. In the daily practice of planting is done through strategic way habituation. Planting of the basic values of this continued effort to keep nurtured in family life, community and school, although in some instances even faced obstacles in the implementation of certain aspects in

the life of the child showed a tendency to fade and thinning.

- c. Integrated character education to inculcate the basic values of social harmony among elementary school students conducted conflict-prone areas by integrating the basic values of the step-by-step; (a) reviewing, analyzing / find the value of basic essential that support social harmony in society, (b) to formulate into a theme or sub-themes, (c) create a mapping curriculum and learning materials related to the theme and sub themes (d) implement the learning process is integrated in the value of education related subjects.

B. RECOMMENDATIONS

- a. To encourage the growth and preservation of values in public life, in particular the basic values of social harmony and awareness efforts required the involvement of all elements in society. Efforts such maintenance can be carried out from regrow, foster and develop values or positive habits, from family, school and community synergistically.
- b. Among the forms of the effort to preserve the basic values in the school environment can be done by developing an integrated learning model of education value and if possible be equipped with learning modules which contain basic values are essential. The involvement of teachers in developing values is expected to keep these values be maintained among students and young people in general that social conflicts in the future can be anticipated and avoided.

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ACCELERATING THE IMPROVEMENT OF INFRASTRUCTURE AND HUMAN RESOURCES TO SUPPORT NATIONAL ECONOMY GROWTH

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Abstract. The national economy in the third quarter of 2016 still showed a positive performance, with the growth of 5.02%. Lower growth than the growth in the second quarter of 2016 of 5.19% is supported by a relatively strong economy in various regions. The economy of Java and Sumatra, which have a large share in the national economy, is still growing quite strongly. Economic Java in quarterly reports is still growing quite strong despite record slowed to 5.6% (yoy) compared to the achievements of the previous quarter by 5.8% (yoy). The economic slowdown mainly contributed by government consumption and export abroad Java. Spatially, the growth of almost all provinces in Java grows slower, except Banten province still recorded an increase in growth. Developing countries like Indonesia, the Industrial Revolution 4.0 is a challenge that must be faced. Therefore, accelerating the improvement of infrastructure and human resources is needed. Readiness indicator Human Resources (HR) and technological readiness also shows that Indonesia is still inferior compared with that of peers such as China, Malaysia, Thailand, and the Philippines.

Keywords: Economic, government consumption, Human Resources

I. INTRODUCTION

The national economy in the third quarter of 2016 still showed a positive performance, with the growth of 5.02%. Lower growth than the growth in the second quarter of 2016 of 5.19% is supported by a relatively strong economy in various regions. The economy of Java and Sumatra, which have a large share in the national economy, is still growing quite strongly. Provinces that recorded a growth spurt is Jambi, Lampung, Bangka Belitung and Banten. Special Banten, growth underpinned by increased inter-provincial exports and increased manufacturing performance, especially related to the petrochemical subindustry. The economy of Eastern Indonesia (KTI), which covers Kalimantan, Bali-Nusa Tenggara (Balinusra) and Sulawesi-Maluku-Papua (Sulampua) aggregate growth, increased. KTI increased growth occurred in almost all provinces in Kalimantan, except South Kalimantan, and some provinces in Sulampua, namely Gorontalo, West Sulawesi, Papua and West Papua. Sumatra economy grew by 3.88% in the third quarter of 2016 was supported by the improvement in net exports and still subdued consumption. Report quarterly growth rate, although lower than the previous quarter growth of 4.44%, driven by improved export mainly to the improvement of inter-regional CPO exports due to domestic demand continues to strengthen. However, the improved price of main export commodities are still limited Sumatra led to overseas export grows at a low level. On the other hand, growth in household consumption is stronger hampered by the limited purchasing power reflected from Farmer and consumer confidence.

Meanwhile, government consumption contracted in quarterly reports and occurs in almost all provinces in Sumatra, except Riau Islands and Bangka Belitung. It is influenced by the policy of the central government in maintaining fiscal

sustainability in the form of policies to reduce and delay the transfer to the regions as well as spending cuts in Ministry/Agency. Meanwhile, the investment slowdown affected the decrease in construction investment performance related to the development projects being hampered government on the issue of land acquisition. Private sector investment is still stuck as a result of improved economic conditions is likely to be limited. Java Economic grew strongly reaching 5.57%, although lower than the previous quarter. Java economic growth is sustained investment in the quarter report, in particular non-building, as well as inter-regional exports recorded higher growth. Ramadan consumption peak shift to the second quarter of 2016, resulting in limited growth in household consumption. Limited growth in consumption is particularly true in the consumption of food and beverages and clothing. Government consumption recorded a contraction, though not as deep as Sumatra. Budget rationalization efforts as DAU delays policies, as well as a shift in the distribution of salaries to the 13th and 14th centuries became in the second quarter of 2016 also affect the decline in government consumption growth. On the other hand, the economy of Eastern Indonesia (KTI) recorded a growth increase. In the third quarter of 2016, the economy of various region of KTI in aggregate grew 5.32%, higher than the second quarter which grew by 3.88%. Increased economic growth KTI supported by improved export performance, both abroad and between regions, particularly in Kalimantan and Sulampua. Moreover, growth was also driven by improvement in the investment, construction investment, especially in Kalimantan and Balinusra as they went by government infrastructure projects. On the other hand, in line with the conditions in Sumatra and Java, government consumption grew at KTI also negative; which mainly occurred in all provinces in

Kalimantan, part of Sulawesi, and NTT and North Maluku. By region, Kalimantan and Sulampua economy recorded a growth higher than the previous quarter, driven by exports. It supported the operation of the smelter new bauxite to produce alumina in West Kalimantan as well as increased production to achieve the target of post-repair machinery copper production in Papua. While Balinusra economy recorded a lower growth in line with the contraction in NTB mineral concentrate sales, the decline in investment in Bali, as well as inside the contraction of government consumption in the province.

II. METHODOLOGY AND ANALYSIS

Economic Java in quarterly reports is still growing quite strong despite record slowed to 5.6% (yoy) compared to the achievements of the previous quarter by 5.8% (yoy). The economic slowdown mainly contributed by government consumption and export abroad Java. Spatially, the growth of almost all provinces in Java grows slower, except Banten province still recorded an increase in growth. Meanwhile, the annual inflation rate Java is still relatively controlled and recorded at 2.58% (yoy), lower than the historical average in the last 5 years. Java Economy is expected to improve in the fourth quarter of 2016 were boosted by the return increasing household consumption, exports abroad, as well as government consumption which had declined enough in the third quarter. On the other hand, the inflation rate of Java in the fourth quarter 2016 is expected to be lower than in 2015 and is within the range of the inflation target in 2016. Pressure from forecasted food commodities are relatively low, but still need to be aware of potential inflationary pressure from horticultural commodities due to high rainfall, The pressure from administered prices is expected to be limited. Overall in 2016, the economy is expected to improve Java sustained by household consumption better higher investment realization in line with the increase in domestic demand, and exports outside is also expected to increase. By sector, the economic improvement of Java in 2016 driven mainly by the performance of the undertaking of the construction in line with the development of government infrastructure projects.

Processing industry plays an important role in economic growth in Java, with a share of the GDP is the largest compared to other economic activities, reaching 29%. Labor successfully absorbed by the processing industry is also relatively high, with an absorption rate of 18.2% of the total workforce. In terms of investments, the realization of direct investment to Java mostly intended for industrial processing or manufacturing, and reached 45% of the total direct investment. In addition, non-oil exports Java majority are manufactured goods. Since the global financial crisis in 2008, the share of processing industry in Java does continue to decline until its current level, and has not shown any indication to go back to the previous level. On the other hand the share of the services sector would continue to increase.

The global financial crisis in 2008 has led to declining global demand and then have an impact on slowing growth in the processing industry in Java as one of the leading global chain. The decline is also indicated by the share of manufacturing in GDP is declining from 32% in 2000 to reach 28% in 2015. Against the national processing industry, the share of processing industry in Java remains the most dominant in the

amount of 71%. Slowing industrial growth in employment manufaktur berimplikasi industrial sector that did not experience a lot of changes from 2001 to 2015. But at the same time, trade and services grows higher above the processing industry. In terms of investments, the realization of the investment is still growing strong enough for the 2011-2015 period is higher than the period 2001-2010. Investment is still dominated by the processing industry in the form of Foreign Direct Investment (FDI), and spatially still concentrated in West Java. Investments from more FDI to capital-intensive industries with high-tech medium. Meanwhile, domestic investment more to labor-intensive sectors and sector-based minerals. According to approach local chain, manufacturing activity in Java do not have strong links with outside Java. This is shown by the low portion of raw materials originating from outside Java. Based on data 2005, only a sub-field cement, steel and petrochemical raw materials that have been brought from outside Java with a share of over 10%. In recent time developing the industrial revolution 4.0 that rely on information technology, digitization, and the high level of knowledge and skills. For developing countries like Indonesia the Industrial Revolution 4.0 is a challenge that must be faced. Therefore, accelerating the improvement of infrastructure and human resources is needed. Readiness indicator Human Resources (HR) and technological readiness also shows that Indonesia is still inferior compared with that of peers such as China, Malaysia, Thailand, and the Philippines.

Improvement of competitiveness of manufacturing industry faces several challenges in the fulfillment of basic capacity, both physical and non-physical.

A. *Physical Infrastructure*

In terms of physical infrastructure, quality of roads in Java still not up primarily associated with the condition of road damage in the South Line. Road infrastructure is one of the critical infrastructures in view of shipments of manufactured goods are still many who use trucking. Meanwhile, based on the results of a survey conducted by Bank Indonesia to the Industrial Zone in Java, showed that the gas network infrastructure which is still low. Indonesia industrial gas prices relatively when compared with other Asean Countries. Meanwhile, other supporting infrastructure in the Industrial Area is still a lot that needs to be improved, especially in terms of Research & Development centers, training centers, residential and office employees of the bank. Associated with electricity supply in Java, which has been fulfilled, but in order to encourage and needs as the economy grows, the construction of power plants remains to be done. Based on the survey conducted by Bank Indonesia to the manufacturing company, showed that the availability and accessibility of electric energy in Java is good enough, but the frequency and duration of power outages, for companies located outside industrial estates reportedly still relatively high.

B. *Non-physical infrastructure*

Meeting the basic capacity for non-physical, sourced primarily on the quality of human resources. Labor manufacturing industry in the region Java are dominated by workers with a high school education level, followed by the level of primary and secondary education, so necessary to

improve the quality of labor in terms of years of schooling as well as other supporting competence. The majority of manufacturing companies in Java has not cooperated with vocational education institutions even today has established several vocational educational institutions in Java. Challenges in HR is also related to the qualifications and skills mismatch workforce with the type of work. In general, workers in the garment sector and non Java > 50% are under qualified. In terms of technology readiness, Indonesia still lags behind other countries in the region. This is reflected in the availability of the latest technology and internet bandwidth is relatively under state peers. Meanwhile, on the institutional side, although surveys Ease of Doing business provides better rankings for Indonesia, there are still challenges related to the gap between central and local policies. Furthermore, in terms of efficiency associated supply chain, one of the indicators provided that the cash conversion cycle (CCC) 13 Indonesia was the lowest in the region, or including efficient. However, low CCC was not followed by efficiency in production factors, of which 14 COGS to Sales Indonesia is the highest in the region with a low return. As for the financial aspect, Weighted Average Cost of Capital (WACC) 15 in Indonesia is one of the highest in the region. However, interest rates on corporate loans is still lower than the WACC even until the third quarter 2016 loan growth processing industry continues to experience a slowdown.

III. CONCLUSION

For accelerating the transformation of the manufacturing industry to realize the industrialization of Indonesia that is globally competitive, there are seven strategies that can be done for the processing industry in Java.

- 1) Integration of the industry with the Global Value Chain (GVC). To encourage the growth of manufacturing industry have to do efforts to increase the competitiveness of the industry with a high degree of backward participation, such as electronics, automotive, iron and steel products, chemicals, textile and footwear, as well as paper and paper products.

- 2) Optimization of an efficient local chain. Local chain competitive and efficient need to be optimized to promote the growth of key industries in Java, such as transportation, petrochemical, paper and paper products, textile and footwear, as well as food and beverages.
- 3) To encourage the integration of GVC and export, foreign trade diplomacy needs to be optimized. In the case of IJEP, although Indonesia bilateral trade balance deficit against Japan but Indonesia's trade balance recorded a surplus of automotive products to the worldwide total.
- 4) The potential SOE strategic industries in Java should be optimized through the establishment of a holding to increase economies of scale, the ability of financial performance, and specialized expertise.
- 5) On the corporate side, the diversification strategy is needed to compete in an era of global competition given the characteristics of the corporation. For example, vertical integration can be done, which has a line of business from upstream to downstream.
- 6) Increasing access to banking capital Small and Medium Industries (SMI) should be increased in accordance with the characteristics of SMEs.
- 7) The strengthening of the SME supply chain, through partnerships and the use of e-commerce to improve efficiency in the distribution process and encourage national competitiveness.

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ADVERTISING JARGON FOR LOCAL PRODUCTS AS CREATIVE INDUSTRY

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Abstract. In this global era, it is a fact that traditional or local foods are "second-class product" in the community. The existence of regional food is never taken into account. In the culinary field, local or regional foods has always been underestimated. The food area is a product that is always marginalized in the world of cookery. In terms of advertising jargon, the promotion of local food does not use the creative word choice, tasted stale, and old-fashioned so that its existence is belittled. Developing advertisement jargons should serve as the creative industries that favor local products. Therefore, in the midst of the hustle and uproar of modern and foreign products, precisely jargon which is the power of language can be empowered as a creative tool to boost the popularity and positive image of local products. This research will discuss jargon creatively used by local brands that can serve as models for local producers to be compelled to make jargon creative, unique, and high value. For example is jargon in the brand of chocolate made in Garut, West Java, namely "Cokelat Antigalau" (Worry-free chocolate), "Cokelat Enteng Jodoh" (Easy-Love partner chocolate), "Cokelat Cegah Alay" (Tacky-preventing chocolate), "Cokelat High Quality Jomblo" (High Quality Singles chocolate), "Cokelat Antikorupsi" (Anti-corruption chocolate), and so forth, all of which have positive image. It is time for Indonesia to rise up and oppose regional food advertising jargon which impartiality combat against regional food. The food area represented by advertising jargon as the creative industries must be brave to appear distinctively in the market. Local consumers must believe that the food of the region also has the prime quality, competitiveness, and a positive image compared with food products from outside. Therefore, businesses of local produce and advertisement designer must work together to devise jargon with creative words that can boost the positive image of the product and has a high enchantment to attract consumers to buy.

Keywords: Advertising jargon, the power of language, creative industries, positive image of local products

I. INTRODUCTION

There is no doubt that in the field of advertising, language does hold an important role. Language is used as a tool to carry out advertising activity. Language can be a power or strength because that is a mean to realize the vision of a product. Language was used as a mean to persuade consumers and the market through advertising promises. The power of language can not be measured. With language, people can stifle rival products. Language can change public opinion about a product. Language itself can persuade and convince the audience against an ad argument. Through language approach, one can be a loyal customer specific products.

The power of language has been able to boost the popularity and change the image of a product. It is inevitable that language has pervaded our advertising world. Language is always pulsating and wafts in every breath of advertising in Indonesia. Advertising jargon is a language tool to market the product, including local

produce. As a linguist, we can contribute in designing advertisements through making creative jargon.

A. Understanding Jargon

According KBBI [1], called the jargon is a specialized vocabulary used in the field of life (environment) specifically. Harimurti Kridalaksana (2008: 98) in the Dictionary of Linguistics stated that jargon is a vocabulary that is typically used in areas of life, such as that used by car mechanics, carpenter, teacher, and so that is not used and is often not understood by the people from other fields. In the Indonesian Thesaurus [2], also called jargon by patois or slang,

B. Jargon for the Product Ads Benefit

Important indicator of a business is to make sales, both goods and services. If there are no sales, no business is going to last long. Every sale is always preceded by a promotion or advertisement. In this globalization era, advertising has entered almost every corner of life, both in the print media, electronic media, open space, and a variety of angles where human does activity. The ad has a primary role, namely giving information to the public, on the nature

of the goods and services offered and encourage purchases. Advertising is not only required by the industry or the manufacturer, but also the community. Therefore, people need information about products both goods or services before people decide to choose a specific product. In conjunction with the Indonesian language, advertising becomes one of the centers of attention language. In fact, sometimes people imitate the words that exist in the ad and bring the advertising language in everyday life. It indicated a success of ad makers so that the product became famous. Thus, the product also became known and the action of any purchases will be realized. Judging from the role, advertising language is different from the language used in scientific essays, literary, or books. To convey information, ads need to use language that is concise and directly hit into the community. Thus, the language in advertising jargon has its own peculiarities with other languages. Language used are supposedly able to arouse, attract, and move the image of the product, identify, boost desire to have the products, and communicate the message to the audience [3]. Jargon has two main functions, namely to maintain the continuity of a series of ads in the campaign jargon and simplify an advertising message strategy in order to be quick, repeatable, attract attention, and memorable. In some cases, jargon created by using a foreign language, using language with elements of incomplete, illogical, and ambiguous sentences, and does not use local or correct language. It is a linguistic phenomenon that occurs due to the interest of advertisers that the products offered are known by the public. It is time linguists take part to design jargon exciting, straightforward, language is correct, effective, and imaged positive.

C. Semantic and Pragmatics Analytics

Semantics is the science that questioned the meaning attributed to such use, assuming that the language user understands the meaning of the word he used. In the semantic analysis. We are going to be thinking anyway, to whom the word had been addressed, and in that situation how word had recommended, for example, galau, alay, stress, jomblo, high quality. Selection of the word, not only consider the conversation partner, but also wanted to show the character of the speaker. That's why a speaker is not only required to know the meaning of the word, but he also demanded to know when a word can be used, and at the time where the word can not be used.

Pragmatics as one of the fields of linguistics, specialized studies on the relationship between language and context speech. In connection with that, Mey [4] defines pragmatic "pragmatic is the study of the conditions of human language uses a there determined by the context of society", Pragmatics is the study of the conditions of the use of human language specified by a community context.

II. RESULT AND DISCUSSION

A. Advertising Jargon as Creative Industries

Here, will be presented and explained distinctiveness and creative advertising jargon meaning in advertising local food products chocodot of Garut, West Java. Garut is indeed the city that became so popular both by its culture

and culinary so seductive and charming. Garut which is one of the areas east Priangan has distinctive culinary named dodol. Dodol Garut is the food that became an icon very famous second after Garut sheep. Dodol garut made of glutinous rice, coconut milk and palm sugar naturally. It is not complete if visiting Garut without buying souvenirs typical, dodol garut. However, now that the incomplete phrase used has now evolved into Swiss VanJava. Swiss Van Java is the latest nickname of Garut. The nickname was given because Garut became one of the cities that produce chocolate. Uniquely created chocolate is chocolate mixed with dodol garut. Mixing of these two ingredients also inspired the owner to name his creation with the name "Chocodot" which is an acronym of Chocolate dodol Garut. Chocolate flavor combined with the sweet and distinctive flavor dodol will melt in the mouth in one bite us. Savory and sweet chocolate taste of dodol will complement this Garut. We will find a different sensation of eating chocolate. This feeling makes the tourists decide to come back to the Main just to buy Chocodot. Chocodot packaging have unique designs. As Chocodot antigalau, Chocodot prevent Alay and much more. Can not be denied that the advertising jargon requires creativity and high competence. Chocodot easy to find because there are many outlets in several cities renowned in Indonesia such as Bandung and Tasikmalaya. Chocodot variant Chocolate Flavor ginger, Chocolate Taste Cinnamon, Chocolate White and Chocolate Flavor Cabe.

B. Analysis of positive image ad jargon *Chocodot*

Here, we will clarify a positive image both in terms of semantic and pragmatic analysis of some of the jargon product Cochodotads, which are as follows.

Table 1. Analysis of positive image adsjargon Cochodot

No.	Jargon	Semantic analysis	Jargon positive image (Analysis Pragmatics)	The specificity Jargon
1.	"Chocolate Anti galau"	troubled contains a negative meaning, ie ga · lau a, ber · ga · lau a busy abuzz; very crowded; chaotic incoherent (mind); to · ga · ·'s lau n the nature of (the state of things) upset, while antigalau significantl y positive, that thing	Judging from the advertising jargon, " Chocolate Antigalau " strategy positive promotion aimed at young people aged 15 -25 years plagued turmoil. Said confusion trending and young children often used in conversations both in real life and in social media. Persuasively, manufacturers	Manufacturers jelly selecting and using jargon that has become a <i>trend setter</i> among young people. The targeted market, too, is the majority market for young people account

		or situation that offers a sense of calm, fun, and do not sweat.	make their products as "drugs" bidder troubled.	for 50% of the population in our country.
2.	"Chocolate Rasa Sayang"	Judging from pemaknaannya, compassion means a feeling of wanting to maintain what is already in the can. Examples might like our favorite objects that always wants us to maintain and we care. Not only objects, affection course can also occur in someone who is dear to us as parents, girlfriend or our official partner (husband / wife). According KBBI (2009), which sa · 1 a love (kpd); love (kpd); love (kpd); 2 v compassion will (kpd); Like so will (kpd); love; loved	by the speech act(speech act), compassion is spoken in the context of seriousness, but it contains something very romantic and coveted. Affection usually is universal and enduring than the love which sometimes has been temporary.	The specificity of affection closer to the word love (love). Compassion is sincere, willing, and always protect, never extinguished, never dimmed, and can never be replaced by anything .
3.	"Chocolate Reject Poor"	Lexically, word poor meaning <i>a</i> not affluent; deprivation (income is very low), while	Jargon "Chocolate Reject Poor" provides a positive and valuable lesson to us that one should not have to	The specificity of this jargon is the learning of life deep, that one should

		starting a meaningful deterrent disaster (danger, disease, etc.). So, poor starting can be defined as 'an attempt to reverse poverty and improve quality of life.'	surrender to the circumstances that befall / or handcuffs. We have to keep working hard, intelligent, and sincere in order to achieve a better standard of living. Jargon it is a spirit that we want to try, look alive, and be proud to be productive.	have activity as the meaning of life through an activity that can bring sustenance as their capital in livelihood and life.
4.	"Chocolate Drug stress"	According KBBI (2009), stress / stress / <i>n</i> <i>Doc</i> disorders and emotional or mental disorder that caused by external factors; tension. Drug <i>n</i> means 1 <i>Far</i> materials to reduce, eliminate disease, or to cure someone dr disease: 2 <i>Kim</i> chemicals (for various purposes). So, lexical, significant stress drugs 'drug that alleviates / eliminates clutter / mental tension'.	"Chocolate Drug Stress" can be understood as a pragmatic manner jargon positive and could be considered as a supplement to negate the emotional tension or stress. Stress or depression in a simple sense is a condition where a person's mind or inner depressed by something, so emotional disturbance, minds, and souls of people who experience it. This pressure is typically caused by different kinds of life issues such as, economic, social. Stress can also be caused by excessive fear or anxiety is excessive. However, stress can also be caused by lifestyle factors that	The specificity of this jargon is consistent with the study conducted by experts who do the 60 shows drinking two cups of chocolate a day can increase blood flow to the brain that can improve the health and memory. Researchers believe that the rich in flavanol content of chocolate has an important role.

			are not healthy, such as eating high cholesterol foods, often staying up late to bed after midnight.	
5.	"Chocolate Prevent Alay"	In KBBI not found understanding Alay for Alay categorized as slang instead of the standard language. Alay is a term that refers to a phenomenon of teen behavior in Indonesia, "Alay" is an abbreviation of "kites child" or "children lebay" This term is a <u>stereotype</u> that depicts the lifestyle garish or tacky. Moreover, Alay refers to a style that is considered excessive (<i>lebay</i>) and is always trying to attract attention. So, "Chocolate Prevent Alay"	Someone who categorized Alay generally has a unique behavior in terms of <u>language</u> and lifestyle. In the style of language, especially written language, referring to the pleasures. Alay <u>teen</u> combine uppercase-lowercase, combining letters with numbers and symbols, or abbreviate excessively. In the style of talk, they talk with intonation and excessive force. In the Philippines there is a similar phenomenon, often referred to as <i>Jejemon</i> . Alay is a minority group that has unique characteristics in which the appearance and the language they use is sometimes blinding and painful ear to the majority who are not used to socialize with him. Usually <i>Alayers</i> (name of the <i>Alay</i> people) has its	The specificity of jargon "Chocolate Prevent Alay" is that advertisers really understand the world of young people who love to use the term slang, the term typical teenage world.

			own fashion trends that can spread rapidly like a virus outbreak among the <i>Alayers</i> others, thus creating a uniformity of shape a little unusual. Therefore, "Chocolate Prevent Alay" pragmatic raises the maximum positive, which teaches the audience that the behavior that tracks can be prevented by consuming their products.	
6.	"Chocolate High Quality Singles"	Jargon High Quality Singles or 'high-class singles or top level'. Jomblo means they own or have not been paired.	In pragmatic, singles are high class or the upper level refers to a person or a subject who has a positive attitude and the quality of high self-esteem, people do not feel the status of singles is a thing that makes her self to be pitied. They can actually prove to everyone that the singles can enjoy life, confident, still hang out and socialize, and also looks attractive even though the status of single.	Jargon "Chocolate High Quality Singles" contains the promotional strategy was great to change the construction of thinking our society because society we tend to view negative status single. It thus able to make the singles feel inferior, and his life is meaningless. With the "Chocolate High

				<p>Quality Singles can trigger the spirit of the singles to keep thinking positive, optimistic, and keep working to pursue ideals.</p>
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III. CONCLUSION

Based on the above discussion, found things as follows.

1. Language can be a power/ strength because that is a means to realize the dream of behavior of a product.
2. Jargon growing ad should serve as the creative industries that favor local products.
3. Jargon with creative words that can boost the positive image of the product and has a high magic power to attract consumers to buy.

4. Advertising jargon "Chocolate Antigalau" "Chocolate R" Chocolate Prevent Alay "desperate shame" "Chocolate Reject Poor" "Chocolate Drug Stress" "Chocolate High Quality Singles" in semantics and pragmatics able to increase the joy positive local product which gives the impression of a modern, fun, independent, and primed for consumers who enjoy it.

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THE CONTRIBUTION OF CONSCIOUSNESS THE TAXPAYER AGAINST TAX REVENUES IN THE KPP PRATAMA SURAKARTA

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Abstract. Tax is one source that is quite important for the country's admission to the financing of development. Tax contributions to development have equal or even greater than the oil and gas sector as a source of development funds. Currently Indonesia start prioritizing the tax sector as a source of funding of development in various fields. Tax revenue can be derived from income tax (PPh) of the oil and gas sector and non oil and gas facilities, value added tax (VAT), tax sales over luxury goods (PPnBM), Earth and building Tax (PBB), the Bea Acquisition of land and buildings (BPHTB), tax receipts, as well as other taxes – tax. The taxes that will be useful to improve the welfare of society. The research base on legal research conducted with non doctrinal approach, as in the study of law, conceptualised as a manifestation of the symbolic meanings of social behavior that looks as interactions between them. A type of study in this research is more descriptive in nature, because it is intended to illustrate clearly, about the various things associated with the objects examined, i.e. the taxpayer awareness of the Agency and a private person against the taxpayer acceptance KPP Pratama tax in Surakarta, the effectiveness of the law on general provisions and Taxation Procedures. Data analysis techniques used in this research is the analysis of qualitative data. This research obtained the data takes the form of words is not a series of number.

Keywords: Contributions, Consciousness, Taxpayers

I. INTRODUCTION

National development is a series of continuous development effort covering the entire life of the community, the nation and the State to carry out the task of realizing the national goal, namely a fair and prosperous society. Extracting the potential reception in the country will continue to be enhanced through an extension may seoptimal acceptance of the country's non oil and gas, to replace State funding sourced from foreign debt. One source of acceptance within the country a fairly dominant comes from tax revenue[1].

One source of funding the construction of a major mainstay is sektor tax revenues. Tax revenue can be derived from income tax (PPh) of the oil and gas sector and non oil and gas facilities, value added tax (VAT), tax sales over luxury goods (PPnBM), Earth and building Tax (PBB), the Bea Acquisition of land and buildings (BPHTB), tax receipts, as well as other taxes – tax. The taxes that will be useful to improve the welfare of society. [2]

Organizing tax in Indonesia turned out to be not easy as we imagine. An awful lot of cases dealing with mangkirnya the taxpayer fulfils its obligations in the State. But taxpayers are the people of Indonesia itself. Cases like that we often see in the news on television, newspapers or magazines.

As reported in the Media Indonesia, said that there were 58 business entities at the Central Java region II were never reported much less to pay taxes. There are currently 45,906

registered business entities as new taxpayers in Central Java. However, only 42 thousands of active report and pay tax[3].

The Directorate General (Ditjen) Tax records the Taxpayer Private People (WP OP) returning a new Annual SPT around 55 percent. And the rest, about 45 percent of the WP OP who have yet to return it. the individual taxpayer compliance is not due to tebongkarnya corruption in the tax office nor cry boycott of paying taxes. However, due obedience in reporting Annual SPT is still low. Although on the one hand an increase in the number of WP OP quite high this year. In 2010 the number of WP OP reaches 16 million people. The number was increased compared to the year 2009. However, the number of tax payers who reimburse SPT only about 55 percent[4].

In such cases it is usually preceded by the reluctance of taxpayers to pay until he is willing to pay with forced when there is already an action of the State party. Then from the side of the Government, corruption was seen from the attitude of the Government in attracting discrimination forced tax obligations of taxpayers. The Government occasionally or even frequently allow big companies to suspend his taxes for fear of liability if the company loss so massive layoff will occur that will result in economic instability.

Some facilities in the field of taxation in 2008 among other things, the PPh facilities for investing in certain business fields and/or in certain areas, including in the form of a reduction in income depreciation and amortization neto, accelerated, and the addition of the period of compensation of losses; Facilities in the form of the use of other values in

addition to the market price, that is the value of the rest of the book for taxpayers who perform business restructuring; Facilities for the taxpayer to do the assessment back fixed assets in anticipation of the mismatch between the elements of the cost with an income due to price developments; Fasilitas in the form of tariff reductions the PPh for taxpayers in-country body that shaped the company's open fulfil certain requirements; Increase in limit on the maximum sale price of the House is simple and very simple House facility exemption of VAT; Facilities grant of a reduction of the UN and BPHTB due to overflow of Lapindo mud disaster; Facilities in the form of Tax borne by Government (PDT) which among other things is used to finance the VAT upon delivery of cooking oil in the country, and wheat flour. [5]

The goal of any change in the Government policy, is none other than to improve the awareness of compliance and tax payers. Based on the description above, it should be noted regarding the effectiveness of the reform of tax policy to raise awareness of the tax payers. Associated with exposure to the above, the authors want to do research with the headline "taxpayer awareness of Contributions against tax receipt in KPP Pratama Surakarta"

FORMULATION OF THE PROBLEM

Based on the background of the problem, then the problem can be formulated as follows:

1. What were the factors influencing the effectiveness of the law on general provisions and Taxation Procedures (law of 18 BRUMAIRE), the law on income tax (income tax ACT), and the law on value added tax upon goods and services (VAT ACT)
2. What is the law on general provisions and Taxation Procedures (law of 18 BRUMAIRE), the law on income tax (income tax ACT), and the law on value added tax upon goods and services (VAT ACT) has been effectively raises awareness of tax payers and tax payers people to increase tax revenue in the KPP Pratama Surakarta?
3. How to model in the future to increase contributions and taxpayer awareness of the Agency and taxpayers people to increase tax revenue in the KPP Pratama Surakarta?

FRAME OF MIND

Tax is one source that is quite important for the country's admission to the financing of development. Tax contributions to development have equal or even greater than the oil and gas sector as a source of development funds. Currently Indonesia start prioritizing the tax sector as a source of funding of development in various fields. With tax, the Government can provide a variety of economic infrastructure in the form of roads, bridges, ports, water, electricity, health facilities, educational facilities, on-site security and various other public interest devoted to the welfare of the people.

Thus, the tax became an important priority for the Foundation of the country's main source of admissions. In the era of globalization or the era of free competition is, sooner or later cannot be denied and must accept the existence of economic globalization as well as taking the

opportunities that can arise due to changes in the international economy. One of the supporting device support so that achieved economic success in grabbing the opportunities are tax law, i.e. the overall regulations covering government authority administering the tax.

The magnitude of the tax sector's role in supporting the country's acceptance, then the necessary awareness of all walks of life the importance of taxation for the life of a nation and a country. The Government is expected to issue the policies in the field of taxation by remaining attentive to the principle of fairness, certainty, and comfort.

The tax sector is the right choice to seek an alternative source of acceptance of non oil and gas sector of the country, because taxes are relatively more stable against changes in the condition of the world economy, as well as a real form of community participation in development, so as to increase the awareness and responsibility of society to increase self-reliance in financing nationwide.

The reform of Taxation policy in the form of amendments to the three laws of taxation policy is to increase Tax revenue Ditjen State. With the implementation of the third amendment to the Taxation Law, be in the know to what extent the effectiveness of the law in raising awareness so that taxpayers are able to contribute tax revenues. As for the scheme of the framework of thought can be seen in the chart below:

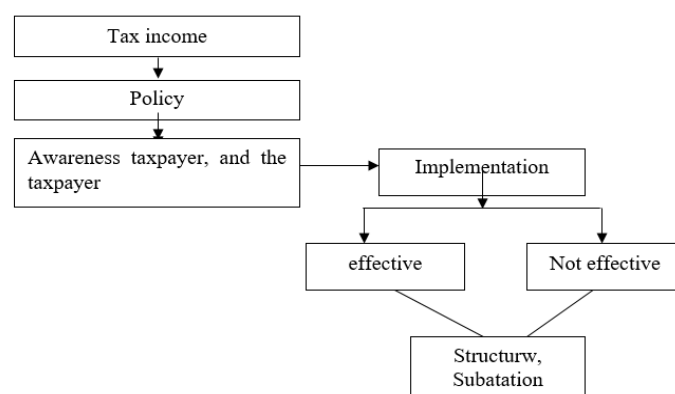


Fig 1. Framework Mind

II. METHOD

1. The Method Of Approach

The research base on legal research conducted with non doctrinal approach, as in the study of law, conceptualised as a manifestation of the symbolic meanings of social behavior that looks as interactions between them.

2. Specification Of Research

A type of study in this research is more descriptive in nature, because it is intended to illustrate clearly, about the various things associated with the objects examined, i.e. the taxpayer awareness of the Agency and taxpayers against tax receipt in KPP Pratama Surakarta, the effectiveness of the law on general provisions and Taxation Procedures, the law on income tax, and the law on value added tax upon goods and services in improving awareness of tax payers and tax

payers people to increase tax revenue in the KPP Pratama Surakarta and the factors that influence the effectiveness of the law on general provisions and Taxation Procedures, the law on income tax, and the law on value added tax over goods and services.

3. Sources and types of Data

According to HB. Sutopo, sumber data includes the informant, event or activity, place or location, objects, pictures, recordings, documents and archives. This research uses a type of data comes from two different sources, namely[6]:

a. Data Skunder

This study uses secondary data source types that are the primary data obtained through the study of references, in this case in the form of taxpayer data entities and individual taxpayers as well as tax revenue from 2006 – 2011 which is in the KPP Pratama Surakarta.

b. primary Data

I.e., the data in the form of information originating from the parties involved with the object examined was intended to be more understanding of the intent, purpose and meaning of skunder data. Primary data at its implementation only serves as a support of skunder data.

4. Methods Of Data Collection

a. the study of Librarianship

This method is used to collect the data of the secondary, which was done by menginventarisasi, search, and study the regulations, doctrines, and secondary data-data that other, related objects are examined. As for the instruments of the collection that is used in the form of form of documentation which is a secondary data collection tools in the form of special formats, which are made to accommodate all sorts of data, obtained during the study done.

b. Interview

The interview is a conversation with a specific meaning. [7] this method was used to collect primary data, conducted by interviews freely guided, with the various parties are seen to understand the object examined.

5. Methods Of Data Analysis

Data analysis is the process of arranging the sequence data, organise into a pattern and a basic outline. The process of data analysis is an attempt to find answers to questions about the formulation and things that are obtained in the research. [8]

Data analysis techniques used in this research is the analysis of qualitative data. This research obtained the data takes the form of words is not a series of numbers. Qualitative analysis using words that are usually arranged in an expanded text. [9] With this analysis, model analysis has been performed since data collection. In this case there are three components of analysis, namely data reduction, data and cereal drawdown conclusions or verivikasinya.

While the activities carried out in the form of interactive data collection process as the process cycle. In this model the researchers keep it moving inside the component analysis as mentioned above. [10]

In the midst of time data collection and data analysis will also be conducted audit data for the sake of the validity of

the data. Whereas after data collection is complete, if there is still a lack of data, using the available time, so researchers can return to the research location for the collection of data for the sake of stability conclusions. For more details, the analysis of data with this interactive model can be described as follows.

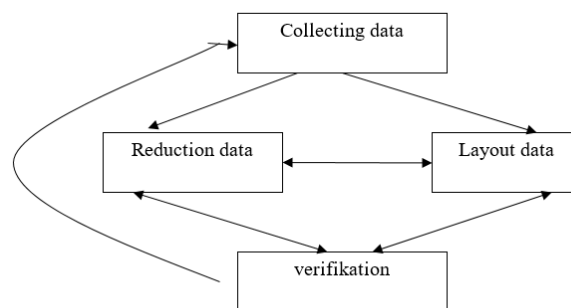


Fig. 2 Interactive Analysis Model

III. DISCUSSION

According to our review evaluation of quality assurance was very important to improve quality assurance of higher educational institution. Quality assurance will determine reputation of higher educational institution. Some aspects which we found about reputation related quality assurance which are (1) It is built upon the competitive elements of quality, reliability, delivery, history and price. (2) Once a higher education institution acquires a poor reputation for quality, it takes a very long time to change it. (3) Higher education reputations can quickly become national reputations. And (4) the management of the competitive weapons, such as quality, can be learned like any other skill, and used to turn round a poor reputation, in time.

A. Factors that influence the effectiveness of UU KUP, UU PPh, and VAT ACT

Based on the results of the research of land above, then it can be unknown factors that influence the effectiveness of the law on general provisions and Taxation Procedures (law of 18 BRUMAIRE), the law on income tax (income tax ACT), and the law on value added tax upon goods and services (VAT ACT). Those factors can be known of the legal awareness of indicators which, among others, legal knowledge, legal understanding, the attitude of the law and legal behavior.

Table 1. Recap Of The Effectiveness Of ACT KUP

NO.	Indicator	The frequency of the		Effective	Not Effective
		WP O	WP B		
1	Legal Knowledge	10	10	V	-
2	Understanding The Law	7	10	-	V
3	The Attitude Of The Law	10	10	-	V
4	The Legal Behavior	5	10	-	V

Based on the above table, in general the ACT turned out to be ineffective KUP. Factors that affect is not effectively ACT KUP is an understanding of the law, the attitude of the law and legal behavior.

Table 2. UU PPh Effectiveness Recap

NO.	Indicator	The frequency of the		Effective	Not Effective
		WP O	WP B		
1	Legal Knowledge	10	10	V	-
2	Understanding The Law	8	7	-	V
3	The Attitude Of The Law	10	6	-	V
4	The Legal Behavior	10	5	-	V

Based on the above table, UU PPh turned out to be ineffective in increasing the awareness of the legal taxpayers. Factors which aspects influenced not effectively ACT PPh is an understanding of the law, the attitude of the law and legal behavior.

Table 3. Recap Of The Effectiveness Of The VAT ACT

NO.	Indicator	The frequency of the		Effective	Not Effective
		WP O	WP B		
1	Legal Knowledge	2	10	-	V
2	Understanding The Law	2	7	-	V
3	The Attitude Of The Law	10	10	V	-
4	The Legal Behavior	6	7	-	V

The table above shows that the VAT ACT does not quite effective in raising the awareness of the tax payers. Factors that affect the VAT ACT is effectively not legal knowledge, an understanding of law and legal behavior.

B. The effectiveness of the ACT, the income tax ACT, KUP and the VAT ACT in increase awareness of the Agency and taxpayers tax payers people to increase tax revenue in the KPP Pratama Surakarta

Taxpayers are given a questionnaire concerning the legal awareness of indicators about the UU KUP, UU PPh and VAT ACT. From this research were obtained the following results.

Table 4. Progress Report Of Tax Arrears Yearly Tax January until December of 2011 (in thousands of Dollars)

NO.	TAX YEAR THE EARLY MONTHS OF ARREARS	The ADDITION of the	ARREARS THE END OF THE MONTH
1	2011	53.175	113.043
2	2010	278.936	562.470
3	2009	224.595	260.134
4	2008	740.198	809.848
5	2007	1,071,785	1,069,784

Based on the above table, there is uncertainty in arrears from years 2007 to 2011. Year 2011 going decline in significant arrears after the enactment of the amendment ACT and income tax ACT KUP, VAT ACT in 2009.

Table 5. Report The Amount Of Tax Reproof Tax year 2007-2011

NO.	TAX YEAR	The TOTAL NUMBER of LETTER OF REPRIMAND
1	2011	234
2	2010	778
3	2009	635
4	2008	895
5	2007	997

Based on the data in the table above, it can be known once enacted ACT KUP, PPh and the VAT ACT decline letter of reprimand on the taxpayer or taxpayers.

Table 6. The legal consciousness of the people against Taxpayers ACT KUP

NO.	Legal Awareness	UU KUP									
		R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
1	Legal Knowledge	V	V	V	V	V	V	V	V	V	V
2	Understanding The Law	V	V	V	-	-	-	V	V	V	V
3	The Attitude Of The Law	V	V	V	V	V	V	V	V	V	V
4	The Legal Behavior	-	-	V	-	-	v	-	V	v	v

Description:
R1-10: the respondent Taxpayer People 1-10
V: Yes -: No

The table above shows, Rsponden 1-10 has learned of the amendment ACT KUP but only 7 respondents who claimed to understand the contents of the amademen. The overall attitude of the respondent taxpayer insiders report the SPT always receive good rule of law the only respondents to conduct timely in reporting his taxes on time 5 people and 3 people are not timely.

Table 7. The legal consciousness of the people against Taxpayers ACT PPh

NO.	Legal Awareness	UU PPh									
		R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
1	Legal Knowledge	V	V	V	V	V	V	V	V	V	V
2	Understanding The Law	V	V	V	-	V	V	V	-	V	V
3	The Attitude Of The Law	V	V	V	V	V	V	V	V	V	V
4	The Legal Behavior	V	V	V	V	V	V	V	V	V	V

Description:
R1-10: the respondent Taxpayer People 1-10
V: Yes-: No

The table above shows, the legal consciousness of the people against taxpayers ACT PPH, the whole of the respondents knew about the amendment of UUPPH but only 2 respondents who understand these changes. The overall attitude of the respondent taxpayers receive good people that the rule of law and all the respondents answered trying to timely in reporting obligations of his taxes.

Table 8. Legal consciousness of Taxpayers against the VAT ACT

NO.	Legal Awareness	THE VAT ACT									
		R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
1	Legal Knowledge	-	-	-	-	-	-	-	-	V	V
2	Understanding The Law	-	-	-	-	-	-	-	-	V	V
3	The Attitude Of The Law	V	V	V	V	V	V	V	V	V	V
4	The Legal Behavior	V	-	-	-	V	V	-	V	V	V

Description:
R1-10: the respondent Taxpayer People 1-10
V: Yes-: No

The table above, there are only two of the respondents are aware of any changes to the VAT ACT and understand these changes while the other respondents 8 persons are not aware of any changes and do not know the contents of the VAT ACT. On the whole they accepted the Government's policy in the form of VAT ACT but the respondent behavior is still not ready to implement the ACT PN due to ignorance and incomprehension of the VAT ACT.

Table 11. Legal awareness Agency against Taxpayers ACT KUP

NO.	Legal Awareness	UU KUP									
		R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
1	Legal Knowledge	V	V	V	V	V	V	V	V	V	V
2	Understanding The Law	V	V	V	V	V	V	V	V	V	V
3	The Attitude Of The Law	V	V	V	V	V	V	V	V	V	V
4	The Legal Behavior	V	V	V	V	V	V	V	V	V	V

Description:
R1-10: the respondent Taxpayers Agency 1-10
V: Yes-: No

From the table above, the whole of the respondent taxpayers agency say they understand, knowing about the changes the ACT of KUP. In addition they also always carry out what is in the LAW require a by KUP.

Table 12. Legal consciousness of Taxpayers against the Agency ACT PPh

NO.	Legal Awareness	UU PPh									
		R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
1	Legal Knowledge	V	V	V	V	V	V	V	V	V	V
2	Understanding The Law	V	-	-	V	V	V	V	-	V	V
3	The Attitude Of The Law	V	V	-	V	-	-	-	V	V	V
4	The Legal Behavior	-	-	V	V	-	-	-	V	V	V

Description:
R1-10: the respondent Taxpayers Agency 1-10
V: Yes-: No

The table above shows, there are only two of the respondents do not know and understand the changes the ACT of PPh. There are 6 respondents say they agree with the Government's policy regarding the changes the ACT of PPh, but there are 4 that said do not agree to these policies. This automatically gives the electrical behaviour of the law of the respondents i.e. 5 orderly reported tax and 5 is not orderly.

Table 13. Legal consciousness of Taxpayers against the Agency ACT on VAT

NO.	Legal Awareness	THE VAT ACT									
		R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
1	Legal Knowledge	V	V	V	V	V	V	V	V	V	V
2	Understanding The Law	V	V	V	-	-	-	V	V	V	V
3	The Attitude Of The Law	V	V	V	V	V	V	V	V	V	V
4	The Legal Behavior	V	V	V	-	-	v	-	V	v	v

Description:
R1-10: the respondent Taxpayers Agency 1-10
V: Yes-: No

The table above shows the rest of the respondents know of any changes or amendments to the VAT ACT however 3 respondents said it did not understand the changes. The rest of the respondents said it agreed with the Government made rules, however, only 7 respondents are orderly in conducting tax obligations.

The law as the setting of human deeds by power is said to be valid not only in the decision (the regulations formulated) but also in its implementation in accordance with the law is not supernatural. In other words, the law should be in accordance with the ideology of the nation as well as pengayom society[11].

One of the Government's efforts to increase community awareness in paying taxes is to do the amendments to the ACT and the income tax ACT KUP, VAT ACT. The drop in rates income tax PPh ACT 2008 made in the tariff provides a positive effect with the level of compliance with the community. The drop in rates believed to be increase earnings after tax from the taxpayers so it will encourage tax payers to be more obedient to report his earnings. The end result, the reported income will be more and therefore, PPh collected will also be increased in spite of the decline in the rate.

C. The Model Law that is used to Increase Taxpayer Awareness

From the results of research on the factors affecting not efektifinya law on general provisions and Taxation Procedures (law of 18 BRUMAIRE), the law on income tax (income tax ACT), and the law on value added tax upon goods and services (VAT ACT) is a legal knowledge, an understanding of law and legal behavior.

The public distrust over the tax imposes a plurality of his community to have an awareness of paying taxes. This is not surprising because of the perception that taxpayers depend largely on the knowledge of the taxpayer. Therefore, to eliminate the community's mindset toward the person, then the need for knowledge of tax law or tax education.

The education tax is worth considering tax system that now runs in Indonesia is self assessment system where Taxpayers are given full trust to compute, reckon, pay and report its own amount of tax owed. How self assessment system will be able to walk without followed by understanding of the people that paying taxes is an obligation, that paying taxes is not conducted at the tax office but at banks or post offices, that all the services in the tax office is free, that the tax money paid by Taxpayers directly go into the State Treasury without could be tampered with by the tax officer or settles. Therefore, it's

good things are presented to a broad audience in order to improve the knowledge and understanding of the people about the tax.

The tax can be filled with educational information-basic information about tax up to technical information about taxes. Dissemination of knowledge of the tax will be even better when packed in a program that targeted, measurable and continuous in nature. Tax education is very important in order to build community understanding and knowledge about taxes, so that awareness and compliance with Taxpayer obligations to meet the taxation will be increased. If Taxpayer compliance awareness and already well formed with offset by increased bureaucratic reform program Directorate General of Taxes, then tax revenues will increase, so that the independence of the STATE BUDGET that had aspired to be realized. Independence of the STATE BUDGET is a step to realize a better Indonesia.

Understanding taxpayers against taxes is one factor of many other factors that affect taxpayer compliance. Taxpayers who have an understanding of high/positive about the implementation of tax regulations will fulfill the obligation of perpajakannya compliance with regulations and tax payers who have low/negative understanding tend not to carry out the obligations of perpajakannya or wayward.

IV. CONCLUSIONS

In particular in the field of tax payment there are 3 strategies/models in improving awareness of taxpayers through the tax administration:

1. Create programs and activities is expected to arouse and increase voluntary compliance, especially for taxpayers who have not obeyed.
2. Improve service to taxpayers who are already relatively well behaved so that kepatuhannya can be maintained or improved.
3. Improving compliance with programs and activities which can combat non-compliance.

To realize this then needs to be held:

1. Education and understanding of the importance of the awareness of paying taxes is done continuously (publications, lectures, seminars and training.
2. Providing reward and punishment will grow happy and proud to pay tax and embarrassed or even give a real punishment for offenders.

Based on these indicators, then the Government should make the rule of law based on the knowledge of law, an understanding of law and legal behavior. These things, among others:

1. Create tax collection system more simple, obvious, easy and a short time;
2. Increase public confidence towards the Government. If the Government can be trusted and put tax money correctly, surely anyone willing to pay taxes;
3. Should be able to scrape the exhausted persons-persons mafia tax not responsible so that people don't feel free and proud to be taxpayers;
4. The spirit of public service should be more dominant in operational X_ROBINFAN_X than as

government officials entitled to drop the sanctions for infringement of taxation;

5. Develop of tax management system that is more open and transparent to the public;
6. The withdrawal of the tax should be noticeably fair and there should be no use of tax corruption it one bit;
7. NOOBS UNITED employees character wakes up to be personally honest tax all employees;
8. Various reform measures undertaken should be widely publicized X_ROBINFAN_X and constantly;
9. in collaboration with the PPATK to monitor a weath of tax officier in the rest of indonesia, so before it was revealed in the media, X_ROBINFAN_X already do action and publish it to the media.

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COMPARATIVE ANALYSIS OF DETERMINATION AND MANAGEMENT HAJJ FEES IN INDONESIA AND MALAYSIA (Study of Comparative Analysis)

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Abstract. Every year is always emerging trends developing issues in Indonesian society conical between the Ministry of Religious Affairs with the House of Representatives of the Republic of Indonesia, namely the issue of costs and services (cost and service) Hajj. Among the key issue regarding the cost of the Hajj, which is the comparison is boarding, quality health care and better food, Researchers conduct research directly in Indonesia and Malaysia. Data were collected from both sides between Indonesia and Malaysia, as well as from sources other reliable official information. Then the researchers process data and comparing the two data scientifically. Researchers used *comparative descriptive* method. Based on the results of comparison, we can conclude: Cost Hajj Indonesia at a glance in accordance with the statement of the Minister of Religion, cheaper, namn if scrutinized more expensive than Malaysia, because many costs are not mentioned or deliberately hidden, including subsidies from the state budget (Budget countries) and APBD (Regional Budget), while Malaysia is not the slightest countries provide subsidies to the Institute of Tabung Haji.

Keywords: Implementation, efficiency and optimization, Cost, Haji.

I. INTRODUCTION

The Hajj as the fifth pillar of Islam, is the duty of Muslims around the world. As the pillars of Islam, it is fitting must be carried out by Muslims. Normative obligations multidimensional Hajj is the willingness of psychological, physical ability and the ability to supply. This invites the pilgrim to continue to perform the pilgrimage.

This desire is based on the teachings of Islam are on the proposition about the Hajj, that in an al hadith "*that people who pilgrimage for God and customized manner with the guidance of Islam, then they will be returned as the day in which was born from the womb of his mother, cleansed of all sins.*" [1](#). This doctrine has become an attraction and a source of motivation (encouragement) was strong for the Muslims to perform the pilgrimage. Further postulate that makes prospective pilgrims interested in the pilgrimage so willing to queue up and be willing to pay more than the cost of the pilgrimage in general. That is the notion that "*spending costs in the way of Allah (Fi sabil Allah), ie one dirham acquired answers to seven hundred times.*" [2](#) Haji is an implementation of the jihad in Allah's way and will get a huge reward. [3](#)

Not a bit behind the high desire sebahagian people to go to the holy land to leave the problem alone. For the sake of an ideal of pilgrimage, not infrequently they are willing to sell the land, fields and other valuable property which may be an asset only for survival. In fact, to meet the "capital" of the pilgrimage, were forced debt here and there, because they do not think long-term about the future of economic life after the pilgrimage. Whereas the hajj is not the usual traveling impoverished meaning, not just a matter of earthly course. Pilgrimage "a journey kewujudan; The most fundamental in the Hajj is not traveling to the House in

Mecca, but a *Spiritual Journey Inner Journey* or to seek God through the maze of hallways heart. " [4](#) pilgrimage can provide tremendous psychological experience. This experience is creating inner change and awareness of one's identity as a human would.

In this study, researchers focused only to illustrate and discuss the financial management of haj funds to benefit the ummah in Indonesia and in Malaysia. How good financial management according to standard financial statements (*Responsibility, Transparency and Worth*), and also whether it has been effective, efficient and be beneficial to the interests of the ummah. Researchers consider the importance of this topic to be studied because in Indonesia, the government has set the organization of pilgrimage as a national duty. This is due to the large population of Indonesian Muslims who want to perform the pilgrimage, involving various institutions and organizations, both domestically and abroad, their limit or number of pilgrims who have been assigned by the government of Saudi Arabia, and are associated with various aspects such as counseling, transportation, health, and safety placement. The Indonesian government has been working to improve every year kualitas Hajj which are demands for reform in the implementation of clean government and good governance (*GCG*). [5](#) While in Malaysia, Lembaga Tabung Haji is also one component of the Islamic banking system that contributes to the development of the system. [6](#) Lembaga Tabung Haji is the first organization of Muslims who take care of and mentadbir pilgrims systematically by providing the structure of financial savings to the Holy Land is the most comprehensive. [7](#)

Viewed from the background of the problem under study, researchers were able to formulate the key issues is the main topic in the formulation of the problem, namely:

1. B How financial management of funds of pilgrims in Indonesia and Malaysia? How financial management of pilgrims before departure, in the category *waiting list*? Any service components in the can in the course of the pilgrimage?
2. Is the financial management system of funds from the initial deposit pilgrim, already effective, efficient and helpful for the benefit of the Muslim Ummah? How the Ministry of Religious Affairs manages funds initial deposit of pilgrims who entered the waiting list? How Lembaga Tabung Haji Malaysia to manage the registration fee of pilgrims who entered the waiting list?
3. Is the financial management system of funds pilgrim, has been reported Responsibility, Transparency and worth, according to standard financial reports? The organizational system like what is used by the Ministry of Religious Affairs in the provision of services on a regular pilgrimage? The organizational system like what is used by the Institute of Tabung Haji Malaysia in service delivery regular pilgrimage?
4. How can I get more Transparency in Financial Management, Responsible, worth as well as Effective, Efficient and Helpful? Looking for financial management model fund regular pilgrimage at the time be a *waiting list*, how the service provided is balanced with the funds released to be effective, efficient and helpful.

II. METHOD

1. Descriptive research

Husaini Usman & Purnomo, SA (2008) writes:

Descriptive words derived from English, *descriptive*, which means descriptive or describe something. Depicts or describes in this case may be in the true sense (literally), namely, in the form of drawings or photographs obtained from field data or research to explain the results to the image-image and can also mean explain it in words. Both are in, research reports may be used in order to complement each other. There's a saying that a picture or painting, can give meaning more than a million words. The perpetrator or respondent who becomes the object and subject of research, activities or events studied, and the context (environment) where the research performed is reported in a descriptive way so that the reader better understand the results of his research report.

While M. Subana & Sudrajat (2001) explains:

Said descriptive study and interpret data when the study of the facts, circumstances, variables, and the phenomenon that occurs when the research took place and present it *as it is*. Forms that can be observed and pahdangan attitude that prevails when present, the relationship between the variables (*correlative*). antagonism of two or more conditions (*komparaijff*). influence on a condition, or differences antarfakta. In a descriptive study, the researchers did control the current state of research in progress. *treatment* such *provision*, and control of the external variables.

Husaini Usman & Purnomo, SA (2008) explains:

Qualitative descriptive study described in words in the opinion of the respondents, it is in accordance with the research questions, then analyzed also with words what lies behind respondents behave (thinking, feeling, and acting) as it was not like any other, is reduced triangulated, concluded (given meaning by researchers), and verified (consulted back to respondents and colleagues). At least three things that are described in qualitative research, that occurred during the study, and the state of the environment or katakteristik where the research took place. Descriptive quantitative research combined with qualitative contains two things that have been described.

Based on the result of the processing of the above data, the researchers concluded the results of a descriptive study by answering the research questions and synthesize all the answers are in the conclusion that summarizes the overall research problem.

The above step must be contiguous and should not be putting a particular step before the steps that led completion.

2. Framework

The advantages of this method are as follows:

- a. The comparative method can mensubsitusikan experimental methods for several reasons;
 - 1) If the control is held hard against one of the factors they want to know or investigate causal relationships.
 - 2) If the technique to hold a control variable can block the normal appearance of the phenomenon or not allowing their normal interaction.
 - 3) The use of a laboratory for research to be possible, either because of technical constraints, financial as well as ethical and moral.
- b. With the more recent techniques and more advanced statistical tools, make a comparative study can conduct the estimation of the parameters of causal relationships more effectively.

Besides advantages, comparative research mengandung weaknesses, among others:

- a. Because of its comparative research *ex post facto*, then these studies have no control over independent variables. Researchers simply adhering to the variable appearance as is, without the opportunity set conditions or conduct manipulasi against several variables. Therefore, the researchers expected mepunyai enough reasons in mepertahankan results causal relationships are found, and may file rival hypotheses to create justification for the conclusions drawn.
- b. It is difficult to obtain certainty, whether the factors investigated the cause of a causal really relevant.
- c. Because of the factors causing not work independent, but interrelated with each other, then the interaction between single factors as a cause or a result of a phenomenon known difficult. Even in the aftermath of a double factor, could have been caused by factors beyond the scope of research is concerned.
- d. There are times when two or more factors show an association, but not necessarily that the relationship shown is a causal relationship. Perhaps the variable relationship dikarena by their association with other

factors outside of it. On the other hand, if word has been found that the relationship between the factors is a causal relationship, but it is still difficult to be separated, which factor as a cause and factor which as a result.

- e. Categorizing subjects in the dichotomy (eg, in the category of democratic and authoritarian) for the purposes of comparison can lead to decisions and conclusions as a result of the category-kategori created dichotomy has blurred nature, varied, vague, and did not want valuejudgement sturdiness.

3. Personality Research

In the writing of this study have the kind of research and the researchers used a type of research that is *descriptive comparative*, meaning that the study is limited to the business of disclosure issues and circumstances as in fact only a disclosure of the facts by using the comparison between the services of Hajj regular Indonesia and Malaysia, the Ministry of Religious Affairs Republik Indonesia in this case the Directorate General of Hajj and Umrah with Hajj Lembaga Tabung Malaysia.

The study is basically a search of the data needed to test the hypothesis and to solve a specific problem or just want to know if there is a problem or not.

By katena it so that research can be managed properly in accordance with what we want, then the data collected should be good anyway.

The data source is a source of study is divided into two kinds, namely:

- a. Primary data
Seara is data obtained directly from the source, observed and recorded for the first time. Researchers will collect data directly, or at least get the data officially released by the agency in connection directly or indirectly with the study.
- b. Secondary Data Is collecting these data sought by investigators to study how library to collect data that is done by analyzing the literature that have a relationship with the problems examined. For example by studying science books, brochures, news print and electronic.

2. Method of collecting data

In this study, the authors take the data in three ways, namely:

- a. Observation
The method of data collection by a direct observation of activities, general conditions and events in the object of research by systematically recording and recording.
- b. Interview
Namely data collection techniques done by mangadakan question and answer directly to the problems examined by sources that have a direct connection or indirectly. The results of the interview are recorded or recorded electronically.

- c. References
Namely the collection of data obtained through the library, news print and electronic media to obtain additional data relating to the problems examined.

III. CONCLUSION

From the data analysis and discussion can be deduced as:

1. Ministry of Religious Affairs of the Republic of Indonesia and Malaysia both Lembaga Tabung Haji is equally the services of Regular Haji. Indonesia's Minister of Religious Affairs as coordinator of Hajj Central level. The Malaysian government commissioned a Minister in the Prime Minister's position as one of the leaders in the Institute Tabung Haji. In both countries there is no executor organizing regular Hajj except these two institutions in each country.
There is a fundamental difference between the organizational system the Ministry of Religious Affairs with the Institute for Tabung Haji Malaysia. Hajj regular in Indonesia under the Ministry of Religious Affairs. In Indonesia the Minister of State Administration is a partner of the parliament, and parliament will determine and control the organization of Hajj. In Malaysia Regular Hajj organizers are the Institute Tabung Haji, which this institution is like a company (in Indonesia similar to SOE). All policies do like company. Parliament supervised others.
2. Differences in organizational systems, it makes one of the main factors in the provision of services on the candidates and the pilgrims.
 - a. Malaysia can directly perform activities related to service to the pilgrims must wait at any time without the consent of parliament. In Indonesia all service activities of the organization of the Hajj in the year that will run only with approval of parliament / DPR.
 - b. As a result of the above system then every year Indonesia will be busy with the routine things that should be anticipated from the beginning. For example the problem of lodging, Malaysia could make anticipatory measures with long-term contracts, even with the ownership and development of permanent quarters. So it will reduce the factors that lead to less efficient and less optimal in its services to the pilgrims.
 - c. *B iaya Life* conducted by Indonesia is a system that does not exist in Malaysia and is a superior product that can suppress the financing of pilgrims, especially the allowance that they should take of the homeland.
3. There are different perceptions about the *cost* of the pilgrimage.
 - a. Hajj *fees* paid by pilgrims (in Indonesia BPIH, in Malaysia Paid Haji) Indonesia is more expensive than Malaysia, namely Indonesia, Malaysia amounted to US \$ 3342 amounted to US \$ 3,178.34
 - b. B iaya □ differences of opinion

table 5.1

Opinions about the difference Cost		
Indonesia	Malaysia	Information
US \$ 3,937.18	US \$ 4,011.33 (<i>approximate</i> 1431H RM13.040 = US \$ 4,149.33)	Indonesia is cheaper

US \$ 4,167.18	If added health service budget of MoH RI US \$ US \$ 230 per person	Indonesia is more expensive
	See table 4.5	

If the added costs incurred for salaries of civil servants working under MORA RI for organizing the pilgrimage. Researchers have not been able to calculate, because researchers are not data.

4. Secret Organization Tabung Haji Malaysia to be *nomboki indirect cost* of such a large and able to hire all of its employees independently is Lembaga Tabung Haji pilgrims using the initial deposit as an investment fund. From there then the funds are developed. While the initial deposit funds pilgrim Indonesia just bought SBSN (Sharia Securities).

Research limitations

This study only provide a general description of how the determination of Hajj in Indonesia and comparative management of haj funds in Malaysia. For this, the researchers are not freely widely author of the findings of the entire subject or phenomenon.

For further research in order to allocate appropriate time and longer so it could be examined for more data variables, more detailed and representative, it is in the interests of the maintenance of the development progress of the pilgrimage.

Suggestions / Recommendations

From the results of the above conclusions, the researchers submit suggestions / recommendations as follows:

1. Indonesia could be modeled on other countries, including Malaysia regarding religious affairs agency that mengurus the Hajj, the agency is berisifat independently without interference from the government, so that the management of the funds saved can be used to measlahatan Muslims.
2. Judging from the first conclusion that, if managed by a single entity or institution that takes care of Hajj funds, then there will be costly. From the example in Malaysia, any funds deposited in the beginning as the waiting list, has received the results and will be used to fund the cost of the pilgrimage at the time of departure, so that pilgrims will depart lighter than the extra pay due to the increased cost of the pilgrimage.
3. Differences costing in Indonesia and Malaysia, due to the quality of services for their components or services received, it dikearenakan services received in Malaysia more and Main. Therefore, the Indonesian government should emulate how costing Hajj in Malaysia oriented or *customer* service to customers in this regard pilgrims.
4. Funds collected should be used for investments that can be used for the development of facilities and infrastructure development of the Hajj or direct investment related to the benefit of the ummah of Islam in Indonesia. If only bought SBSN or sukuk, for the proceeds received no how, see the funds were deposited in the bank for more. Therefore, the fund should be managed for the benefit of the Ummah.

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ANALYSIS OF THE FACTORS OF SERVICE, PRODUCT, PROMOTION TO THE DECISION OF THE COSTUMER DEMAND SERVICES PRODUCTS MANDIRI SHARIA BANK BATAM BRANCH

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Abstract. This study aims to identify and analyze customer demand decision Mandiri Sharia Batam Branch. The sample used in this study amounted to 97 people. Questions are given a questionnaire which is distributed through simple random sampling techniques and analytical method used are validity test, reliability test, classic assumption test and multiple regression analysis. The results showed for the Variable Services Affect positively and significantly to the decision of the Customer's request Products Services Bank Mandiri Sharia Batam Branch, it can be seen from the significant value (0.000) which is smaller than 0.05 and the value of the $t(8403) > t$ table (1,658) pales improved Variable Services by one unit then the decision of the customer's request (Y) will be increased by 0526 units. Variable Product Negatively and not significant to the decision of the Customer's request Products Services Bank Mandiri Sharia Batam Branch, it can be seen from the significant value (0.737) which means greater than 0.05 and the value of the $t(0337) < t$ table (1,658) meaning that although improved Variable the product of one unit then the decision of the customer's request (Y) will not be reduced by 0.014 units. Variable Promotion Affect positively and significantly to the decision of the Customer's request Products Services Bank Mandiri Sharia Batam Branch, it can be seen from the significant value (0.001) which is smaller than 0.05 and the value of t arithmetic (3.312) $> t$ table (1,658) pales improved Variable Promotion by one unit then the decision of the customer's request (Y) will be increased by 0294 units. Results of Examiners Simultaneous Revealed that the calculated F value of 85 339 with a significance level of 0.000, while F table at the 95% confidence level ($\alpha = 0.05$), is 2.70 by because they on the calculation that F count (85 339) $> F$ table (2.70) and the significance level (0.000) < 0.05 it shows that the influence of the Independent variable Services, Products and Promotions simultaneously is significant to the decision of customer demand for the Product Services Bank Mandiri Sharia Batam Branch.

Keywords: Service, promotion, product, customer demand decision

I. INTRODUCTION

Man in his daily life will not be separated from the activities of security be to obtain better benefits than immediately before the transaction. Transactions that occurred in the community may be a transaction of goods and services. Marketing system has allowed the transaction occurred and developed from time to time because marketing is a study of the exchange or transaction that is how the transaction was initiated, motivated and consumed.

Indonesia is a country that has the largest Muslim population in the world with a population today amounts to 207 176 162, equivalent to 87.18% of the total population of Indonesia (www.google.com) March 29, 2013 at 9:00 pm. The development of the banking sector has brought about economic growth, as well as businesses on a very tight competition in the banking world to win the sympathy of the consumers in using the products of banking services, a variety of approaches taken to gain public sympathy through banking services based on high technology and human resources skilled ,

Competition weeks to provide satisfaction in terms of service to customers has been fine tune the customer / consumer as decision-makers, the increasing number of conventional banks opening sharia units to operate the opening sharia units by operating the product and services offered provide opportunities masyarakat to make a choice according to need, can views in decision-making is generally influenced by the cultural background that affect the community, the level of education and knowledge are the higher of course people will be more selective in retrieval conclusion to meet the banking needs. Indonesian people, especially the Muslims do not just want services of appropriate quality alone but require banking services that do not conflict with the principles of the religion of Islam as usury.

Islamic banking is a financial institution that propesional accordance with Islamic principles. The birth of Islamic banking has brought a positive impact on the banking treasury diIndonesia. In the presence of Islamic banking can meet the needs of the community that provide banking services or financial institutions are net of usury and become a better institution. Banking services have helped in

facilitating the exchange and help the formation of capital for the community.

A. Theoretical Basis

1) Consumer Behavior

Consumer behavior is the study that focuses on how individuals make the decision to utilize their available resources (time, money, effort) to buy goods related to consumption.

Study of consumer behavior as a separate marketing discipline begins when marketers realize that consumers do not always act or react as proposed by the theory of marketing

2) Understanding Consumer Behaviour: The Key to Development of Islamic Banking

Understanding consumer behavior in general banking capital is to formulate a strategy to recruit new customers that had not been convinced of the superiority of Islamic banking. While understanding the behavior of customers of Islamic banking in particular in order to keep them from running back to conventional banking, or want to make Islamic bank as the primary bank by increasing the satisfaction they get

3) Understanding of Marketing

Marketing is one of the important activities that need to be done to improve the business enterprise and maintain the viability of the company. Besides the company's marketing activities also need to combine functions and use their expertise for the company to run well.

4) Understanding of Marketing Services

Lamb, Hair dan MC. Daniel (2001) defining business services as a result of the use of man and machine against a person or object. Services include an act, a performance, or the effort that can not be processed physically.

5) Term of Services

Services (Barata, 2004) is an activity or sequence of events that occur in the direct interaction between a person with another person or a physical machine, and providing customer satisfaction. In Big Indonesian Dictionary described the service as a business serving the needs of others. While the airport is helping to prepare (take care) what a person needs. Kep. Menpan No. 81/93 states that public service is any form of service provided by the central government / local, state, enterprises, in order to meet the needs of the community, or the prevailing regulations. Service comes from people not of the company.

6) Excellent Service

Defining business services as a result of the use of man and machine against a person or object. Services include an act, a performance, or the effort that can not be processed physically. In today's world development services known term excellent service (service excellence). Excellent service terms, which means it is a concern to customers by providing the best services to facilitate ease of realizing the fulfillment of satisfaction, so that they are always generous to the company, (Barata, 2004)

To achieve service excellence, the company must have certain skills, such as good and presentable, be friendly,

show morale and attitude are always ready to serve, quiet work, not high-minded because they feel needed, to master his job better tasks related to the section or department or other part, able to communicate with baikmampu know and understand sign language (gesture) customers as well as having an ability to handle customer complaints in a professional manner.

7) Marketing mix

Marketing mix constitute one of the elements in the marketing strategy of products and services. Marketing mix has a very important role in the progress of the company, so the marketing mix must be conducted in stages with full consideration of the right.

B. The results of previous research

Previous research that Samsudin in 2007 in his research entitled "Why do customers choose to use the services of Islamic banks case study on bank BNI sharia branches thamrin" Menyimpulkan that the factors that most influence a client's decision to save in BNI sharia is "Factor facilities and services" such research , technical analysis is the analysis of the validity and rehabilitation, diskriptif analysis, factor analysis and cross tabulation chi square analysis, the significance level $\alpha = 5\%$.

C. Framework

Framework explained, developed, and elaborated on the formulation of the problems that have been identified through interviews, observation and literature survey. (Kuncoro, 2003). These frameworks will be put forward on the variables studied were:

Service factor, factor products, and promotional factors are independent variables, as well as the client's decision to use the services of Bank Syariah Mandiri merupakan related variables.

Simply put frameworks outlined diatas can be illustrated in the schematic diagram below :

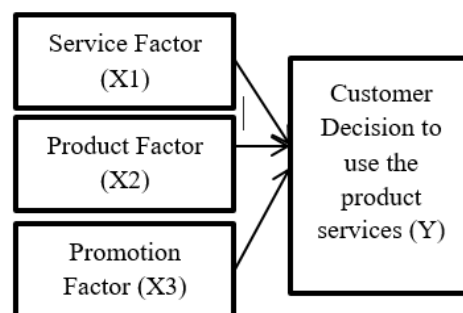


Fig. I Frame of the customer decision

D. Research Hypothesis

Based on the issues formulated writer can take hypothesis as a temporary answer, namely:

- 1) suspected that the service (service) significantly influence customers' decisions on product demand services of Bank Sharia Mandiri Branch Batam
- 2) It was alleged that the product (product) significantly influence customers' decisions on product demand services of Bank Sharia Mandiri Branch Batam
- 3) It was alleged that the promotion (promotion) significantly influence customers' decisions on product demand services of Bank Sharia Mandiri Branch Batam
- 4) Suspected simultaneously Services, Product and Promotion significantly influence customers' decisions on product demand services of Bank Mandiri Sharia Branch Batam.

II. METHOD

Research sites I researched was the Mandiri Sharia Bank Branches Batam

A. Sampling Technique

Population

The number of customers who save at Bank Sharia Mandiri branch Batam during 2015 is included in the form of savings deposits, time deposits and demand deposits.

According Sugiono (2004) Population is the generalization region consisting of subject / object that has certain qualities and characteristics that are applied by researchers to learn and then be deduced.

The number of the population used in this study were taken from the number of customers in the month of May 2015 which amounted to 3000 people. The population is only taken from the number of customers in May 2015 because of this May many customers transact savings.

Sampling

The sample is part of the number and characteristics possessed by this population. A sample is a set for (subset) of a population unit Kuncoro (2003).

B. Type of Data

This study uses two types of data sources that :

Primary Data

Primary data is data collected directly by using a questionnaire that distribute a list of questions either directly or indirectly related to writing a report to clients of Bank Mandiri Sharia Batam.

Sekunder Data

Skunder data is data collection to study the problems associated with the object under study through manuals, literature compiled by experts associated with the analyzed problem

C. Data Collection Technique

According to the research method used is survey method, the data collection techniques in this study carried out by using, among others:

- 1) Questionnaire
Is collecting data by asking questions through a list of questions on selected respondents.
- 2) Interview
Research carried out by conducting interviews directly to consumers / customers to clarify the answers of a questionnaire that has been filled by the consumer / customer research location.
- 3) Study Library
Collect data to learn the information and data obtained through books, journals, websites that serve as a reference.
- 4) Likert Scale
According Sugiono (2004) is a measuring instrument used to measure attitudes, opinions, perceptions, a person or a group of social phenomena. The study provides five alternative answers to the respondent, then the scale of the use of 1 to 5.

D. Operational Defination

1) Independent Variable

The independent variable is a variable whose value is not dependent on other variables. The independent variables of penilitan are:

- a. Factors Services (X1)
Are all factors associated with service and facilities owned by the bank and then diberikan to its customers.
- b. Variable Product (X2)
Are all factors related to the type of product, easiness in the transaction as well as the features contained in the product.
- c. Variable Promotion (X3)
Are all factors relating to the promotion, encouragement from others (family, friends, and others).

E. Bound variable (Y)

A variable whose value depends on other variables. As for the dependent variable was the decision of customer savings deposits, time deposits, and current accounts to use the services of Bank Mandiri Sharia Batam.

F. Technical Data analisis

Descriptive analysis

Descriptive analysis method is a way to formulate and interpret the data so as to provide a clear picture of the perception kopnsumen / customers about the factors that affect customers using the services of Bank Mandiri Sharia Batam

1) Validity and Reliability

Conducted to examine whether the questionnaire used as an instrument worthy of study. The validity and the reliability questionnaire in this study using SPSS version 20 softwer help to obtain targeted results.

2) Clasic Assumption Test

- a. Normality
Interest normality test is to know whether the distribution of data or approaching a normal distribution, the distribution of data with a bell shape, good data is the data that have a normal distribution pattern, ie, the distribution does not deviate left or right.
- b. Heteroskedastisitas
Heteroskedastisitas test aims to test whether there is inequality in the regression model variance of the residuals of the observations of other kepengamatan fixed, then there homoskedastistas. If different, then it is called heteroscedasticity. A good regression model is that not happening heteroskedastisitas. With decision-making criteria:
Sig. >0:05 means data is not exposed heteroskedastisitas
Sig. <0:05 means the data exposed heteroskedastisitas.
- c. Autocorrelation
The term autocorrelation can be defined as the correlation between members of a series of observations are sorted by time (as in the data deterwaktu) or space (as in a cross-section).
- d. Multikolinearitas
Multikolinearitas term was originally developed by Gagnar Frisch. At first multikolinearitas This means that the linear relationship is "perfect" or "definitely", among some or all of the variables that describe the model regeresi, in short, can be interpreted as a linear relationship between the variables oksplanatoris of a regression model is perfect.

3) Hypotesis Test

This test uses the F test and t test, among other things:

- a. Test-F (simultaneous test) is to see whether the independent variables together (simultaneously) a positive and significant effect on the dependent variable.
- b. Test-t (partial test)
Through t-test (partial test) using a step-langlah as follows:
Ho: $b_i = 0$
That is partially there are positive and significant effect on the dependent variable.
Ha: $b_i \neq 0$
That is partially contained slight positive and significant influence of the independent variable on the dependent variable.

4) Kofesiensi Correlation and determination (R2)

Identification Determinas (R2) function for variable significance it must find the coefficient of determination (R2). Coefficient determinant shows the contribution of independent variables on the dependent variable, the greater the value of the coefficient of determination, the better the ability of independent variables to explain the variables of determination, if the determination (R2), the greater (close to one), it can be said that the independent variable was great on the dependent variable , This

means the more powerful models used to explain the influence of the independent variables on the dependent variable studied.

5) Multiple linear regression analysis

Method of multiple linear regression analysis is used to menegtahui influence / relationship of independent variables with the dependent variable, the data processing will be done using tools SPSS 20 software application for windows.

III. RESULT AND DISCUSSION

A. A General description of the company

1) Glimpse of Bank Sharia Mandiri

The company values that uphold the humanity and integrity have been firmly entrenched in all beings Bank Syariah Mandiri (BSM) since its establishment.

BSM presence since 1999, is actually a blessing at the same wisdom after the 1997-1998 economic and monetary crisis. As is known, the economic and monetary crisis since July 1997, followed by multi-dimensional crisis, including on the national stage, has led to a variety of negative impacts was superb on all aspects of community life, the business world is no exception. In these conditions, the national banking industry is dominated by conventional banks experienced a tremendous crisis. The government finally took action by restructuring and recapitalizing the banks partly in Indonesia.

PT Bank Sharia Mandiri present, performing and growing as a bank that combines business ideals and spiritual values, which underpin its operations. Harmony between business ideals and spiritual values that is the one of the hallmarks of Bank Syariah Mandiri in Indonesia work in banking. BSM was born to build Indonesia better.

B. Mission and Vision Bank Mandiri Sharia

1) Vision

Bank Sharia Leader: Becoming Islamic banks have always excelled in between the perpetrator of Islamic banking industry in Indonesia in the consumer segment, micro, SME, commercial and corporate.

Bank Syariah Modern: Being Islamic bank with cutting-edge technology systems and services that exceed customer expectations.

2) Mision

- a. Delivering growth and profitability above the industry average sustainable.
- b. Improving the quality of products and technology-based services that exceed customer expectations.
- c. Stresses's fund-raising and channeling funds in the retail segment.
- d. Develop business on the basis of sharia universal values.
- e. Develop a talent management and healthy work environment.
- f. Increasing concern for the environment and society.

C. Values and Culture Job Bank Mandiri Sharia

In carrying out its obligations which are based on the basis of Sharia law, namely the Qur'an and the Hadith, the whole insane Bank Mandiri Sharia also have values that guide you in every temperament. These values are formulated in the working culture of Bank Mandiri Sharia.

D. Products Bank Sharia Mandiri

Bank Sharia Mandiri provides a range of products and services that complete and supported with an extensive distribution network and support of human resources of the highest integrity. Bank Mandiri Sharia also have different types of products and services such as Savings, Current Accounts, Time Deposits, Mandiri Service Priority, Consumer Financing, Product Services, Gold, Hajj and Umrah.

E. Data test

1) Characteristic of Respondent

This research uses descriptive analysis, which is done to explain and describe the various characteristics of respondents overall, by gender, age, and other matters related to this research. The descriptive analysis will be done using frequency analysis methods. While collecting data using observation and dissemination of questionnaires, by asking a few statements that will be answered by the respondents.

a. Gender

Of all respondents amounted to 96 people who participated in this study, as many as 41 people or 42.70% gender Male and as many as 55 people or 57.30% Female sex. Based on data from respondents by sex shown in Table 1 as follows:

Table 1 Sex Sample Type

No	Sex	Frequency	Presentase (%)
1	Men	41	42,70
2	Woman	55	57,30
Total		96	100

The data processing reseacher, May 2016

b. Age

Table 2 Age Sample

No	Age	Frequency	Presentase (%)
1	18 - 30 tahun	44	45,83
2	31 - 40 tahun	40	41,67
3	41 - 50 tahun	10	10,42
4	≥ 51 tahun	2	2,08
Total		96	100

The data processing reseacher, May 2016

c. Formal Education

Table 3 Education

Education	Frequency	Presentase (%)
SLTA	50	52,08
D3	12	12,50
S1	29	30,21
S2	3	3,13
S3	2	2,08
TOTAL	96	100

Sumber : The data processing reseacher, May 2016

Table 4. Working

Working	Frequency	Presentase (%)
PNS	11	11,45
Private Employees	55	57,30
Business	30	31,25
TOTAL	96	100

IV. RESULT

Multiple linear regression analysis

In multiple linear regression analysis that has been done, then the regression coefficient, t value, and the level of significance. The following table shows the test results of multiple linear regression, namely:

Table 5. Multiple Linear Regression Result

Model	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
1 (Constant)	-2.262	0.976	
Service	.526	0.063	.631
Product	.014	0.042	.022
Promotion	.294	0.089	.277

The data processing researcher, May 2016

t Test

The t-test was used to test how far the level of significance of the influence of the independent variable (Services, Product and Promotion) in influencing the dependent variable (the decision request) is partial. Pengujian significant partial correlation coefficients and partial regression coefficients is done by looking at the significance level, if the level of significance resulting from the calculation below 0.05, then the hypothesis is rejected or which means that there is a positive and significant influence between the variables X and Y.

V. CONCLUSIONS AND SUGGESTION

Based on statistical analysis testing and discussion of the research were processed with SPSS 20 program has shown that the factors that affect customer demand for the Product Decision Services Bank Mandiri Sharia Batam can be concluded that:

1. Variable Services (X1)
Affect positively and significantly to the decision of the Customer's request Products Services Bank Mandiri Sharia Batam, it can be seen from the significant value (0.000) which is smaller than 0.05 and the value of the t (8403) > t table (1,658) pales improved Variable Services by one unit then the decision of the customer's request (Y) will be increased by 0526 units.
2. Variable Product (X2)
Negatively and not significant to the decision of the Customer's request Products Services Bank Mandiri Sharia Batam, it can be seen from the significant value (0.737) which means greater than 0.05 and the value of the t (0337) < t table (1,658) meaning that although improved Variable the product of one unit then the decision of the customer's request (Y) will not be reduced by 0.014 units
3. Variable Promotion (X3)
Affect positively and significantly to the decision of the Customer's request Products Services Bank Mandiri Sharia Batam, it can be seen from the significant value (0.001) which is smaller than 0.05 and the value of t arithmetic (3.312) > t table (1,658) pales improved Variable Promotion by one unit then the decision of the customer's request (Y) will be increased by 0294 units.
4. Results of Examiners Simultaneous
Revealed that the calculated F value of 85 339 with a significance level of 0.000, while F table at the 95% confidence level ($\alpha = 0.05$), is 2.70 by because they on the calculation that F count (85 339) > F table (2.70) and the significance level (0.000) < 0.05 it shows that the influence of the Independent variable Services, Products and Promotions simultaneously is significant to the decision of customer demand for the Product Services Bank Mandiri Sharia Batam.

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Analysis of the Use of Applications 'Mobile Banking' BRI Business Transaction of Traders in the Market Bengkayang

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Abstract. Satellite launch bank-owned Bank Rakyat Indonesia in the week of June 19, 2016 in French Guiana has been given a new atmosphere to the service of Bank Rakyat Indonesia. One of the benefits of satellite called BRI^{sat} this is that banking services across remote areas in Indonesia can be realized, one of which is in the area of banking services Bengkayang West Kalimantan as remote areas. Bank Rakyat Indonesia via satellite, all the problems of business transactions online can be missed. It was perceived usefulness through a variety of services in the form of online transactions both transactions being in the office services and use various features with technologies such as mobile banking applications. Business activity in the market Bengkayang by merchants who use mobile banking application gives speed and accuracy of business transaction services. And to this day many businesses are feeling the ease of transaction using the mobile banking application on android mobile facilities, smartphones, and personal digital assistant (PDA). Traders in the market Bengkayang have used the services repeatedly, even when sending money shopping and receive payments in large quantities by using mobile banking, so that ultimately, enables merchants to transact.

Keywords; Facility service 'mobile banking' increasing business transactions in the merchant market Bengkayang

I. INTRODUCTION

Launching banking application program through sophisticated technology to facilitate a variety of financial transactions, which has been used by most businesses. Technology using mobile devices and internet media, increasingly sophisticated with a variety of features that have been offered by the makers of the communications media. Use of information technology has become a necessity to support business development in the banking sector. Utilization of appropriate technologies should also be considered, in order to minimize operational risk, banks should be able to operate more efficiently. Currently the banking service is already a requirement of society, even in remote areas, such as in West Kalimantan Bengkayang, banking transaction as a 'must'. To facilitate banking transactions, to offer a product that serves to support the various activities of banking customers including mobile banking, m-banking abbreviated.

II. MOBILE BANKING

Mobile banking is abbreviated as m-banking facilities or banking services using mobile communication devices such as mobile phones, smartphones and personal digital assistant (PDA) which provides facilities for banking transactions via the application. With the mobile banking services, banking transactions are usually done manually, that is, activities that were previously done customer by visiting the bank, can now be done without having to visit the service office / bank, or do not need to machine ATM (automated teller machine) but only with using devices such as mobile phones,

smartphones, and personal digital assistant (PDA), customers can save time and costs.

Mobile banking service provides convenience to customers to conduct banking transactions such as check balances, transfer between accounts, bill payments, the content of credit, and others. Mobile banking itself remains connected to the telephone network connectivity is supported by excellence despite BRI^{sat} satellite services.

A. *The Interests of Customers Using Mobile Banking BRI*

Davis et al. in Hapsara (2015) defines the perception of the usefulness (perceived usefulness) as a level at which a person believes that using such a system can improve its performance in work. This statement is in line with a previous study conducted by Pratiwi (2012) and Amanullah (2014) in which the results of the study show the usefulness influential in interest in using mobile banking. Perceived ease (perceived ease of use) is defined as the extent to which a person believes that using a technology would be free from effort. So that if one believes that the information system is easy to use then he will use it and vice versa (Jogiyanto, 2007: 320). Malhotra and Galleta in Hapsara (2015) defines the perceived ease of someone that is the level of confidence that a particular technology systems can be used easily (without effort). This statement is in line with research Hapsara (2015) as well as Mubiyantoro and Syaefullah (2014) which states that the effect on the ease of use of mobile banking services. The view of the risks of the use of mobile banking services greatly affect the level of trust. The smaller the risk perception of an individual, the greater the level of confidence, on the contrary, the greater the risk perception of an individual, the smaller level of confidence. This statement is supported by research conducted Hapsara

(2015) which states that the risk of an effect on the use of mobile banking services by customers.

B. Quality of Service Mobile Banking

Before the advent of satellite BRIsat, mobile banking services have been used by the customer. Feature updates continue to be made to improve the quality of services, ranging from manual way up with the help of software on mobile phones and smartphones android. Along with the development of technology, Bank Rakyat Indonesia launches applications that facilitate transactions of various purposes except cash withdrawals. Purposes such as check balances, transfer funds to pay for mortgage insurance, can be performed with just one hand and can be freely enjoyed by customers of Bank Rakyat Indonesia.

This transaction convenience BRIsat supported by a satellite that will help banking activity and reach previously inaccessible areas. Rahardjo (2002) explains that there are several requirements of mobile banking, ie, the application is easy to use, the service can be reached from anywhere, cheap, safe and reliable (reliable). The advantages of mobile banking has experienced a wide range of applied advanced technologies, improvements mean, so do not worry about its use.

III. Use of Mobile Banking Market by Traders Bengkayang

Bengkayang as remote areas directly adjacent to neighboring Malaysia experienced economic dynamics are complex. No wonder if the area is divided in 1999 is not yet well developed. Infrastructure has not been adequately supported so that the economy is still limited local trade, such as the nine basic trading businesses where pricing is still dependent local productivity. With the lack of creative economy industry, Bengkayang can not compete with other regions in Indonesia. However, as the border area, there is no doubt going to the entry of the changes could affect existing conditions, such as economic conditions. Bilateral economic influence can occur when price and quality of Indonesian products not in accordance with the wishes of consumers. Here is a powerful strategy that is played by the business, including traders in the market Bengkayang. In various ways they are trading for profit with the hope to be a winner in the war Bengkayang business in the market.

To increase sales strategy, a trader in the market Bengkayang use way to transact through mobile banking. Some of them stated that the use of mobile banking supports the sales process so that turnover to increase. Since their mobile banking application Bank Rakyat Indonesia uploaded through internet services, transactions are becoming increasingly easy to do by traders, both when they check the balance on savings accounts, make transfers, recharge phone credit and electrical pulses, even paying water bills and insurance , can be done with just one hand. Traders ordering merchandise and pay through transfers between accounts, good account of fellow Bank Rakyat Indonesia, as well as other bank accounts.

The merchants no longer need to come to the office bank cash services in question.

Disruption of mobile phone networks do not become a factor inhibiting smooth transaction for telephone network

interference usually not in a long time. Petty traders in the market Bengkayang within the past few years are likely to use mobile banking application so that the flow velocity of money is always observed through mobile banking. Some of them already came to the office cash services, Bank Rakyat Indonesia to conduct a transaction.

For making cash, market traders Bengkayang usually visit the nearest ATM. ATM machines are widely used for cash withdrawals, while transactions in the form of remittances, everything is done with a mobile banking application. The application is easy to operate, but the associated security need to be aware that there is nothing to know which keywords to enable the use of mobile banking applications. Because mobile banking is closely linked to the user's device security using any application that can be known by the user only, in this case the trader who operates the application. And until when interviewed, traders in the market Bengkayang not find obstacles in using mobile banking application that can make them fear and distrust. This is a technological advancement banking information, because it is in Bengkayang; a remote area in West Kalimantan.

To support the development of information technology continues to reach out to various remote areas such as in this Bengkayang, the strengthening of the cellular network and mobile phone signal should be further strengthened.

Bengkayang market traders in the move always looking for convenience. For example, when buying goods from a manufacturer or distributor selling products, they are sufficient to communicate by cell phone and after that regulate the distribution of goods and the payment schedule through mobile banking. This happens only to traders and distributors who already know each other so that together they trust each other, ranging from the sharing of information, the purchase until the payment schedule. If trust is not a priority then the traders will undertake economic activities trade with manual methods. Communicate face to face, ordered goods in a way to buy it from the warehouse and pay for these goods with cash.

Bengkayang in the market, most traders do trading activities with existing information technology, including information technology banking through mobile banking application when making a transaction. Very few among them who do not believe in the accuracy of transfer of funds through mobile banking application, in fact there are traders who do not carry out this activity, in other words, still hanging and familiar with how to trade manually, ie, go to the service cash or visit an ATM machine without think the ease of technology that has been offered by Bank Rakyat Indonesia.

Bengkayang located away from the provincial capital of West Kalimantan was able to access the various facilities of information technology, such as the ease of using the mobile banking application. If the application only has the level of difficulty in operating it then of course the application will not be used for a long time. And may the customer will submit complaints related technical consumer, in fact, they would still use manual methods when conducting business transactions, for example, came in the office of the local service of Bank Rakyat Indonesia, or to an ATM machine to make a transaction. However, the activity of traders in the market Bengkayang greatly aided by the use of mobile banking applications, to conduct business transactions, such

as money transfer, payment and other bills. Ease of what actually caused the traders Bengkayang prefer the application rather than the transaction in a way that manual? Actually, concerns the mobile banking application on mobile services facility, smartphones, and personal digital assistant (PDA), is quite high in the market Bengkayang, followed by the various scams in the form of a short message service keragua hesitations that cause it to happen. Traders in the market Bengkayang conduct various studies and analysis of the toughest challenges of using mobile banking application as a means of speeding up transactions and the level of accuracy that can be trusted. Various considerations ultimately makes itself a reason to keep trying to use the application when doing business.

To understand this phenomenon, it is necessary to find the root of the problem and the solution according to the perspective of traders as the subject of most interest appropriately. Conventional economic theory that positivistic certainly can not resolve the real answer to the problems of economic activity in the market Bengkayang. So the approach to decide whether to use a mobile banking application is more directed at rational considerations based on the experience of other traders who have used the application before. It was only at a later stage entirely traders can use these applications to launch business activities. As part of the development of sales strategies, traders continue to strive to know the techniques they use mobile banking and find a form of use for a long time and try to make use of mobile banking is not a new problem reap. The biggest benefit is the use of mobile banking is to help traders in the markets Bengkayang conduct business activities.

IV. Impact of the Use of Mobile Banking Market by Traders Bengkayang

A. Market Traders Bengkayang

Bengkayang market activity formed since their clothing needs of the community board and so on can be found in the center of the capital Bengkayang. Bengkayang market which only consists of traditional markets is mostly occupied by the community of origin Bengkayang that since the beginning has started a business in the field of trade. Bengkayang market area not more than 1000 m², has buildings for shops, residential traders who once used as a place to sell, as well as small buildings used as places to sell. In these places, there are already have a property, but there are only rented for a period of one year, even up to five years. Traders who conduct activities in the market Bengkayang coming from the districts around the capital Bengkayang, such as districts Bengkayang, sub Sungai Betung, sub Sungai Raya, subdistrict Ledo, district Shouts, district Suti Semarang, until districts Jagoi Babang already adjacent to neighboring Malaysia.

Traders vary in selling merchandise, such as selling nine staple, selling vegetables, selling electronic equipment, sell fabrics and clothing, to sell prepared food. Traders who conduct business activities and using mobile banking transactions of more than 100 vendors and they have no trouble when transacting using an application-owned Bank Rakyat Indonesia. Along with the development of information technology, banks conducting banking activities such as Bank Rakyat Indonesia started to offer the

convenience of transactions, among them like an ATM machine, then the latest innovations such as mobile banking application which has been used by market traders to transact Bengkayang.

B. Risk

Risk can be understood as an uncertainty which is considered the ones to decide or not to conduct transactions online. It can be said that online transactions have a high risk, because traders can not transact face to face and they also can not be sure whether the transaction has been done, has been processed in a timely manner or not. Before using the mobile banking service, traders must have considered the possibility of various risks. As such, the risk of leakage of personal data PIN and traders, the risk of virus attack, the risk of misdirected, or even traders make a typo. However, all these risks can be minimized, either from the bank or from the merchant himself. To prevent leakage PIN And Personal Data, then the Bank can be parties give Yang More Security, to Third parties can not be Stealing Data Merchant. Meanwhile, to reduce the risk of misdirected or typo, traders can double check (rereading), before it is sent. It has nothing on the menu mobile banking so that the user which in this case is the merchant can determine exactly the letters or numbers typed whether it is correct or not, after it was confirmed is correct, then the user can immediately send the appropriate commands menu on mobile the banking. The greater the risk will be borne by traders in using mobile banking system, the lower the use of the system.

Risk can also be defined as the perception of uncertainty and their consequences are after specific activities. Risks associated with the security system in the mobile banking service. When security in the system is weak, then it can make users anxious and hesitant to give their account numbers and other vital information through a system of mobile banking services. Users worried if the confidentiality of the PIN number known by others without their knowledge, resulting in lower mobile banking facility user wishes to use the mobile banking service. Amijaya (2010) concluded that the higher the client's risk perception will lower customers' interest in using mobile banking.

C. Ability Acces

The rapid advancement of information and communication technology today, making users increasingly demand mobile banking facility availability and speed of access, safety, convenience and comfort in order to conduct their banking transactions. Many banks understand the development trends and continue to improve its transactional banking facilities to increase business activities.

Access capabilities include physical access (infrastructure) and the ability to use the system. Karahanna et.all (1999) states that if information systems can be more easily accessible, the less effort is required to use the system. In the context of mobile banking, the ability to access not only the client's ability to use the system, but also the ability to access the internet and HP physically. The existence of adequate technology infrastructure, marketing applications through the Internet and mobile phones, such as mobile banking will be done more easily. Tan and Teo (2000) states that the ability to access mobile banking is a facilitator in the

adoption of mobile banking as the capacity to perceive technology encourages users to be better.

D. Security

Security is the customer perception of the ability of banks to protect personal information obtained from electronic transactions against unauthorized users. The security of electronic transactions make customers feel confident that their personal data confidentiality is assured when transacting via mobile banking.

Security against a data is an important thing to consider in using mobile banking services. In online transactions, the risk of loss of confidentiality is a significant factor affecting the trust and use. There have been many surveys that found a high concern of investors about the confidentiality of their personal data when transacting online (Maharsi and Fenny, 2006). A major concern for mobile banking users is the lack of control over the confidentiality of the information that led to the abuse of personal data. Party mobile banking service providers must be able to ensure the security of user data. Banks must provide security technology to the appropriate data standards, so that the customer data can not be stolen and misused by irresponsible people. Systems and networks for mobile banking has been applied maximum security possible. Mobile banking security conditions are also constantly monitored and improved, in line with technological developments and threats. The guarantee of the security of the banks will cause a sense of trust and attract users to use mobile banking. Positive effect on the security of mobile banking usage. The implication is that if consumers believe that the payments in mobile banking channel is not secure, it reduces consumer confidence. As a result they are lazy perform online banking transactions.

(Maharsi and Fenny, 2006). Banks will be trusted by its customers, if they can convince customers that the security and confidentiality of customer data secure. If the customer has been believed that payment channels on the internet is safe, and believe that the bank will not divulge their personal confidential information or sell it to another party without consulting it first, then the condition is the appeal of the interest of potential customers to use mobile banking.

V. CONCLUSION

Traders in the market Bengkulu have used mobile banking Bank Rakyat Indonesia as the only choice in doing business transactions. Given the level of risk and high security they can still use this application easily uploaded into a facility that is convenient to use. Although Bengkulu have inadequate infrastructure development but the online service facility provided by Bank Rakyat Indonesia greatly assist the traders in the market Bengkulu transaction.

With the launch of the satellite owned Bank Rakyat Indonesia called BRIsat have supported economic activity in remote areas including in Bengkulu so that traders can take advantage of this technology appropriately and correctly. Various security concerns for mobile banking usage has been reduced by a system of banking information Bank Rakyat Indonesia. In relation to economic development, traders in the market Bengkulu have been helped by these online services so that their productivity

increased, and certainly come to support economic growth in Bengkulu. If the economy grows rapidly through the trading activities of traders in the market Bengkulu, then by itself involved moving the other sectors in the development of micro-economic scale in Bengkulu. Merchants who use the facilities of the online service is now not a problem compounded by the time and place of the transaction, because enough with the facility services such as mobile banking application Bank Rakyat Indonesia, all forms of transactions carried out on their premises, under any circumstances and at any time.

To further help speed up access to the banking information should the Bank Rakyat Indonesia reorganizing the mobile banking system with a high level of security with the support of mobile phone networks and the internet is higher. Menu options on mobile banking is not difficult when making transactions, including when opening or closing the mobile banking application.

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ANALYSIS ON LEVEL OF SACCHARIN AND CYCLAMATE ADDITIVES INSIDE CUP-PACKAGING-DRINK ATSD KARANG TENGAH, TANGERANG CITY

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Abstract. The use of food additives today were extremely diverse, from preservatives to flavor concentrates and sweeteners, the circulation needs to attention. This study aims at analyzing the levels of saccharin and cyclamate at children elementary school's beverage at Karang tengah, Tangerang City. This study uses HPLC with a C18 column with mobile phase KH₂PO₄ and methanol (70:30), with UV-Vis detector for cyclamate at 200 nm wavelength and for saccharin at 227 nm wavelength. The results of this study showed that five samples containing saccharin (sample A = 73.059 mg/L, the sample B = 56.624 mg/L, the sample C = 0.73 mg/L, the sample D = 0.82 mg/L, the sample E = 61.52 mg/L), this figure was still below the recommended threshold BPOM RI. Whereas four of the sample including, containing cyclamate (sample A = 1184.42 mg/L, the sample B = 1409.95 mg/L, the sample D = 1418.31 mg/L, the sample E = 444.38 mg/L), it's levels exceeding BPOM RI's threshold recommended and one sample containing cyclamate whose levels do not exceed the threshold (sample C = 117.095 mg/L).

Keywords: Saccharin and Cyclamate, Sweeteners, Beverage Packaging

I. INTRODUCTION

Food additives, such as preservative, additive, and food coloring, were easily found in various food and beverage. Factory-based-industries used those additives for their products as well as home-based-industries. The safety of school's snacks had to be paid attention because it related to students' physical-growth. Food that was often become source of intoxication were snacks. This was due to lack of quality control from the manufacturer (that was often come from home-based-industry) (Adriani M, Wirjatmadi B, 2012).

Additive that was often used was artificial sweetener. It was processed chemically, and its compound was not found naturally (Anonym, 2012). It was purposely added to increase flavor, aroma and physical appearance of food or drink. Sweetener was divided into 2 (two): synthetic sweetener (cyclamate, aspartame, saccharin) and natural sweetener (sucrose, fructose, glucose, sorbitol).

Saccharin was artificial sweetener in form of salt, consisted of calcium, potassium and sodium saccharin. In general, saccharin salt was crystal white, odorless, soluble in water and very sweet (Head of National Agency of Drug and Food Control, 2014). Saccharin was 200-700 times sweeter than sucrose. Unfortunately, it left bitter or metal after taste in middle until high concentration. This was due to low purity as result from synthetic process. To remove the after taste, saccharin could be mixed with cyclamate by comparison of 1:10 for cyclamate (Putri Intan Eriska, 2013).

In 1971, a research conducted by Wisconsin Alumni Research Foundation (WARF) proved that saccharin classified as carcinogenic substance. From 15 rats which were given saccharin, 5% (or 7 rats among them) had cancer on gall bladder after consuming saccharin for 2 years (Djojoseobagio, Soewando dan G, Wiranda, 1996). In 1977, Canada's Health Protection Branch reported that saccharin was responsible as the cause of urine bladder cancer. Afterwards, the use of saccharin was banned in Canada, except as sweetener (Winarno F.G, 2008).

Initially, cyclamate was only use in drug industry. The purpose was to cover bitter taste from active drug substance, like in antibiotic and pentobarbital. After it was proclaimed safe on 1958, cyclamate was more popular as low-calorie artificial sweetener. However, research in 1969 showed that it could cause urine bladder cancer on mice that was given cyclamate regularly (Anonym, 1998). As result, United States withdrew its distribution from food industry totally on 1969 and continued by United Kingdom on 1970.

Cyclamate (C₆H₁₂NNaO₃S) was often found in form of calcium salt, potassium, and sodium cyclamate. Cyclamate was quite cheap additive, 30 to 50 times sweeter than sucrose. Unlike saccharine, cyclamate seldom leave bitter after taste like saccharin (Anonym, 2009). Cyclamate had 0 kJ/g and ADI: 0 mg/kg - 11 mg/kg per body weight. Based on regulation from Head of National Agency of Drug and Food Control (NADFC) No. 4 year 2014 regarding maximum limit of sweetener additives allowed in flavored drink, including

sport drink or electrolyte and particle drink, was 350 mg/kg (Head of National Agency of Drug and Food Control, 2014).

High Performance Liquid Chromatography (HPLC) was a chromatography method which could separate macro molecule, ionic compound, unstable natural products, polymeric compound and poly-functional groups with high mass molecule. It worked by fractional filtering, absorption or ion substitution that used interactive active phase and active solid/liquid passive phase (Ibrahim Slamet S, 1995). Its instruments consisted of: active phase's container, pump, tool to insert sample (injection container), column, detector, container to collect emission from active phase and a computer or integrator or recorder. Advantages of using this method were fast, well-separation power, sensitive to unique detector, column could be reused, ideal for big molecule and ion, and easy to reclaimed.

II. RESEARCH METHOD

A. Material and Instrument

Materials used in this research were plastic-cup-drink with P.I.R.T label (Product of Home-Industry), saccharin, cyclamate, potassium dehydrogen phosphate (KH₂PO₄), methanol, aquades.

Instruments used in this research included: Shimadzu SPD-20A as HPLC with C 18 (150 mm x 4.6 mm) of nucleosil column, analytic scale, whatman filter paper no. 42, volumetric flask, beakerglass, pipet volume.

B. Analysis Method

Drink sampling

Sampling method used in this research was purposive sampling; sample was taken intentionally depended on sample requirements needed. Researcher decided himself which sample taken due to particular consideration; sample must have P.I.R.T label (label for home-made industry product) and potentially contained saccharin or cyclamate. Drink with cup-package was chosen and five samples were taken.

1. Making of standard solution (British International Standard, 1997).

a. Making of saccharin standard solution 1000mg/l

Measure 0.0103 gram of saccharin. After that, pour it into 100 ml volumetric flask. Then dissolved it with KH₂PO₄solution – methanol until the border and homogeneous. 10 ml was taken from the 100 mg/l source solution. It was then dissolved and diluted into 100 ml volumetric flask with KH₂PO₄solution – methanol. Series of standard solution was then made; 10, 50, 100, 300, and 500 mg/l by pipetting 0.1 ml, 0.5 ml, 1.0 ml, 3.0 ml, and 5.0 ml solution. These standard solution series was then poured into 10 ml volumetric flask. Afterwards, it was dissolved with KH₂PO₄solution – methanol.

b. Making of cyclamate standard solution

Measure 0.0508 gram of cyclamate. After that, pour it into 50 ml volumetric flask. Then dissolved it with KH₂PO₄solution – methanol until the border and homogeneous. Series of standard solution was then

made; 10, 50, 100, 300, and 500 mg/l by pipetting 0.1 ml, 0.5 ml, 1.0 ml, 3.0 ml, and 5.0 ml solution. These standard solution series was then poured into 10 ml volumetric flask. Afterwards, it was dissolved with KH₂PO₄solution – methanol until the border and homogeneous.

2. Sample Preparation

Measure 2 gram of sample. After that KH₂PO₄solution and methanol were added until the border. It was then shaken until dissolved and homogeneous. After that, it was filtered by whatman filter paper no. 42. The solution was ready to be injected into HPLC (British International Standard, 1997).

3. Conditioning Instrument

a. Conditioning Instrument for cyclamate

HPLC's optimal condition for this experience was as follow : C-18 (150 mm x 4.6 mm) of nucleosil column, the flow speed was 1 ml/minute, 200 nm Ultraviolet detector, composition of active phase from potassium dehydrogen phosphate (KH₂PO₄) - methanol was (70:30) with 20 µl injection volume.

b. Conditioning Instrument for saccharin

HPLC's optimal condition for this experience was as follow : C-18 (150 mm x 4.6 mm) of nucleosil column, the flow speed was 1 ml/minute, 220 nm Ultraviolet detector, composition of active phase from potassium dehydrogen phosphate (KH₂PO₄) - methanol was (70:30) with 20 µl injection volume.

c. Determining level of synthetic additives (saccharin and cyclamate)

Sample, which had been diluted by KH₂PO₄solution – methanol, was taken for the amount of 5 µl. It was then injected into HPLC. The area obtained from the result was recorded, and calculated using calibration curve from each element. Concentration of saccharin and cyclamate synthetic additives was calculated using standard curve by linear regression equation as follow (Winarno F.G, 1997):

$$y = a + bx$$

whereas: y = area's width
x = sample's concentration
a = intercept
b = slope

While level of synthetic additives could be calculated using formula as follow (Winarno F.G, 1997) :

$$\text{Synthetic_Additives_Level} = \frac{C_{\text{sample}} \times \text{Dilution_factor}}{W_s} = \text{ppm}$$

Note: C_{sample} = concentration of sample
W_s = weight of sample

III. RESULT AND DISCUSSION

A. Conditioning HPLC Instrument

Conditioning instrument in this research was conducted with the objective to find optimal condition for HPLC

method. Cyclamate optimal conditioned obtained from this research was C-18 (150 mm x 4.6 mm) column, flow speed 1 ml/minute, 200 nm Ultraviolet detector, and 70:30 composition of active phase from KH₂PO₄-methanol. Saccharin optimal conditioned obtained from this research was C-18 (150 mm x 4.6 mm) column, flow speed 1 ml/minute, 220 nm Ultraviolet detector, and 70:30 composition of active phase from KH₂PO₄-methanol.

We could differentiate between saccharin and cyclamate with instrument's condition stated above. Separation between saccharin and cyclamate could be seen from its retention period. Retention period was time needed after sample was injected to bring out an analyt peak by detector (Ibrahim Slamet S, 1995).

Sample Preparation

Sample preparation was conducted by dissolving sample with the fit solvent and conducting filtration (Ibrahim Slamet S, 1995). The solvent used was KH₂PO₄ - methanol (70:30). Meanwhile the filtration process was using whatman filter paper no. 42 so that sample would still be in clear condition.

Determining Calibration Curve

Correlation coefficient value (r) was a quality indicator from linier parameter which described proportionality of analytic respond (area width) towards the measured concentration. Data of area width generated from saccharin standard series (with concentration of 0.101; 0.505; 1.009; 3.028; 5.047 µg/ml) showed that it had linier relation with correlation coefficient value (r = 0.9999987) by using linier regression equation; $y = 69020.9 x - 112.852$. The coefficient obtained showed good result (close to 1 score). This informed that there was proportional relation between area width and concentration measured. Result from linier test of saccharin calibration curve could be found in Figure 1:

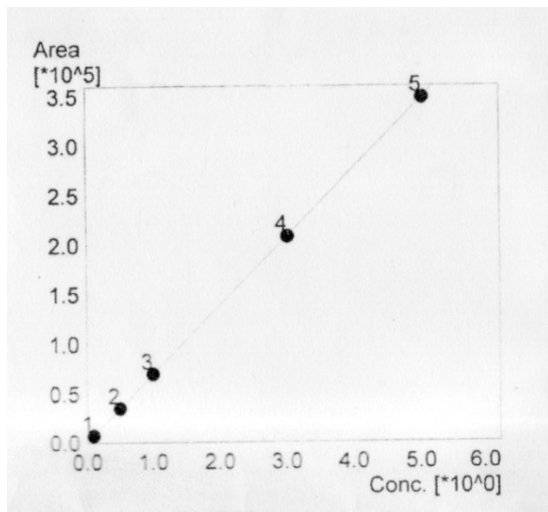


Fig. 1 Saccharin calibration curve

From series of saccharin concentration (9.957; 49.784; 99.568; 298.704; 497.840 µg/ml), correlation coefficient value (r) was obtained (r = 0.9999088)

using linier regression equation; $y = 929.899 x - 1479.25$. The coefficient value obtained revealed good relation between concentration and area width (because the score was close to 1). The linier test result from cyclamate calibration curve was shown in Figure 2:

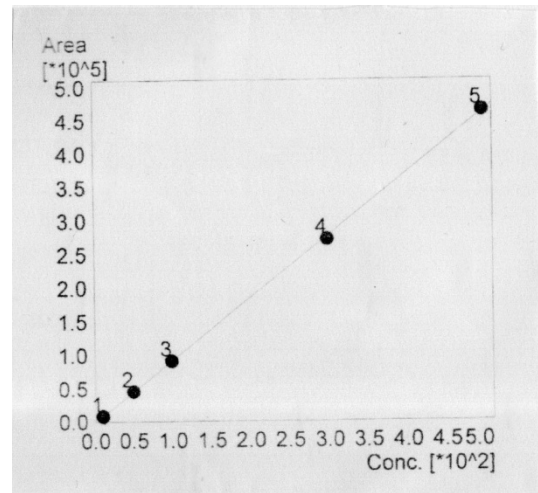


Fig. 2 Cyclamate calibration curve

B. Analysis Result of Saccharin and Cyclamate Content

Based on linier regression calibration curve obtained from saccharin and cyclamate on Picture 1 and 2 above, saccharin and cyclamate level content was found in various amounts within all five samples. All five samples tested positively contained cyclamate. One sample showed safe level of cyclamate as determined by NADFC, while the rest four samples had cross it. Those five samples also positively contained saccharin in safe level.

The analysis result was shown on table below:

Table 1 : Analysis result towards saccharin and cyclamate content in drink sample

Sample	Saccharin		Cyclamate	
	Curve's width (ppm)	Level (mg/L)	Curve's width (ppm)	Level (mg/L)
A	0.735	73.059	47.704	1184.422
B	0.575	56.624	57.447	1409.954
C	0.030	0.73	4.754	117.095
D	0.0083	0.82	59.289	1418.306
E	0.615	61.522	17.854	444.385

This research was conducted to test whether cup-package-drink with P.I.R.T (Home-Made Industry Product) label contained synthetic additives, such as saccharin and cyclamate. Based on result from the research, the five samples contained saccharin with concentration between 0 – 73.059 ppm, while cyclamate's concentration ranged between 0 – 1418.306 ppm. After calculating the content level, saccharin found in all five samples didn't exceed safe

level of 120 mg/L as determined by NAFDC's regulation No. 4 Year 2014. The highest found only contained 73.059 ppm saccharin. However, the cyclamate found in all five samples range between < 2.00 mg/L – 1418.306 mg/L, where safe level of cyclamate determined by NAFDC must not exceed 350 mg/L.

The sweet taste of every synthetic additive was always evaluated towards its relativity with the sweet taste from sucrose. Cyclamate was 30 – 50 time sweeter than sucrose, while saccharin was 200 – 700 times sweeter. Due to its strong sweet taste, the use of synthetic additive was thought to be more efficient than natural additive (Wisnu C, 2006).

The use of cyclamate had been banned in United States. However in Indonesia, it wasn't forbid and could be used with certain daily intake which had been determined for each food and drink substance. Considering the danger that might cause by this synthetic additive, supervision and regulation towards the use of synthetic additives for commercial food and drink needed to be stricter.

Cyclamate from the analysis result had exceeded safe level determined by NADFC. This could cause negative effect for children in the future. This issue needed to be anticipated. Government in general and NADFC in particular, as authorized institution needed to warn manufacturer which already P.I.R.T label but still used cyclamate.

CONCLUSION

Based on research towards saccharin and cyclamate inside commercial cup-drink with P.I.R.T (Home-made industry product) label using HPLC method, it can be concluded that :

1. All five samples positively contained saccharin and cyclamate
2. Saccharin levels in all five samples were still in safe level as determined by NADFC. However, cyclamate level in four samples had exceeded limit set by NADFC, while one sample was still in safe level.

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PERFORMANCE OF EQUITY MUTUAL FUNDS ACCORDING TO SHARPE, TREYNOR AND JENSEN METHODS PERIODE 2013-2015

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Abstract. This study aims to determine the performance of the Fund shares based Risk-Adjusted Return by Sharpe, Treynor, Jensen and compare the performance of the Fund shares with the benchmark performance in the study period. Benchmark performance in this study using Composite Stock Price Index. The sampling technique used purposive sampling techniques and obtained 15 Product Mutual Fund shares as the study sample. The variable in this study is the return of Mutual Fund shares, the market return and risk-free profit. Methods of data analysis using the method of Sharpe, Treynor, Jensen. The results showed for the method of Sharpe in 2013, there were 7 Mutual funds that had positive performance and 11 performing equity funds outperform the benchmark. In 2014 all equity fund has a positive performance and outperform the benchmark. In 2015 there were equity fund has a positive performance and a 6-performing equity funds outperform the benchmark. For the method of Treynor, in 2013 there were 2 Equity funds with positive performance and 11 performing equity funds outperform. In 2014 there were 14 equity fund with a positive performance and 14 performing mutual funds outperform. In 2015 there are no equity fund with a positive performance and there are 6-performing equity funds outperform. For the method of Jensen, in 2013 there were 9 Equity funds with positive performance and 9-performing equity funds outperform. In 2014, there were 7 Equity funds with positive performance and 7-performing mutual funds outperform. In 2015 there were 2 Equity funds with positive performance and second-performing equity funds outperform.

Keywords: Risk-Adjusted Return Method Sharpe, Treynor, Jensen.

I. INTRODUCTION

Investment is essentially the placement of the funds on the present in the hope to gain an advantage in the future. Generally, investments are divided into two categories, namely: investment in financial assets and investments in real assets. Investments in financial assets are carried out in the financial markets, for example in the form of certificates of deposit, commercial paper, money market securities, and others. Investments can also be made in the stock market, for example in the form of shares, bonds, warrants, options, and others. While investment in real assets can take the form of purchase of productive assets, the establishment of the factory, the opening of the mining, plantation, and others.

The capital market today has grown very rapidly and become something very important and valuable; capital market is an alternative for investors to invest. One of the advantages of the capital market is its ability to provide long-term capital and indefinitely. The capital market has a very important role both in terms of the demand for capital by a company which is called the issuer as well as in terms of the supply by the capital market through public or commonly called investor. Both parties in the capital market are equally benefit so that the capital markets continue to develop, even the stock market has become a benchmark of modernity. That is, a nation or state is then entitled to the modern title if its capital market is already advanced.

There are three main things that underlie the investment, namely: first, there are future needs, or the needs of the present. which has not been able to be fulfilled at this time, the second, there is a desire to increase the value of assets and the need to protect the value of assets already owned, third, because of inflation (Pratomo and Nugraha, 2009).

Each investment option to generate returns in the future is risky because it involves the future of uncertainty, which means it contains an element of risk for investors. A rational investor before making an investment decision, at least have to consider two (2) terms, the expected revenues and risks involved in alternative investments that he carried on. One of the media of investment frequently chosen by investors is the type of mutual fund.

In Indonesia, mutual funds first appeared when the government established PT. Danareksa in 1976. At that time, PT. Danareksa is issued a mutual fund as certificates of Danareksa. In 1995, the government issued capital market regulations which include provisions regarding a mutual fund through Act No. 8 of 1995 on the Capital Market. The issuance of these laws has been the momentum of the rise of mutual funds in Indonesia that began with the publication of closed mutual funds by PT. BDNI Mutual Funds.

Investing in stocks is recorded to have a fairly high rate of return in the long term, but in addition, investment in stocks has the highest risk. Stock mutual fund have a composition of 80% of its portfolio in stocks, then the movement of NAB of the stock mutual fund will be identical to the movement of the stock market. So the stock mutual fund has a high rate of return, but also has a high risk anyway.

Many investors are choosing the type of stock mutual funds but are not matched by the ability of investors to analyze stock mutual funds that have good potential. This is coupled with a lack of information circulating on the analysis of the performance of stock mutual funds that exist today. The movement of the stock market of unstable is also an obstacle for investors to pick the best mutual fund shares especially in 2014, the Indonesian stock market experienced

great upheavals, one of which is due to the change of government that led many investors hesitate to invest.

Therefore it is necessary to analyze the performance of the good investment managers, and carefully before investing. The performance of mutual funds can be measured by simply counting the total income basis or better yet is to involve also risk assessment. Performance measurement that involves the risk factors will provide more detailed information to investors about the extent to which the results or performance provided by the Investment Manager is associated with the risk taken to achieve such performance.

To address these problems, it is important to do a research on the analysis of the performance of mutual fund shares updates to help investors to gather information and compare the performance of each Mutual Fund shares. Given this research is expected that investors is equipped with valid information to choose Mutual Fund shares that could potentially generate optimal profits.

For new investors who want to invest in mutual funds, it is important for them to know of the mutual fund from which investment management company which has the best performance. Mutual funds are said to have a good performance if it gives high returns with reasonable risk and good. With the presentation of the performance of stock mutual funds in Indonesia is expected to be able to give an objective picture of the condition of the performance of stock mutual funds in Indonesia. Therefore, the author will do a study entitled: "Analysis of the Performance of Mutual Funds by Sharpe, Treynor and Jensen's Method (Study of the Mutual Fund Shares for the Period of 2013-2015)".

A. *Mutual Fund*

According to the Capital Market Law No. 8 of 1995 Article 1, paragraph (27), Mutual Funds is a vehicle used to collect funds from public investors to be invested in a portfolio of securities by the investment manager. In other words, the mutual fund is a vehicle to invest collectively to be placed in the portfolio based on investment policies established by the investment manager. According to Sawidji Widodoatmojo (2015), Mutual Funds are defined as securities issued by an investment manager and then sold to investors, with the sale proceeds are used to create portfolios in order that investment risk decreases, but with the advantage that relatively large.

Mutual Funds are basically created to simplify the management of investments, particularly for individual investors. We do not invest in mutual funds, but we are investing through mutual funds so that we have the capital that can be allocated to investment instruments that we know or that are difficult for us to do alone.

B. *Types of Mutual Funds*

According to Supervisory Agency of Capital Market and Financial Institution (now becomes Financial Services Authority), Mutual Funds in Indonesia based on the portfolio is comprised of four categories, namely:

1. Money Market Mutual Funds

Money market mutual fund is invested 100% in the money market. Money market mutual funds are mutual funds short-term (less than one year). Instruments

included in the category of money market mutual funds include deposits, Bank Indonesia Certificates (SBI), bonds and other debt securities with a maturity of less than one year. Judging from the level of risk, money market mutual funds are mutual funds that have the lowest risk level than other types but the money market mutual funds is also possible to produce a negative value but very small. In contrast to other types of mutual funds whose value is always changing every day, money market mutual funds generally have short-term fixed prices. The investment return of money market mutual funds is almost similar to the deposits for most of the investment portfolios of money market mutual funds are comprised of deposits. The purpose of the money market mutual funds is generally for the protection of capital and to provide high liquidity and capital maintenance.

2. Fixed-Income Mutual Funds

Fixed-income mutual funds are mutual funds that invest at least 80% of the portfolio managed in debt securities. Debt securities are generally providing income in the form of interest, such as deposits, Bank Indonesia Certificates (SBI), bonds and other instruments. Fixed income mutual funds are an attractive option for investors who specifically want to invest in bonds. Fixed income mutual funds are mutual funds medium-term and long-term (over three years) which has a medium risk but the risk is owned by fixed income mutual funds is greater than the risk of the money market mutual funds. Distribution of profits in fixed income mutual funds are in the form of cash (dividend) paid on a regular basis, for example monthly, 3 monthly or yearly. In this respect, it is similar to the payment of interest on deposits that may be considered as regular income. Fixed income mutual funds aim to generate stable rate of return.

3. Equity Mutual Funds

Stock mutual funds make their investment with stocks. These mutual funds have a higher risk than the risk of money market mutual funds and fixed income mutual funds but stock mutual funds have a high return rate. According to BAPEPAM (Supervisory Agency of Capital Market and Financial Institution) regulations IV.C.3, stock mutual funds are mutual funds with a portfolio of a minimum of 80 percent of total assets are invested in stocks. In Indonesia, only a small part of investors to invest in shares, although it is not easy to invest in stocks, many constraints faced by investors, is one of them, lack of time and knowledge to invest in stocks. Stock mutual funds are created to assist investors in making investment in stocks. Stock mutual funds are mutual funds for the long term. The purpose of investing in stock mutual funds is to be free of the hassle of investing in stocks, such as managing stocks, select the type of the right stocks, limited time to control stock performance over time, wants to get a dividend, investors want to get a capital gain on the appreciation that so large in stock prices, and to invest in stock mutual funds because they want to get dividends and capital gains.

4. Discretionary Mutual Funds

Mixed mutual fund has its own characteristics that are different from other types of mutual funds for mixed mutual fund can make investments in the form of debt or equity securities, while other types of mutual funds have restrictions on the allocation that can be done. Mixed mutual fund is an alternative option for investors to invest, which in addition to investing also simultaneously consist of equity securities and debt securities. The rate of return and risk of mixed mutual funds are in the middle between fixed income mutual funds and stock mutual fund. For investors who are less daring accept high risks, this mixed mutual funds is alternative to invest as a replacement for stock mutual fund.

C. Measurement of Performance of Mutual Funds

1. Sharpe Method

Performance measurement, by this method, is based on a premium over the risk or the so-called risk premium. Premium over the risk is the difference between average performances generated by mutual funds with an average risk-free investment performance that is assumed by an average interest rate of Bank Indonesia Certificates (SBI). In addition to a positive return, with Sharpe, returns of mutual funds should also be above the level of return of risk-free instrument. The greater the Sharpe ratio, the better the performance of mutual funds. Sharpe method can be formulated as follows:

$$SRD = \frac{RRD - RRF}{\sigma RD}$$

where:

SRD = Sharpe ratio value of mutual fund

RRD = Average return of mutual fund

RRF = Average return of risk-free investment

σRD = Standard deviation of return of mutual fund

2. Treynor Method

Treynor method is similar to Sharpe, both of which use the same risk premium but the difference is that in Treynor method beta (β) divisor is used which is the risk of fluctuation relative to market risk. Treynor method is formulated as follows:

$$TRD = \frac{RRD - RRF}{\beta}$$

where:

TRD = Treynor ratio value of mutual fund

RRD = Average return of mutual fund

RRF = Average return of risk-free investment

β = Portfolio β (market risk or systematic risk)

3. Jensen Method

This method, is based Capital Asset Pricing Models (CAPM). Different with treynor method, Jensen method of using data of each period from time to time. Jensen method is formulated as follows :

$$\alpha = (Rp - Rf) - \beta p (Rm - Rf)$$

Where :

α = The measure of performance of the mutual fund

Rp = Average return of mutual fund

Rf = Average return of risk-free investment

Rm = Average return of market (IHSG)

βp = Portfolio β (market risk or systematic risk)

II. METHOD

A. Population and Sample

The population in this study is all stock mutual fund listed on the Indonesia Stock Exchange for the period 2013-2015.

Purposive sampling technique is used in sampling for this study. The sample used in this study is the product of the best mutual funds for the period of 2015 according to the website www.howmoneyindonesia.com

B. Data Collection Technique

In accordance with the data used, i.e. secondary data, this study uses documentary technique as data collection technique. Data was collected through:

1. Recording data from the web www.ojk.co.id and www.kontan.co.id for data on Net Asset Value of stock Mutual Fund in the observation period for January 2013 to December 2015.
2. Recording levels of BI rate in the observation period for January 2013 to December 2015 from web www.bi.go.id.
3. Recording data on a monthly Composite Stock Price Index from the web www.finance.yahoo.com in observation period for January 2013 until December 2015.

F. Data Analysis Technique

Data obtained from various sources were analyzed by descriptive quantitative. The data collected is processed with formulas according to the operational definition of the relevant variables using Microsoft Excel to facilitate data processing. The steps undertaken are:

1. Collecting data on the weekly NAB of each stock mutual fund that was sampled. Then the data on the movement of the Composite Stock Price Index and the BI rate during the measurement period is collected.
2. Calculating the return of each stock Mutual Fund and the average return of the Composite Stock Price Index as a benchmark as well as the risk free which is based on the BI rate.
3. Calculating the risk based on the standard deviation (σ) and Beta (β).
4. Conducting an analysis of calculations using Risk-Adjusted Return by Sharpe method.

For method Sharpe returns of mutual funds minus the BI rate is calculated. Results of the excess return are then compared with the standard deviation. Standard deviation is the overall risk of a mutual fund and can be calculated using the formula MS Excel (= STDEV (...)); STDEV (return Mutual Funds). The formula used to Sharpe method was as follows:

$$SRD = \frac{RRD - RRF}{\sigma RD}$$

σRD

where:

SRD = Sharpe ratio value of mutual funds

RRD = Average return of mutual funds

RRF = Average return of risk-free investment

RD = Standard deviation of return of mutual funds

5. Conducting an analysis of the calculation using Risk-Adjusted Return by Treynor method.

Calculations for the performance of mutual funds are similar to Sharpe method namely by calculating the excess return obtained from the return of mutual funds minus the BI rate. However, the comparator is in the form of beta, which is the level of systematic risk of a company. Here the beta can be measured by using MS Excel Linear Regression (= slope (y, x)), where y is the market return and x is the return of mutual funds. The higher the beta, the higher the potential risks that can occur. The formula used is as follows:

$$TRD = \frac{RRD - RRF}{\beta}$$

where:

TRD = Treynor ratio value of mutual funds

RRD = Average return of mutual funds

RRF = Average return of risk-free investment

β = beta of multiple linear regression equation

6. Analyzing the calculation using Risk-Adjusted Return by Jensen method.

Jensen method is derived from Capital Asset Pricing Model (CAPM). The first step is to calculate mutual fund returns by subtracting the value of the current NAB from the value of the previous NAB and then the result is divided by the value of the previous NAB. Second, the return earned minus the BI rate, which is then added to the beta as systematic risk. Jensen method can be calculated with the following formula:

$$\alpha = (Rp - Rf) - \beta p(Rm - Rf)$$

where:

α = Jensen's measure of the performance of mutual funds

Rp = Average return of mutual funds

Rf = Average return of risk-free investment

Rm = Average market return

β = Portfolio's beta (market risk or systematic risk)

III. RESULT AND DISCUSSION

The population in this study is all stock mutual fund listed on the Indonesia Stock Exchange. Based on data obtained there are as many 206 stock mutual fund which are still active and are listed on the Indonesia Stock Exchange until February 29, 2016.

This study using purposive sampling method for sampling and as many as 15 products of stock Mutual Fund are obtained to be used as a sample.

1. Calculation of the Weekly Return of the Stock Mutual Fund

Return of each mutual fund is calculated based on the net asset value which has been published on the website kontan.co.id.

$$Rd = \frac{NABt - NABt-1}{NABt-1}$$

2. Calculation of average weekly return of the benchmark Composite Stock Price Index

The average index of weekly returns of the benchmark Composite Stock Price Index in this study serves as a comparator (benchmark) to declare the performance of the mutual fund whether mutual fund is outperform or underperform. The average weekly index is obtained from the web www.finance.yahoo.com. The following is the calculation of weekly return of Composite Stock Price Index.

To calculate weekly return of Composite Stock Price Index, the following formula can be used:

$$Rm = \frac{IHSGt - IHSGt-1}{IHSGt-1}$$

3. Calculation of Average Weekly BI Rate
Certificate of Bank Indonesia or BI rate is set by Bank Indonesia, in this study, it will serve as a risk-free rate. A weekly average of BI rate is obtained by the following calculation:

- a. Calculate weekly return of BI rata

The first step before calculating weekly return is calculating the daily return of BI rate by the following formula:

$$Rf = \frac{BI\ Rate}{n}$$

- b. Calculate Weekly Average Return of Risk-Free Investment

After the return of the BI rate per week is known, then to calculate the average weekly return of a risk-free investment the following formula is used:

$$Rf = \frac{\sum Rf}{n}$$

4. The calculation of Standard Deviation
Standard deviation is a variable that must be determined before calculating mutual fund performance and the benchmark performance by Sharpe method. Calculation of standard deviation can be done using Microsoft Excel or the following formula:

$$\sigma = \sqrt{\frac{\sum (X - \mu)^2}{n - 1}}$$

$$\mu = \frac{\sum X}{n}$$

5. The Calculation of Beta
Beta is a variable that must be found before calculating the performance of mutual funds and the performance of the benchmark by using Treynor method. Beta (β) can be calculated by the following formula:

$$\beta =$$

6. Performance Measurement by Sharpe Method

Performance measurement, by this method, is based on a premium over the risk or the so-called risk premium.

Table 1
Results of Study by Sharpe Method

No.	Nama Reksa Dana	2013	2014	2015
1	Millenium Equity	>benchmark	>benchmark	>benchmark
2	Sam Indonesian Equity Fund	>benchmark	>benchmark	>benchmark
3	Pratama Equity	>benchmark	>benchmark	<benchmark
4	RHB OSK Alpha Sector Rotation	<benchmark	>benchmark	<benchmark
5	Pratama Saham	>benchmark	>benchmark	<benchmark
6	Dana Pratama Ekuitas	>benchmark	>benchmark	<benchmark
7	Batavia Dana Saham Optimal	>benchmark	>benchmark	>benchmark
8	Schroder Dana Prestasi	<benchmark	>benchmark	<benchmark
9	HPAM Ultima Ekuitas 1	>benchmark	>benchmark	<benchmark
10	Schroder Indo Equity Fund	>benchmark	>benchmark	<benchmark
11	Lautandhana Equity Progresif	<benchmark	>benchmark	<benchmark
12	BNP Paribas Infrastruktur Plus	>benchmark	>benchmark	>benchmark
13	Danareksa Mawar Konsumer 10	>benchmark	>benchmark	<benchmark
14	Tram Infrastructure Plus	>benchmark	>benchmark	>benchmark
15	Cipta Syariah Equity	<benchmark	>benchmark	>benchmark

The above table shows that in 2013 there were 11 stock mutual funds which are outperform over the benchmark. In 2014, all stock mutual funds had positive performance and outperform over the benchmark. In 2015, there were six stock mutual funds which are outperforming over the benchmark. The greater the results obtained, the better the performance of stock mutual fund because it provides a high return on individual risk incurred. A mutual fund that has a positive value and outperform over the performance of Composite Stock Price Index is the most appropriate for investment.

7. Performance Measurement by Treynor Method

Treynor method is similar to the method Sharpe, i.e. share in the use of risk premium, but the difference is that in Treynor method divisor beta (β) is used which is the risk of fluctuation, relative to market risk.

Table 2
Results of Study by Treynor Method

No.	Nama Reksa Dana	2013	2014	2015
1	Millenium Equity	>benchmark	<benchmark	>benchmark
2	Sam Indonesian Equity Fund	>benchmark	>benchmark	>benchmark
3	Pratama Equity	>benchmark	>benchmark	<benchmark
4	RHB OSK Alpha Sector Rotation	>benchmark	>benchmark	<benchmark
5	Pratama Saham	>benchmark	>benchmark	<benchmark
6	Dana Pratama Ekuitas	>benchmark	>benchmark	<benchmark
7	Batavia Dana Saham Optimal	<benchmark	>benchmark	>benchmark
8	Schroder Dana Prestasi	>benchmark	>benchmark	<benchmark
9	HPAM Ultima Ekuitas 1	>benchmark	>benchmark	<benchmark
10	Schroder Indo Equity Fund	>benchmark	>benchmark	<benchmark
11	Lautandhana Equity Progresif	<benchmark	>benchmark	<benchmark
12	BNP Paribas Infrastruktur Plus	>benchmark	>benchmark	>benchmark
13	Danareksa Mawar Konsumer 10	>benchmark	>benchmark	<benchmark
14	Tram Infrastructure Plus	>benchmark	>benchmark	>benchmark
15	Cipta Syariah Equity	>benchmark	>benchmark	>benchmark

In the calculation using the method of Treynor, which are shown in the table above, it appears that in 2013 there were 13 stock mutual funds which outperform over the benchmark. In 2014 there were 14 mutual fund shares that have a positive performance and outperform over the benchmark. While in 2015 there were 6 stock mutual funds which outperform over the benchmark. The greater the results obtained, the better the performance of stock mutual funds because it provides a high return on individual risk incurred. A mutual fund that has a positive value and outperform over the performance of Composite Stock Price Index is the most appropriate for investment.

8. Performance Measurement by Jensen Method

Jensen method is based on the development of Capital Asset Pricing Model (CAPM). In contrast to measurement by Treynor method which uses the average performance for certain sub-period, Jensen method uses data every period of time. In Jensen method, the higher positive value of α (alpha), the higher, or the better, the performance of mutual funds. Jensen method is to assess the performance above the market's performance in accordance with its risk.

Table 3
Results of Study by Jensen Method

No.	Nama Reksa Dana	2013	2014	2015
1	Millenium Equity	>benchmark	<benchmark	<benchmark
2	Sam Indonesian Equity Fund	>benchmark	>benchmark	<benchmark
3	Pratama Equity	>benchmark	>benchmark	<benchmark
4	RHB OSK Alpha Sector Rotation	>benchmark	>benchmark	<benchmark
5	Pratama Saham	>benchmark	>benchmark	<benchmark
6	Dana Pratama Ekuitas	>benchmark	>benchmark	>benchmark
7	Batavia Dana Saham Optimal	>benchmark	<benchmark	<benchmark
8	Schroder Dana Prestasi	<benchmark	<benchmark	<benchmark
9	HPAM Ultima Ekuitas 1	>benchmark	<benchmark	<benchmark
10	Schroder Indo Equity Fund	>benchmark	<benchmark	<benchmark
11	Lautandhana Equity Progresif	<benchmark	<benchmark	<benchmark
12	BNP Paribas Infrastruktur Plus	<benchmark	>benchmark	<benchmark
13	Danareksa Mawar Konsumer 10	<benchmark	<benchmark	>benchmark
14	Tram Infrastructure Plus	<benchmark	>benchmark	<benchmark
15	Cipta Syariah Equity	<benchmark	<benchmark	<benchmark

In the calculation using the method of Jensen, which is shown in the table above, it appears that in 2013 there were 9 stock mutual funds which outperform over the benchmark. In 2014 there were 7 mutual fund shares that have a positive performance and outperform over the benchmark. While in 2015 there were 2 stock mutual funds which outperform over the benchmark. The greater the results obtained, the better the performance of stock mutual funds because it provides a high return on individual risk incurred. A mutual fund that has a positive value and outperform over the performance of Composite Stock Price Index is the most appropriate for investment.

IV. CONCLUSIONS

The results of this study indicate that by Sharpe method, in 2013, there were 7 stock mutual funds had a positive performance, and 11 stock mutual funds which are outperform over the benchmark. In 2014 all stock mutual funds had positive performance and outperform over the benchmark. In 2015 there was no stock mutual fund had positive performance and there are 6 stock mutual funds which is outperform over the benchmark.

In the method of Treynor, in 2013 there were two stock mutual funds with positive performance and 11 stock mutual funds which are outperform over the benchmark. In 2014 there were 14 stock mutual funds with positive performance and 14 top mutual funds which are outperform over the benchmark. In 2015 there was no stock mutual fund with positive performance and there are 6 stock mutual funds that outperform over the benchmark.

In the method of Jensen, in 2013 there were 9 stock mutual funds with positive performance and 9 stock mutual funds which are outperform over the benchmark. In 2014 there were 7 stock mutual funds with positive performance and 7 stock mutual funds which are outperform over the benchmark. In 2015 there were 2 stock mutual funds with positive performance and 2 stock mutual funds which are outperform over the benchmark.

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CHIEF ELECTION LAW OF REGIONAL AND PREVENTION OF CORRUPTION

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Abstract, direct election, was not directly proportional to the increase in the welfare and progress of the region. It can thus be observed, that not many areas experiencing increased prosperity and progress significantly. Indeed, there are some areas experiencing phenomenal progress under the leadership of the region, but not a few areas that have stagnated the development of all areas. In fact, there are some areas that have considerable economic potential, ternyata not being experienced significant progress. Facts show that the era of regional autonomy more and more cases of corruption. Head of the directly elected county have no impact on efforts to combat corruption. Instead of combating corruption, there are many regional heads who actually are involved in corruption cases. Even many who have become convicted, whether in office or shortly after the fall of the post of regional head. The local elections by the people start to get a lot of corrections and evaluations of citizens. The local elections back by the Legislature. It can seen in the draft legislation the local elections until the enactment of the laws of the republic of Indonesia No. 22 of concerning the election of governors, regents, and Mayors. However the law Also reap many protests, Because It is Considered as a setback. Then President expected to issue a government regulation lieu laws.

Keywords: Law, the local elections, corruption.

I. INTRODUCTION

The long journey of the development of democracy in Indonesia, has not found the final point, because democracy is a political system that is constantly evolving in order to affirm the people's interests to change for the better. It thus can be viewed from several amendments to the constitution of Indonesia which is a major foothold in the running system of state and government. As mandated by the Constitution of the Republic of Indonesia Year 1945 (UUD 1945), that: "the territory of the Republic of Indonesia (NKRI) is divided into provincial regions and divided over the district or city, each as an autonomous region and have local governments to carry out the duties and functions of local government ". The provincial, district or city is composed of regional heads as executive bodies at local level and the Regional Representatives Council (DPRD) as the legislature.

After the second amendment of the 1945 Constitution and the Decree of the People's Consultative Assembly of the Republic of Indonesia Number IV / MPR / 2000 on Policy Recommendations in the Regional Autonomy (MPR Decree No. IV / MPR / 2000), the government and the House of Representatives (DPR) discussed and then

approved Law No. 32 Year 2004 on Regional government, (Act No. 32 of 2004 on Regional government) and several times changes, which form the basis for the implementation of the Regional Head Election (Election) directly by the people, to replace the previous regulation, namely Law No. 22 of 1999 on Regional Government (Act No. 22 of 1999 on Regional Government), which regulates the mechanism the local elections have been selected by parliament. After a few years, the Election by the people and their problems that accompany it, started to get a lot of corrections and evaluation of the various parties, so that at the end of 2014, a debate is quite tough to change the mechanism of elections re-elected by Parliament. This can be seen in the process of preparing to plenary in determining draft Law Regional Head Election (Election Bill) which ultimately enacted Law No. 22 of 2014 concerning the election of Governor, Regent, and Mayor (Law No. 22 Year 2014 About elections). However, Law No. 22 2014 On the Election reap many protests from various elements of the community, because some argue that election by parliament is a setback democratic system that has been built over the years. Janedjri M. Gaffar stated that: "Election by Parliament considered would castrate people's constitutional rights in a democracy, because

Parliament is an elite handful of political parties". In addition, the election by parliament also did not rule out the occurrence of *money politics*, it may even be the deciding factor when compared with the power of *money politics* in the elections directly by the people. The elections by Parliament also has the potential to cause conflict, especially if the regional chiefs were contrary to the expectations of the people.

Under pressure from various parties and a number of considerations, the President is expected the initiative to issue a Government Regulation in Lieu of Law No. 1 of 2014 On the Election of governors, regents, and Mayor (Government Regulation No. 1 of 2014 elections) in order to annul the Law No. 22 Year 2014 About the election just days specified. Then, in a time not too long, to pass the regulation established as Law No. 1 of 2015 Concerning Determination of Government Regulation in Lieu of Law No. 1 of 2014 On the Election of Governors, Regents and Mayors (Act No. 1 of 2015). Furthermore, these laws were revised again limited by the Parliament and the Government were finally enacted Law No. 8 of 2015 on the Amendment Act No. 1 of 2015 Concerning Determination of Government Regulation in Lieu of Law No. 1 of 2014 On the Election of Governors, Regents, And the Mayor (Law No. 8 of 2015).

the mechanism of elections in the regulation of the use of a system of regional head elections (elections) directly by the people. Actual election system directly by the people already in introduksikan the laws governing local government long before the issuance of Law No. 32 of 2004 on Regional Government, namely the Act No. 1 of 1957 on Principles of Local Government, State Gazette of the Republic of Indonesia Year 1957 No. 6 (Act No. 1 of 1957 on the Principles of Local Government), especially in the general explanation Ad , 3. Which states that:

"in essence a regional leader it must be a man close to and recognized by the concerned local communities, and as head of the region must be a man won the trust of the people and entrusted with power over the people's trust. In connection with that, then the only way to accomplish this purpose is that the head of that area should be elected directly by the people of the area ...

"However, due to the process of formation of the legislation referred to in Article 23 paragraph (1) and (2) of the Act No. 1 Year 1957 on the Principles of Local Government is still undergoing a process of time, then for a time head of the region selected by the parliament is concerned, and need to be approved in advance by the President to head the regional level Ke I and Minister of the Interior to the regional head level II and III. But until Law No. 1 Year 1957 on the Principles of Local Government is not valid, the law is meant to regulate the election, procedures for the appointment and dismissal of the head area is not unresolved.

Based on this, it can be understood that the second amendment of the 1945 Constitution has changed the order of the Indonesian political system fundamentally, primarily related to the mechanisms of political officials in the election of executive agencies and legislative branches should be done through the mechanism of elections (election). With regard to the upcoming elections, the

constitution set in the provisions of Article 18 paragraph (4) of the 1945 Constitution which states that: "Governors, Regents and Mayors as the respective heads of provincial government, district, and municipal elected democratically".

The phrase elected democratic provide flexible space for government and legislature to determine the mechanism of elections. So much so that, according to Janedjri M.

Gaffar, "is a form of constitution tribute to the diversity of customs and culture between different regions, as well as the mandate of Article 18 B of the 1945 Constitution which provides recognition of the local government unit which is special and privileged, as well as the recognition of customary law community unit "

the mechanism of direct election as today, according to Joko J. Prihatmoko:" is commonly used in countries that follow the federation or federal system of pure, like the United States, Australia and Canada ". Since the election in person was first held in June 2005 to date in 2015, the mechanism of elections democratically as stipulated in the constitution has not reached the final word, and a positive impact on the implementation of the regional administration, political education in the region and efforts to prevent corruption in the area. Such a view is not without reason, as can be observed on a variety of issues that occur in any implementation of the elections, of which is, cheating the participants of the elections, there was buying and selling recommendation or endorsement of political parties (political party) to the individual who wants to run for local office or representative head of the region, and other problems.

According to the study authors, at least there are some disappointing phenomena associated with the implementation of the elections. Among them is the practice of *money politics* that always arise in the implementation of the elections and has been regarded as a normal thing. *Money politics*, which in essence is a process of bribery, has been shifted to fairness for participants of the elections and the people, even in the course of elections, the latter case is the exposure of the bribery case conducted by the election participants of the judges of the Constitutional Court (MK) to the surprise of all parties. MK which is considered as *the guardian of constitution and democracy* as well as the last bastion of the judiciary in Indonesia whose decision shall be *final and binding* was not separated from the bribery case. As a result of realities, *money politics* such Janedjri M. Gaffar concluded that the voice of the people will spout, and the participants of the elections that elected not necessarily people who really ideal and desired by the people, so that the selected participants pay more attention to personal interests rather than the interests of the people, because they feel already bought the voice of the people and no longer the relationship between elected regional heads with the people. Such phenomena, it can cause the Election to be very expensive for the participants of the elections, especially if it must be done in two rounds as well as the possibility of re-voting done by decision of the Court. It is triggered elected to conduct a Regional Head-corruption efforts.

Based on some of the above problems, it is in the writing of this paper, will be examined to Law No. 1 2015 *jo* Law No. 8 Year 2015 is a cornerstone in the implementation of the elections this time, so this paper can be used as reference material for the prevention of corruption in the region through the implementation of the elections that have been running for this. So that it can be seen from the regulatory side of the elections, whether it has been supporting efforts to prevent corruption in the region.

Based on the description of the background of the above problems, the formulation of the problem in this paper is:

1. Does the Law No. 1 2015 *jo* Law No. 8 Year 2015 has been supporting efforts to prevent corruption in the region?it
2. Istrough Law No. 1 2015 *jo* Law No. 8 In 2015, to encourage the establishment of good local government?

II. PROBLEM AND RESULT

Election Regulation and Prevention of Corruption

During the Election Day, the dominance of political parties (political party) not only in the process of nominating candidates for regional heads submitted by political parties or coalition of political parties. Furthermore, almost all stages of the elections authorizes a very strategic and crucial to the political parties and their representatives in Parliament. In addition to authority to nominate candidate pairs for regional head and deputy regional head at least there are some important role of the political parties, which must be addressed carefully so as not to damage the substance of democracy and prevention of corruption in the region.

1. The dominance of Political Parties In Election

difficulty of submission of individual candidates as stipulated in Article 41 election Law, a gap for the emergence of *money*politics.Possible political party or coalition of political parties put up a certain rate for a couple of independent candidates is impossible to resist. Process for favor of political parties in the elections of 2013 and the establishment of the East Java legislative candidates in legislative elections in 2009 and 2014 be a good example, where *money politics* have become commonplace. In Article 39 paragraph (a) of the Act elections stated that participants of the election is a couple candidates for Governor and candidate for vice governor, candidate pairs Regent and candidate for Vice Regent and pair candidate for mayor and candidate for Vice Mayor proposed by a political party or coalition of political parties.

The provisions of the it can be interpreted that the process of filing an individual candidate remains the absolute right of the political parties. This setting is exacerbated by the absence of clear legal rules, about how the political parties to recruit candidates for regional head and deputy regional head. According Kacung Marijan, that in practice the implementation of the elections that have taken place, the political parties at large can apply for candidate pairs for regional head and deputy regional head. In the practice of nomination by the political parties often distorted by political practices do not accommodate public

aspirations in the determination of prospective head region. There was also a manipulation in the name of money politics, the nomination through a political party is no longer an arena of contestation capacity, integrity and capability, but also a contest of capital / capital. With the nomination as such a model, it is difficult to expect the political parties to accommodate a figure-fugur potential in the community, especially if they do not have the capital (capital) is sufficient. Thus, in this regard, the spirit of prevention of corruption it is still less than the maximum.

2. Recruitment Candidate Regional Head By Political Party

Political Party is the only institution that has the authority to conduct recruitment of prospective head region. In other words, the political parties are the only institutions that carry out the process of election, selection, nomination and registries prospective regional heads are a cadre of leaders at the local level. In addition, the political parties are the institutions in which independent candidates enroll if not able to collect the amount of support required under Law No. 1 2015 *jo* Law No. 8 In 2015, and competed with candidates recruited or prompted by the political party as a candidate for the head area.

Furthermore, the Act No. 1 2015 *jo* Law No. 8 In 2015 as a whole did not set out clearly how processes and procedures performed at the level of political parties in accepting candidates, political party registration process. The procedure of selection, the selection committee and assessors system or criteria used ditingkan transform the political parties accept or reject the candidate. Good candidates from their own political party or individual candidate. This means that the recruitment of prospective head region with no clear legal devices. Although Law No. 1 2015 *jo* Law No. 8 Year 2015 has provided certainty for people living outside political parties to compete in elections, but still such an arrangement giving advantage to the political parties. In addition to high support requirements of individual candidates, Law No. 1 2015 *jo* Law No. 8 In 2015 also does not set the background of individual candidates. Though proper, independent candidates are candidates that are not background as a member of a political party for political party member already has its own path, ie through the political party concerned.

3. Breaking the Political Dynasty Regional

Context local leadership often bring small kings in the area. It thus is often triggers corruption in the area by the head of the region, because once blocked the regulation that does not allow the regional head or deputy head of the region served two (2) times, then the head of the region will prepare for his immediate family, children or his own wife , so that the power of the elite oligarchy is still ongoing. Through the letter r Article 7 of Law No. 8 Year 2015 mensyaratak a regional head candidates do not conflict with the incumbent, then political dynasties in the region to flourish, even barely be able to do. This is a positive effort in the prevention of corruption in the area. Because of all this, corruption in many areas, motivated by political dynasties that are difficult to recycle.

4. Determination Mechanism of Elected Candidates

Stipulationelected candidate in accordance with Article 107 of Law No. 8 In 2015, regional head candidate with the most votes, will be set as a pair of regional head and deputy head of the selected areas, then if the acquisition of the same, then a couple more evenly acquisition candidate will be assigned as pairs for regional head and deputy head of the selected areas. It is thus very different from the provisions of the law governing the previous elections by determining, regional head candidates and deputy regional head who earn more than 50% of the valid votes. Then when the provisions referred to are met, regional head candidates and deputy regional head who obtained more votes than 30% (thirty percent) of the total valid votes, candidates who gain the greatest voice as a candidate is declared elected. However, the problem in this provision is that the contents of paragraph (4), namely: "if the provisions referred to in paragraph (2), are not met or no reach 30% (thirty percent) of the total valid votes, the election of the second round followed by the winners of the first and second winners".

Model determination like this, not just wasteful spending budget and adds to the political agenda of the people, but also creates new political tensions. Indeed, the purpose of these provisions is, that candidates for regional head and deputy regional head elected really got the full legitimacy of the public. It can be seen from the provisions of Law No. 32 of 2004 on Regional Government, which requires the 25% to 30% in the change in the Act No. 12 Year 2008 regarding the Second Amendment to the Regional Government Law. But that should be understood is, one of the principles of the organization of the elections that outlines the principles of effectiveness and efficiency, so that the implementation of these provisions do not reflect the principle of elections. So that the capital spent by participants Election greater, then will lead to corruption by elected regional heads.

5. Enforcement Crime Election

Offence elections is a criminal act that occurred during the stages of organizing the elections, ranging from voter registration, campaigning, voting and counting. By *lexscripta*, the setting of the crime of elections stipulated in Article 115 to Article 177 of Law No. 1 2015 *jo* Law No. 8 In 2015, like the voters' data manipulation, *money* politics, campaign ban violations, violations in the voting. In essence, the act materially criminal offense elections in the regulation of the law is no different with a crime in the legislative elections and the presidential election.

In order to improve the implementation of the elections, it would need to set up special court General Election crime, because for the Election criminal offense difficult for process. Such as those relating to horizontal conflicts that occur both pre- and post-election, which is hard to do an investigation because of regulations governing the conduct of elections less accommodating in detail about it.

Election Delivering Good Governance

elections become the consensus national politics and is one of the instruments important governance after *digulirkannya* regional autonomy in Indonesia. While

Indonesia itself has been implementing direct election since the Act No. 32 of 2004 on Regional Government declared valid. When viewed from the perspective of decentralization, the election is a significant breakthrough for the consolidation of the democratic process at the local level. The election would be open space wider participation, for the people in the democratic process to determine the political leadership at the local level. This system also opens up opportunities for people to actualize their political rights are better without must be reduced by the interests of the political elite, such as when the system applies the elections by Parliament. *Pilkada* also trigger aspirational leadership figure, a competent, *legitimate*, and dedicated. This is due to the elected regional heads will be more oriented to citizens, compared to *segelilir* elite in Parliament. But it is, according to Syamsudin Haris, that public expectations about the elections that are expected to cut the oligarchy of political parties, reduce *money politics* and make local leaders more responsible was not entirely true.

1. Elections for the Advancement of Democracy and Corruption Prevention

Citizens in the region is part separated from the citizens of Indonesia as a whole, and they are also entitled to sovereignty is their basic rights, because these rights are guaranteed in the Constitution, 1945. Therefore, the residents in the area, based on the sovereignty they had, given the right to determine the fate of their area -masing, among others, by choosing direct regional head. Lack of democracy at the local level as a result of the process of regional democracy demanded by progress of decentralization. Local Democracy contains the fundamental thing is the people's participation and mutual agreement to achieve the objectives that were defined together. Local democracy realized one of them with their elections. In another sense, this process of restoring sovereignty to the people. The elections were a local democratic institutions are important because of the upcoming elections, the regional head who will lead the region in achieving the objectives of decentralization will be elected through the hands of local people directly. So it can be said that the elections include the elaboration of Pancasila democracy as outlined first in a seminar army II in August 1966, namely:

"Democracy Pancasila as stipulated in the 1945 Constitution, which means re-establishing the principles of a constitutional state where the rule of law is perceived by all citizens of the country, where the rights of the principles of human good in aspects of the collective, as well as in the aspect of individuals are guaranteed, and where the abuse of power, can be avoided by institutional ..."

"Ikilimdemocracy has thus been given the space and the same opportunities to everyone, giving arousal, desire and libido politics for everyone. For this reason it can be said that almost every class of citizen stimulated to test the guts and ability to compete in the elections. Not surprisingly then came political cadres with very diverse backgrounds. Starting from the party chairman wives and children, family members, businessmen, celebrities, professions and academia. They are all present in the midst of political competition with the same assumption, that

every person has an equal right to follow the process of political elections.

The essence of law and democracy does provide open space for every citizen, it is not allowed discrimination based on race or ethnicity, religion, race, and class and professional backgrounds. So normal that public expectations of direct elections is expected to cut the oligarchy of political parties, minimizing *money* politics, and generate local leaders who are clean of corruption. So that the democratic political life in the region remain sustainable and built, if the fair running of elections. This will increase public confidence, because the principle of sovereignty can be embodied in a factual, so participation will be easily mobilized, and did not rule, will improve also the critical power of society. Feeling have a hand in determining the leader in the region, so that the meaning of a democratic government, of the people by the people and for the people can be realized in practice.

2. Negative Impact Election for Democracy

Problems effective and efficient elections are not merely seen because of the cost. Efficiency is also necessary to address the lack of confidence (*trust*) and the public benefits derived from the performance of elected regional heads. Implementation of democracy which is considered expensive, can die *fisiansikan* in various ways, as far as not undermine democratic values. So that after the elections will form a local government that is effective (*effective government*). Indeed, there is no denying that democracy costs, including in the administration of elections. But if the cost is too expensive, it must find a cheaper way. Is not one of the principles the organization of the elections is efficient, because it is the cost factor becomes very important consideration, because the essence of democracy is not just expensive, but must be balanced with quality.

In relation to the upcoming elections, Law No. 1 2015 *jo* Law No. 8 2015 does not mention the principles of efficiency and effectiveness in the implementation of the elections. Efficiency and effectiveness in Law No. 1 2015 *jo* Law No. 8 In 2015 no longer mentioned as the previous law. But in execution, efficiency and effectiveness is strongly reflected in Law No. 1 2015 *jo* Law No. 8 Year 2015. This can be observed in the establishment of elected regional head candidate that does not require two (2) rounds.

If the elections are not conducted effectively and efficiently, it is feared more government resources to finance drained democratic procedures alone, and forget the substance in order realize the people's welfare. During this time and the resources already widely been drained for the administration of elections tiered, and eventually the gap is getting wider because the government has little time to think about the fate of the people.

On the other hand, the fruit of the elections are not effective and efficient such, not many bring change. Oligarchic power of this elite group is still ongoing. Corruption has worsened in the form of a comparative study legislature, working visits and activities of other waste very far from the expectations of the people. Therefore in order to answer the rebuttal organizers elections that "democracy is expensive", it is important that

elections are costly submitted must also quality, both the process of implementation or the results. Transparency on the amount of budget election is important, so that people know that this election is costly, so it can be kept together the quality of the process or the results.

In addition to the problem of efficiency, the common reality shows that the elections has not been able to ensure the realization of democracy. In fact on the contrary, distort democracy. This is evident in its implementation that the elections raises other problems that actually hurt democracy. In a note Mahfud MD stated that the elections be unhealthy rivalry arena, so it can not give birth to the leaders who have the *political virtues* that act responsibly, in the public interest above personal, group or party. Election results now could not be said to be better than the results of the elections by Parliament. In addition, the elections encourages an outbreak of moral pragmatism regional head candidate, election organizers and the community. Moral pragmatism that makes money politics coloring each stage of the elections. This is due to the weakness of the prosecution infractions in the elections, because such abuse is difficult to prove, but *money politics* greatly injure the substance of democracy, and this also often triggered conflict that led to violence and a culture of corruption.

Other adverse impacts that accompany elections are oligarchy of power after the holding of the elections. The proof is some regional heads who served two terms as head of the region, but to stay ahead in the nomination of regional leaders, despite having to go down the ranks to become deputy head of the region. Otherwise, the former head of the area encourage his wife or children forward in the election. This is Musa Ash'ari as *nyandu* power which he is more dangerous than *nyandu*. As a result, leaders who are already *nyandu* power is more motivated to deliver the policies and actions that only benefit themselves personal, family and group.

Pilkada also triggers the politicization of the bureaucracy, in various regions, regional head candidates incumbent almost always involve mass mobilization of civil servants (PNS), Whereas in a democracy, should be exempt from the bureaucratic entanglement influence and political ties with the political power, so expect the public service provided by the bureaucracy can be a neutral, impartial and objective. Bureaucracy impartial and neutral will give birth to political corruption that actually change the electoral process marred by actions not commendable.

Lastly, the Unification ordinances such elections now likely to ignore the character of indigenous communities that still exist. The people of Papua, for example, which seems not yet ready with the direct election system. If *decermati*, any implementation of the elections in the Papua region, always noisy and troublesome. The losing party always dissatisfied, then filed a case Dispute to the Court in order for the couple who lost can be won. Once disconnected, *raksinya* always lead to action anarchists, rage and even threatened to get out of the Homeland.

III. CONCLUSION

Based on the above, it can be concluded that the democratic process in the implementation of the election began to be followed by democracy in the regulation of elections and policy formulation (*democratic policy-making*) after the elections, which resulted in regional leadership free of corruption. In addition, the election also has implications for the achievement of objectives of regional autonomy. People's welfare index (*Human Development Index*) in recent years reinforce that opinion. Another effect is the accountability of the head area, which until now are still many snagged the problem of corruption.

The implementation of the elections led to model of *a triple accountability*, which is responsible to the central government. The regional head indirectly also should be accountable to Parliament and society. In some areas, the practice-practice protocols relationship and the DPRD head tends to disharmony. In addition, as a democratic process, in terms of budgeting, it turns out the election has implications for local finance post. In addition to the issues above, the direct election system tends to bring disharmony issues of regional head and deputy regional head. In the regions, there is often rivalry triggered by ideological differences, individual factors, unclear authority deputy head of the region. Disharmony is increasingly pointed towards the last 2 years tenure, let alone one or both are run again with a different partner.

In connection with the context of democratic change in the region, the elections actually were able to strengthen democracy at the local level and efforts to prevent corruption, but on the another, after the elections, it is still a question of relations with the regional heads of parliament and the public. The impression that appear, once elected, the head area does not have a clear pattern of relationships with the community. Outside of the above issues, in practice, the implementation of regional election has implications for social and institutional conflicts. Although it does not occur in all regions, it obviously can lead to a deterioration in the implementation of the elections,

the elections were democratic and fair (*free and fair elections*) can be achieved if the available legal instruments governing all the process of elections, be able

to protect the organizers, participants, candidates, voters, observers, and citizens. Therefore, the future regulation is needed to encourage the efficient and effective elections. Breakthrough law to do among others are, merging elections with the President and Vice President as well as the legislative elections at a time, so that these issues affect the efficiency and effectiveness of the institutional organization of the elections.

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PETENCE DEVELOPMENT STRATEGY CORE INDUSTRIAL AREA DISTRICT OF NORTH KAYONG

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Abstract. District of North Kayong established by Act No. 6 of 2007 on the Establishment of Autonomous District of North Kayong. Viewed from a broader dimension, which is an area (district / city), the selection of core competencies industry should not be out of criteria such as having a high added value, unique in the region, have strong links, and has a chance to penetrate the international market , The purpose of research is to identify forms of effort that goes into a core industry that is in the area that became the object of the work; and formulate recommendations in order to provide direction for policy makers in developing strategies and programs for enhancing the competence and independence of the business as a core industry that is based on local resources. The data used in this research is secondary data is data regional gross domestic product at constant prices 2010 Kayong District North and West Kalimantan Province period 2010-2014. The analytical method used in this study consisted of the analysis of the Shift Share, Location Quotient (LQ), and Overlay analysis. These results indicate that the potential sectors (seed) and have a competitive advantage in the North Kayong district is agriculture, Water Supply, Waste Management, Waste and Recycling, Health and Social Work Services and other services sectors. Based Location Quotient (LQ), the leading sectors are agriculture where LQ is greater than 1 (LQ> 1). Based on the analysis of the model of growth ratio (MRP) that the economy District North Kayong in the context of West Kalimantan Province, dominant sectors of growth and contribution consisted of Agriculture, Forestry, and Fisheries, Water Supply, Waste Management, Waste and Recycling, Information and communications, Real Estate, Public Administration, Defense and Security, Health services and Social activities and services. Based on the analysis Overlay for descriptions that the sector has the potential to provide growth and contribution is the agricultural sector and the growth of large and small contribution consists of mining and quarrying, electricity and drinking water, trade, hotels and restaurants, transport and communications. This activity can be enhanced contribution to be driven into a dominant activity.

Keywords: Regional Industry Core Competence, Leading Sector Development Strategy

I. INTRODUCTION

A. Background Research

The development of regional industrial core competence is inseparable from regional development framework. Thus, the purpose of industrial development of core competencies in this regard by increasing the competitiveness of the region in line with the objective of regional development itself, namely the improvement of public welfare. To build regional competitiveness required the creation of the industry's core competencies for the area. It is necessary that all the resources and capabilities of the region can be focused on the effort to create the industry's core competencies. Viewed from a broader dimension, which is an area (district / city), the selection of core competencies industry should not be out of criteria such as having a high added value, unique in the region, have strong links, and has a chance to penetrate the international market , In other words, the determination of the core competencies of an area industry should have a large impact in stimulating the regional economy. Determination of Core Competence of Industry (KII) as one of the directions of the National Industrial Policy is a process of industrial development planning in areas that are in need of synergy in the

implementation of the Provincial Government and District / City. Synergy in the planning process of industrial development through the establishment of KIID expected later in its implementation may be the impetus and commitment for all stakeholders.

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implementation of the Provincial Government and District / City. Synergy in the planning process of industrial development through the establishment of KIID expected later in its implementation may be the impetus and commitment for all stakeholders.

B. Research Objectives

Objectives IntiIndustri Regional Competence (KIID) aims to:

1. Identify forms of effort that goes into the core industry in the area that became the object of the work;
2. Formulate recommendations resulting from the study in order to provide direction for policy makers in developing strategies and programs for enhancing the competence and independence of the business as a core industry that is based on local resources.

C. Benefits Research

While the benefits can be obtained are:

1. Assist Local Government in the provision of data and information on the industry's core competence areas as well as recommendations that resulted into a constructive inputs for the policy and regulatory development of industries based on local resources.
2. With the results of the work are arranged in a complete and detailed, will make it easy for stakeholders to see the opportunities, potential and advantages as well as prospects for the development of core industries based on local resources

II. METHOD

1. Approach and data used This research was conducted in the District of North Kayong West Kalimantan Province, by using two (2) approach is the approach through library research and field research. Library research (library research) done to get the theory as a basis related to the research to be investigated, while the field research (field research) conducted with the direct government institutions. The data used in this research is time series data over a period of five (years) years from the period 2010 to 2014. The data used as follows:

- a. Regional gross domestic product (GDP) at constant prices 2010 North Kayong District from 2010 until 2014.
- b. Regional gross domestic product (GDP) at constant prices in 2010 in West Kalimantan from 2010 until 2014.

2. Method of data acquisition The data used in this study was obtained from government agencies or official institutions, among others:

- a. The Central Statistics Agency (BPS) of North Kayong District;
- b. Regional Development Planning Board District of North Kayong;
- c. The Central Statistics Agency (BPS) of West Kalimantan Province;

3. Analysis Tools The analytical tool used in this study, among others, Shift Share classic, and Location Quotient (LQ).

a. Location Quotient (LQ) LQ calculation aims to illustrate the comparative advantage of a region compared to other regions. With this method can be analyzed sectors which have a comparative advantage. LQ calculation basis used for menentukan sector / featured sectors, the formula:

$$LQ = \frac{X_{in} / X_i}{Y_{in} / Y_i} \dots\dots\dots (2.1)$$

Where :

- LQ = Location Quotient sector i District
- X_{in} = Total gross value added (GDP) sector in the Province
- X_i = total gross value added (GDP) sector i district.
- Y_{in} = Value-added (GDP) of the province
- Y_i = value added (GDP) District.

- 1) LQ > 1, meaning the degree of specialization of certain sectors at district level greater than the same sector at the provincial level.
- 2) LQ = 1, meaning the degree of specialization of certain sectors at the district level is equal to (equal) the same sector in the province.
- 3) LQ < 1, meaning the degree of specialization of certain sectors at the district level is smaller than the same sector in the province.

b. Shift Share Analysis Classical (S-S-K) Shift share analysis is to analyze the shift in productivity and projections, primarily intended to see the position of the District / Town in the system over a wider area (West Kalimantan) in terms of economic growth rates. Model analysis of the shift (Shift share) in each sector of the areas that are comparable total shift (SIR), proportional shift (PIR), and shift differential (DIR) and the projected wider. Soepono said that the growing influence of the province called the influence of the share (Share), the effect of the industry mix is called proportional shift or mix composition and ultimately influence the competitive advantage is also called regional diferential shift or shift. That is why the technique called shift share.

The formula is as follows:

$$D_{ij} = N_{ij} + M_{ij} + C_{ij} \dots\dots\dots (1.2)$$

Information :

D_{ij} = Changes sector GDP variable i in region j N_{ij} = E_{ij} (r_n) (provincial growth sector in the region i j) .. (1.3)

M_{ij} = E_{ij} (r_{in} - r_n) (mix of industrial sectors in the region i j) (1.4) I_j = E_{ij} (r_{ij} - r_{in}) (a competitive advantage in the sector wilayahj i) ... (1.5) Where: r_{ij},

representing the rate of growth in the region i j, r_{in}, representing the rate of growth in the sector in the province i, r_n is the provincial economic growth, which can then be described as follows:

$$r_{ij} = (E^*_{ij} - E_{ij}) / E_{ij} \dots\dots\dots (1.6)$$

$$r_{in} = (E^*_{in} - E_{in}) / E_{in} \dots\dots\dots (1.7)$$

$$r_n = (E^*_n - E_n) / E_n \dots\dots\dots (1.8)$$

While E_{ij} is the GDP in sector i j district, E_{in} is the GDP in sector i at the provincial level. E_n is the economic growth of the province. Everything is measured in a certain base year. Superscript (*) indicates output in the final analysis.

Thus the shift-share equation for a particular sector (sector I) in a specific region (region j) can be formulated:

$$D_{ij} = E_{ij} (r_n) + E_{ij} (r_{in} - r_n) + E_{ij} (r_{ij} - r_{in}) \dots\dots\dots (1.9)$$

The determination of a sector is said to be superior based on the analysis of S - S - K, it can be seen the value of Cij. If Cij > 0 means the sector have a competitive advantage, contrary if Cij < 0 means the sector does not have a competitive advantage.

III. DISCUSSION AND ANALYSIS

Based on Table 1 above PDRB District of North Kayong according to constant prices in 2014 amounted to Rp 1,963,293.26 million. GDP at constant prices can be used to look at the economic structure of the North Kayong district. Three sector the largest contributor to the GDP of North Kayong District in 2014 were manufacturing (46 percent), followed by agriculture (28 per cent) and trade, hotels and restaurants (0.09 percent) and other services amounted to (0.08 percent). The smallest sector contribution to the GDP is the sector of Electricity, Gas and Water (12:01 per cent). As to the average of regional gross domestic product District of North Kayong per sector or field of work can be seen in Figure 1 below:

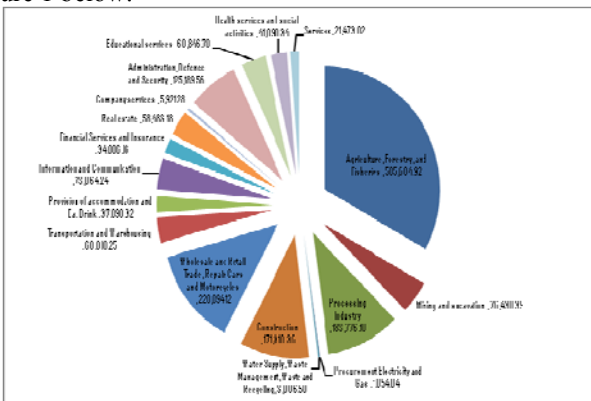


Figure 1
On average the GDP District of North Kayong Year 2010 s.d 2014 (In Million Rupiah) Based on Constant Prices
Source: Data processed BPS District of North Kayong, 2010-2015

The manufacturing sector contributed most to the GDP District of North Kayong, amounting 12:47 per cent in 2011. This contribution increased in 2012 to 0:48 percent. It can be seen from the increasing number of small businesses or home industry around us. Agricultural sector despite a large contribution to the GDP, but this contribution declined 0.01 percent in 2013. It is one of the reasons is the influence of climate, so be disrupted harvests. Contributions electricity, gas and water supply there is no increase at all for three (3) years. This is because very little influence on the increase of sectors Trade, Hotels and Restaurants, Transport and Communications and Finance, Real Estate & Business Services. This is because the decline in the growth rate of transport subsector, where one indicator is the decline in the number of passengers and bus public transportation, especially since the rise in fuel prices. The increasing role of the banking sector and cooperatives in supporting economic activities. While the role of the services sector due to the slow development of the social services such as computer

rental, laundry, workshops, salons and others. In addition, the rising role of the services sector is also due to regional autonomy, where the impact of autonomy is the existence of several institutions liquidated and the employee's status as a center employees largely relegated to the regions for the next area to be employees. Increasing the number of employees in local government raises the addition of the value added generated pemerintah.Hal sub-sector is evident from the greater role of government in the formation of GDP.

1. Analysis of Potential Regional District of North Kayong a. Analysis Location Quotient (LQ)

Calculation of Location Quotient during the period 2010-2014 using the GDP at constant prices of 2010. From the results of data processing by using the formula LQ, 2 images obtained as follows:

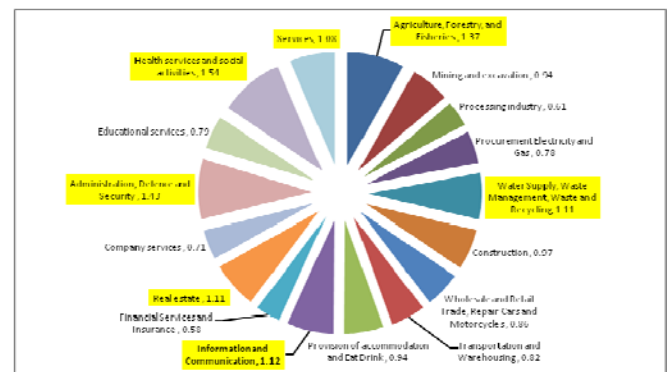


Figure 2
Location Quotient (LQ) District of North Kayong years 2010-2014
Source: Data processed BPS District of North Kayong, 2010-2014

According to the table above, there are 7 (seven) sector which is a sector basis / potential (LQ > 1 / green) in the district of North Kayong, include: Agriculture, Forestry, and Fisheries, Water Supply, Waste Management, Waste and Recycling, information and Communications, Real Estate, Public Administration, Defense and Security, Health services and Social activities and services. As for the sectors that are not a dominant sector (LQ < 1) in the district. North Kayong is: in addition to the above mentioned sectors.

The leading sectors have been able to meet the needs of the community itself and the District of North Kayong potential to be marketed (export) to other areas in West Kalimantan. While other sectors are only able to meet the needs for the area itself or has not been able to meet its own needs, so that the necessary inputs (import) from other regions.

This can be compared from the share the same sector at the provincial level. The low comparative advantage is due to the following factors:

- The development of the District of North Kayong into urban centers resulting in the conversion and behavior changes significantly from agricultural production systems towards manufacturing and services sectors. It is also an impact on the decline of the other primary sectors, particularly electricity, gas and drinking water were shifted to the district.
- Electricity and water sector in the district of North Kayong operate relatively stable so it does not produce a significant increase in added value than those which occurred in the province of West Kalimantan. The same thing also happened on Transport and Communications

sector. Nevertheless, these last two sectors have a tendency to fluctuate from 2011 to 2013. One of the triggers was physical and property development activity for new housing and home store (shop).

b. Shift Share Analysis Classical

Table 1
Shift-Share Analysis (SS) North Kayong District (2010-2014)

No	Business field	Growth		Components (Millions Rupiah)			
		Rin	Rij	Nij	Mij	Cij	Dij
1	Agriculture, Forestry, and Fisheries	0.038	0.047	32.884.53	(10.532.38)	5.181.12	27.552.83
2	Mining and excavation	0.037	0.059	4.239.70	(1.450.40)	1.639.17	4.472.45
3	Processing industry	0.052	0.039	10.323.07	(80.82)	(2.392.70)	7.025.54
4	Procurement Electricity and Gas	0.035	0.076	58.21	30.10	(9.47)	78.84
5	Water Supply, Waste Management, Waste and Rec	0.023	0.047	188.88	(39.35)	73.27	142.76
6	Construction	0.010	0.075	9.822.84	7.426.20	(4,245.47)	12.803.57
7	Wholesale and Retail Trade, Repair Cars and Motor	0.058	0.058	12.857.44	712.82	(336.50)	12.733.74
8	Transportation and Warehousing	0.064	0.072	3.211.34	482.43	500.17	4.333.95
9	Provision of accommodation and Eat Drink	0.055	0.080	2.128.37	94.33	50.80	2.273.50
10	Information and Communication	0.077	0.030	4.014.18	4.445.14	(1,916.53)	6.607.87
11	Financial Services and Insurance	0.030	0.110	1,959.92	1,230.11	658.88	3,848.41
12	Real estate	0.064	0.069	3,285.12	477.04	(188.58)	3,562.58
13	Company services	0.070	0.054	322.51	89.53	(104.58)	307.49
14	Administration, Defence and Security	0.015	0.038	7,032.15	(5,082.38)	2,521.08	4,560.84
15	Educational services	0.063	0.055	3,417.88	223.23	(36.16)	3,376.06
16	Health services and social activities	0.033	0.048	2,308.58	(708.75)	360.63	1,960.45
17	Services	0.073	0.038	1,216.73	(639.36)	197.49	784.36
	JUMLAH	0.056	0.064	99,385.77	-	(3,227.55)	96,158.22

Source: BPS data District of North Kayong, 2015

According to the table above, it can be seen that the shift share analysis Classical (S-S-K) can describe the results are as follows;

1. By using the shift-share analysis is known that during the period of 2010-2014, the GDP District of North Kayong have added value amounting to Rp96,138 billion regional economy. It can be seen from the value Dij are positive in all sectors of economic activity and there is no sector that declined. The increase in the region's economy contributed by all sectors (as many as 17 sectors).
2. Kab. North Kayong have some competitive economic sectors, it is seen from Cij positive values during the period 2010-2014 and consists of: Agriculture, Forestry, and Fisheries, Mining and Quarrying, Water Supply, Waste Management, Waste and Recycling, Transport and warehousing, Providing Accommodation and Eating Drink, Financial services and Insurance, Public Administration, Defense and Security, Health services and Social activities and services
3. Ninth District Kayong economic sector in the North, have shown that the higher competitive level compared to the same sector in the economic level of West Kalimantan Province in the same period. Such as Manufacturing, Supply Electricity and Gas, Construction, Wholesale and Retail Trade, Repair Cars and Motorcycles, Information and Communications, Real Estate, Corporate Services and Education Services
4. Meanwhile, the output produced from a mix of industry (industry mix) in the economy in the district of North Kayong as a result of interaction between the industrial activity in which their activities are interconnected with

one another and resemble other activities that most of the positive impact, namely : Procurement of Electricity and Gas, Construction, Wholesale and Retail, Car and Motorcycle Repair, Transport and Warehousing, Providing Accommodation and Eat Drink, Information and Communications, Financial Services and Insurance, Real Estate, Corporate Services and Education Services

5. But there are also sectors that have a negative mix in the economy of North Kayong District, namely: Agriculture, Forestry, and Fisheries, Mining and Quarrying, Manufacturing, Water Supply, Waste Management, Waste and Recycling, Public Administration, Defense and Security, Health services and social activities as well as services.

Economic Growth in West Kalimantan, which shows how the effects of national economic growth to the economy of the District of North Kayong showed positive value (Nij) on each sector of the economy with a total output value of Rp99.365 billion.

Meanwhile, if viewed from the aspect of sectoral economic growth rate Kab North Kayong compared with a growth rate sectors of the economy are the same in West Kalimantan Province, Kab. North Kayong, showed that most of the growth rate of the economy at the provincial level is higher, but the total number of overall growth rate is still relatively balanced, namely loggerheads 0002. As for the whole sector (Sector 17) in the district. North Kayong experiencing positive growth rates compared to the same sector in the province of West Kalimantan.

Formulate recommendations resulting from the study in order to provide direction for policy makers in developing strategies and programs for enhancing the competence and independence of the business as a core industry that is based on local resources.

The agricultural sector has a decent number of commodities developed, so that its contribution to increased agricultural production and overall would increase the GDP District of North Kayong. The criteria for commodity:

- a. Stable development (LQ rising trend and over 1)
- b. The market is quite extensive (exports)
- c. Have a local advantage.

The development of the agricultural sector will encourage the development of sectors that use agricultural products as inputs (forward linkage) and a sector whose products are inputs for the agricultural sector (backward linkage). Increased demand for agricultural products will encourage additional production quantities, so the implications for the increased need for labor and incomes.

Through the description of the tree can be seen that the industry, the use of coconut to produce a variety of processed products can be made from the parts pulpy coconut, coconut water, shells, coir, until with bunches of flowers.

This analysis will use industrial tree model used by the Directorate General of Plantations Department of Agriculture. Proposed in this study, in order to provide direction for policy makers in developing strategies and programs for enhancing the competence and independence

of the business as a core industry that is based on local resources such as:

a. Agriculture, Forestry, and Fisheries (Prima)

Plan		
Medium-Term	Long-Term	Short-Term
2) Maintaining Increasing production and capacity and plantation crops, and Doing Industrialization in Agriculture, Fisheries and Forestry through: industrial hatchery, nursery, fertilizers, and processing of agricultural and fishery products.	1) Developing agriculture, fisheries, and marine with an integrated territorial approach to the concept of agribusiness development..	1) To encourage and increase the capacity of production of food crops and plantations, through the optimization of land and increased intensity of farming and the development of diversified farming, as well as increasing the value added through post-harvest agricultural products, improving quality, processing, packaging and marketing results
3) Pemantapkan development of agriculture, fisheries and marine with an integrated territorial approach to the concept of agribusiness	2) Strengthening the infrastructure development of agriculture and fisheries.	2) Strengthening hatchery / nursery, through the provision of seeds,

development.		training and assistance both to farmers, ranchers, fishermen and business related businesses directly.
4) Expanding investment activities in various sectors to increase the scale of production to achieve economic resilience of the region.	3) Promoting research and the ongoing development of the potential of Agriculture, Forestry and Fisheries.	3) Improve and develop basic infrastructure that encourages the development of superior products, plantation crops, livestock, and fisheries (such as the network of water / irrigation, access roads and electricity supply, etc.)
5) Strengthening Infrastructure Development of Agriculture and Fisheries.	4) Promoting research and sustainable development of the fisheries potential.	4) Promoting research and sustainable development of the fisheries potential.

b. Water Supply, Waste Management, Waste and Recycling (Prima)

Plan		
Medium-Term	Long-Term	Short-Term
1) Sustainable Development on Water Infrastructures efficient and modern.	1) Sustainable Development on Water Infrastructures efficient and modern.	1) Development of facilities and infrastructures related to Clean Water distribution and direct distribution through pipes and other equipment to households, government and private

2) Developing sustainable Drinking Water Industrial Packaging national competitiveness.	2) Enhance and Develop Drinking Water Industrial Packaging national competitiveness.	institutions to reach out to society at large. 2) Conduct study Develop Drinking Water Industrial Packaging national competitiveness
3) Development of Potential Management of facilities and infrastructure such as construction of Waste and Waste efficient and modern.	3) Research and Sustainable Research on Waste Management, Waste and Recycling efficient and modern.	3) Coordinate and Utilization Potential of Water Treatment Plant in order to be marketed more widely. 4) Conduct of Research and Research the floating Potential Waste Management, Waste and Recycling.

only concentrated in urban areas but also diperdesaan.	or pharmacy usahan are not only concentrated in urban areas but also diperdesaan.	or pharmacy usahan.
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e. Other services

Plan		
Medium-Term	Long-Term	Short-Term
1) Creation and Development services are sustainable over the management of objects of tourism and natural resources that have economic value. 2) Maintaining the quality and increase the number of facilities and infrastructure for tourism, especially tourist who became the idol of the people TPI and its surroundings more modern and integrated	1) Development of tourism management Continual featured mainly Datuk Island Beach and National Park Gunung Palong 2) Sustainable development of infrastructure for tourism, especially tourist who became the idol of the people TPI and its surroundings more modern and integrated	1) Development of tourism management featured mainly Datuk Island Beach and National Park Gunung Palong 2) Improvement of infrastructure for development for tourism, especially tourist who became an idol TPI and surrounding communities are Datuk Island Beach
3) Sustainable development and the type of travel packages featured.	3) Sustainable development and the type of travel packages are featured untapped potential for marine tourism and island	3) Development of the type and featured travel packages, especially those that have not been touched is the potential for marine tourism and the islands.
4) Development and Guidance to local tourist destinations.	4) Development of advanced regional tourist destination, terumata natural attractions that are in the National Park area of Mount Palong	4) Development of a tourist destination area, terumata natural attractions that are in the area of Gunung Palong National Park
5) Utilization Potential of Tourism and Natural resources in an efficient way and moder who have competitiveness.	5) Development of the potential of natural and untapped travel.	5) Study and Research will be natural potential and untapped travel.

c. Administration, Defence and Security (Prima)

Plan		
Medium-Term	Long-Term	Short-Term
1) Maintaining the Local Government Institutional strength, especially SKPDs that provide direct services to the public	1) In line with BPJS have optimal health, JKN kepersertaan expansion, and will begin operation BPJS Employment.	1) Institutional Strengthening Local Government, especially SKPDs that provide direct services to the community
2) Maintaining the Local Government Development apparatuses.	2) Improve the Basic Services to the community	2) Strengthening Local Government apparatuses by means Following Training and courses
3) memerluas range BPJS health programs, expansion of kepersertaan JKN, and BPJS Employment.	3) Make it easier and simplifying the bureaucracy of government.	3) Perform Optimization and Dissemination Program BPJS health, JKN kepersertaan expansion, and will begin operation BPJS Employment

d. Health Services and Social Activities (Prima)

Plan		
Medium-Term	Long-Term	Short-Term
1) Development and Development efforts medication / medical form of the practice of medicine or pharmacy usahan.	1) Establishment and Development efforts medication / medical form of the practice of medicine or pharmacy usahan.	1) Promote the establishment of businesses medication / medical form of the practice of medicine or pharmacy usahan.
2) Encouraging increased efforts types of medicine / medical form of the practice of medicine or pharmacy usahan are not	2) Encouraging increased efforts types of medicine / medical form of the practice of medicine	2) Encouraging increased efforts types of medicine / medical form of the practice of medicine

IV. CONCLUSIONS AND RECOMENDATIONS

A. Conclusion

Thus it can be concluded end to answer questions about the potential and problems researchers Commodity essence of Ketapang that:

1. Based on GDP at constant prices for the sector that dominates the district of North Kayong is processing industry sector, Agriculture and services. The development of the North Kayong districts into urban centers resulting in the conversion and behavior changes significantly from agricultural production systems towards manufacturing and services sectors. It

is also an impact on the decline of the other primary sectors, particularly electricity, gas and drinking water were shifted to the district. The calculation result LQ determination insutri processing sector is featured with a value of $LQ > 1$. Similarly, the GDP at current prices for the sector that dominates the district of North Kayong is the processing sector with $LQ > 1$.

2. Based on the calculation Shift Share GDP at current prices District of North Kayong seeded base sector is on building sector as well as transport and communications, because the presence of growth and development are high because of growth in the sector of high activity, tend to specialize in sectors with growth rapid, however GDP at constant prices District of North Kayong considered that:
 - a. Growth and development of the region were slow in all fields in the absence of specialization in the sector of rapid expansion, as in the sectors of Agriculture, Mining and Quarrying, Electricity, Gas, and Water Supply, Trade, Hotels and Restaurants, Finance, Real Estate & Business Services and Offices,
 - b. Manufacturing sector is expanding rapidly, but also specialize in sectors that slow development, this happens because the region has good access to raw materials and markets location.
 - c. The building sector and transport and communications characterizes the economies of the relatively slow development, but specializes in the rapidly growing sector
3. Coastal Region has a great potential in field crops such as commodities pepper, clove, patchouli and cocoa. This potential can be used by local governments as organic farming development opportunities, given the pattern of farming communities are still traditional and minimal in the use of production facilities of chemical fertilizers and pesticides.

B. Recommendations

Recommendations can be given to develop the potential and problems of core commodities in the district of North Kayong are:

1. Markets and marketing systems at the farm level in West Kaalimantan and District of North Kayong resembles the situation in other parts of Indonesia, the prevailing pattern monopsonistic where local collectors and traders determine the rules for their suppliers: the farmers. Farmers will tend to have a low awareness of the value creation products because they do not understand what is required of merchants and consumers, and basically just sell what is grown in the yard instead of producing what can be sold. To fully gain market opportunities, farmers should understand who market their markets and build an active marketing strategy. The study shows the existence of barriers but also a chance for farmers to access the value chain more profitable. Such as increasing awareness of the market specifications and marketing chain, fully involved in post-harvest processing to enhance the value of the product, and develop their role in the value chain of the product. Factor Another key is

to improve the management of the plant to produce higher-value, fully understand the existence of barriers faced from market players are new, the bargaining power of buyers (dealers and collectors), the existence of substitution products which could replace for the purposes of industry, and the competition between farmers.

2. It should be made regulation of commodity development priorities patchouli competitive commodities along with other teeknis rules so that no raw material supply constraints in various border areas including extortion highly detrimental to local businesses. Help machinery procurement manager for local entrepreneurs in order to obtain a good quality product in the future.
3. Judging from the contribution of commodities to the GDP maupn real conditions in the economic activity of the people especially coconuts and rice then this needs to be developed with modern technology, for example agribusiness and agro-industry, so it will give greater added value as a source of local income and spur activity the manufacturing sector.
4. The development of this sector, followed by the policy in the capital, production techniques and marketing. This policy could be training, provision of market information, support related agencies, financial institutions, non-governmental development organizations.

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CREDIT UNION ROLE IN SUPPORTING CAPITAL SMALL AND MEDIUM ENTERPRISES

(Case Study Lantang Tipu Credit Union Branch Office Bengkayang)

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Abstract. One of the problems faced by Small and Medium Enterprises is the availability of capital and difficulty of access to capital to financial institutions as a creditor bank business capital. There are still many small businesses and medium-sized businesses obtain capital loan from a bank or the circumference of the moneylenders at interest rate tinggi and burdensome. This study aims to reveal the various factors that cause not optimal Credit Union's role in assisting the development of Small and Medium Enterprises through the provision of venture capital. The method used in this research is descriptive quantitative method by using a cross-tabulation between variables into research observations. The results showed that the role of Credit Union are still very low on the empowerment of Small and Medium Business capital, there are many factors that cause low role of Credit Union on the progress of Small and Medium Enterprises in the City Bengkayang; 1) low access perpetrators of Small and Medium against Credit Union (1:89), 2) low appreciation of the importance Credit Union, 3) lack of qualified personnel Credit Union both in terms of understanding of the benefits of Credit Union as well as in the management of its management; 4) the negative stigma of people who pose a lack of trust of the perpetrators of Small and Medium against Credit Union. These factors have resulted in a conviction for Small and Medium Enterprises in the City Bengkayang little incorporated in the container so that the Credit Union Credit Union is still low role in assisting the development of Small and Medium Enterprises through the provision of venture capital.

Keyword: The Role of Credit Union, Small and Medium Enterprises, The Capital Enterprises

I. INTRODUCTION

Looking at the large number of small businesses and medium in Bengkayang which reached 1,861 businesses by the number of workforce of 2,548 people consisting of 1,550 workers male and 998 the female labor force and in particular the number of businesses in the city reached 443 actors Bengkayang Small and Medium enterprises with the number of Credit Union (CU) of 5 Branch Offices potential to tackle poverty in the Region Bengkayang. Number of Small and Medium Enterprises is according to BPS data Bengkayang Year 2015.

Although the potential is great, the problem of capital is a major constraint for Small and Medium Businesses to grow and develop. The fundamental problem that causes the Small and Medium Enterprises have difficulty in financing business ; **First**, the problem of collateral/ guarantee. Almost all Small and Medium complained about the difficulty of getting financing from banks because there is warranty coverage. As a result, financing Small and Medium Enterprises up to now more dependent on capital accumulation (*self-financing*) were very limited. **Secondly**, the issue of interest on loans in the Small and Medium still felt very high. In connection with the financing are at least two types of groups of Small and Medium Enterprises. The first group is the Small and Medium *bankable* marked with (1) has had adequate formal legality device; (2) management

neater; (3) sufficient market access; (4) the presentation of financial information may be acceptable under the technical requirements of banks; (5) access to information and knowledge of banking products is quite extensive; and (6) a guarantee (*collateral*) can meet the technical requirements of banks. The second group is Small and Medium Enterprises are *unbankable* group, which is characterized by (1) has not had a formal legality adequate; (2) management has not neat; (3) restricted market access; (4) the presentation of financial information not meet the technical requirements of banks; (5) access to information and knowledge of banking products is limited. and (6) takes the role of cooperatives as a liaison and partner in building a relationship with the bank.

Credit Union (CU) is part of the Credit Unions, where CU shelter under the Master Credit Cooperatives (Inkopdit). The idea of credit unions was first born in the eighteenth century (18) in continental Europe, precisely in the country of Germany. CU movement originated from the idea of Workers and Weavers Rochdale in England (UK) is formed in a democratic consumer cooperative in 1840. In 1852 and 1864 the cooperative was later developed by Hermann Schulze Delitzsch and Friedrich Wilhelm Raiffeisen became Credit Union (CU). In 1975 introduced the Credit Union West Borneo by CUCO Indonesia (*Credit Union Counselling Office*), based in Jakarta. The delegation led by the Social Archdiocese of Pontianak at Jalan Imam Bonjol No. Pontianak 338 under the leadership of Fater Pius

Camperlie, team basic course for Credit Union brought in from Jakarta. One area of interest is the team Sanggau, West Borneo. Lantang Tipo CU is one of the financial institutions in West Borneo.

Seeing the importance of the Credit Union for the development of Small and Medium Enterprises in all regions of Indonesia, especially the City Bengkayang, the authors feel challenged to investigate this matter. Furthermore, the results of this study are expected to be input for local governments in particular, to create a new policy related to the revitalization of the function and role in improving the Credit Union Small and Medium Enterprises sector. It also can be used as a reference for central government policies related to the empowerment Credit Union and Small and Medium Enterprises. Empowerment of small and medium enterprises as well as the Credit Union is a strategic step in improving and strengthening the basis of the economic life of the majority of the Indonesian people, especially through employment and reduce inequality and poverty.

II. METHODOLOGY

This research uses descriptive method that seeks to uncover the actual facts faced by perpetrators of Small and Medium Enterprises in the City Bengkayang. The data used are primary data and secondary data. Primary data such as specialization perpetrators of Small and Medium to institute Credit Union, the perception of the Credit Union, had difficulties perpetrators of Small and Medium in accessing capital, dependence on mobile banks and moneylenders as well as the expectations of the perpetrators of Small and Medium against the Credit Union acquired directly through questionnaires. While secondary data obtained from a variety of documentation that is the result of a previous study by the Credit Union as well as the manager of the Department of Industry, Trade and Small and Medium Bengkayang.

III. RESULTS AND DISCUSSION

A. Results

1) Group and Business Type of Respondents

Group and type of business respondents in the survey based on data from BPS Bengkayang and field trips are micro enterprises 85.78%, 13.77% group of small business and medium business group 0.45 % and the types of businesses such as restaurants/restaurants, cafes drink, lodging/boarding, workshops, trade/groceries/ grocery, entertainment, stationery and other types of businesses.

2) Capital Resources

Of the 100 businesses surveyed 80% run their business using their own capital and only 20% who use loan funds sourced from various financial institutions.

3) In the Credit Union Membership and Business Capital Assistance

Of the 100 people who responded to the business pelku only 20 or 20% which is a member of Credit Union (CU). Of the 20 people who became members of the CU only 5 people who obtain venture capital assistance sourced from loans at CU.

4) Become a Member Interests Credit Union

Results of interviews with entrepreneurs who were respondents expressed interest in becoming members of the Credit Union but is hampered non-financial administrative requirements specified by the Credit Union so that they are not yet a member.

5) Additional Options In Getting Capital Institute

Generally perpetrators of Small and Medium respondents have not memanfaatkan Credit Union in an effort to obtain additional capital. It is seen from the 100 respondents only 20 people menjadi CU members and 20 persons only 5 people who earn capital from loan at CU.

6) Trust Actors of Small and Medium Against Credit Union

Trust perpetrators of Small and Medium to Credit Union (CU) is quite large, it is visible from the answers that they convey that opt-outs they became members of the CU for the requirements of non-financial such as the obligation to follow the activities of basic education or training use a long time that they should leave their business activities to mengiuti activities of basic education/training CU.

7) Total Credit Union City Bengkayang

Based on information from the Department of Industry, Trade and Small and Medium Bengkayang and field visits number of Credit Union (CU) in the city of Bengkayang amounted to 5 CU namely: CU Lantang Tipo, CU Pancur Kasih, CU Khatulistiwa Bakti, CU Keluarga Kudus and CU Bonaventura.

8) The Number of Small and Medium Enterprises in the City Bengkayang

According to the Small and Medium Enterprises at the Department of Industry, Trade and Small and Medium Bengkayang 2015 as follows:

Table 2. Summary of Data for Small and Medium

Business Group	Total
Small Business	380
Micro	61
Medium Enterprises	2
Total	443

Source: Department of Industry, Trade and Small and Medium Bengkayang, 2015.

B. Discussion

1) Credit Union Picks not Being Small and Medium

Various respondents why Credit Union (CU) has not been the main choice of Small and medium in obtaining venture capital among others: 1) the necessity to follow basic education CU in a long time; 2) the obligation to pay the Principal, Saves Taxpayer Money and Solidarity which is considered as a burden; 3) lack of information about the benefits of being a member of the CU; 4) working capital loans should be gradual or have ever had a history of good loans at CU proficiency level.

2) Interests Become a Member Credit Union

Results showed that interest perpetrators of Small and Medium to become members of Credit Union (CU) is quite high as well as some of the factors that cause them have not become members of the CU include: 1) lack of knowledge of the benefits of being a member of the CU for not the socialization of officers CU; 2) the limitations of their time to megikuti basic education/training CU; 3) the absence of assistance from the Department of Industry, Trade and Small

and Medium Enterprises are able to direct them to become members of the CU.

A large number of Small and Medium Size Bengkulu City is a huge potential for CU in the development of micro-credit as well as perpetrators of Small and Medium meyakini not affected the management of cooperatives and CU are less professional, they are also not affected by the number of CU who failed or Bankruptcy ,

3) *Stigma Negative Credit Union*

Image Credit Union (CU) can not be discharged from bankruptcy several CU's around town Bengkulu. Communities around the City Bengkulu still traumatized by some of the Bankrupt as CU Buana Soreng Mandiri, CU Pansurat Gunung Bawakng well as some of the CU around Bengkulu the Bankrupt.

The existence of several CU closed/ Bankrupt around Bengkulu is why the image of CU according to most people to be negative although at this time of 5 CU in the City CU Bengkulu a nice and healthy in the management.

4) *Dependence on Bank Financing Roving*

Various facilities provided by Bank Roving in disbursing loans for Small and Medium Size perpetrators despite the relatively high interest. This is why the perpetrators of Small and Medium prefer Bank Roving than Credit Union (CU).

5) *Difficulties Human Resource Issues Credit Union*

Several Credit Union (CU), which suffered due to lack of adequate Bankrupt HR and management are less professional and dishonest human resources in carrying out business activities CU. This causes a loss of mutual trust. In fact, commitment and trust among members and administrators is absolutely necessary as the basic capital construction of CU in an effort meet welfare of its members.

6) *Various Problems Credit Union Current*

Credit Union (CU) is formed on the basis of mutual interest and agreement of its founding members and have the same goal for the welfare of all members of the CU.

Specific problems faced by CU for their misappropriation of funds by the officers/officials of CU, the principles and objectives of CU is not implemented in the service to members, mentoring and post disbursement of credit and a weak human resource officer/administrator and a member of CU in the development of productive enterprises and business activities not profit-oriented, empowering members.

IV. CONCLUSION

In financial performance and management of Credit Union (CU) in Bengkulu City quite encouraging, but still low interest perpetrators of Small and Medium Enterprises to become a member. There are several factors that affect low interest perpetrators of Small and Medium CU of members to be: 1) a negative stigma about CU; 2) the existence of several CU Bankrupt both in the city and surrounding counties Bengkulu Bengkulu; 3) the absence of deposit insurance agencies in CU; 4) people still have a sense of trauma to the development of several CUs Bankrupt; and 5) not fleksibelnya rules/provisions foundation for new members, especially the basic education/training CU.

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DEVELOPMENT OF CREATIVE ECONOMY THROUGH THE BLUE OCEAN STRATEGY FOR A SMALL BUSINESS (STUDY ON BIDAI HANDICRAFT INDUSTRY IN THE DISTRICT OF JAGOI BABANG, BENGKAYANG)

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Abstract. Creative economic development is an effort to improve the capabilities of human resources in the borderland areas, especially in the District of Jagoi Babang, Bengkayang, to compete with their counterparts from neighboring countries. The economic development in the borderland areas in the regency of Bengkayang, such as the Bidai making, is still limited by traditional methods inherited from the previous generation and therefore, lack of innovation. However, it is still full with potential of further exploration on human resources through creativity. The goal is to improve eventually the welfare of local communities. Creative economy focusing on the borderland areas economic activity might well has multiplier effects on the local economy in terms of: potential towards financial success, market development, and last but not least, the increase of income. To put it bluntly, the objective of this research is to create a model for creative economy in the borderlands area focusing on the splint craft industry using the blue ocean marketing strategies. Eventually, implementation of this complementary economic models in the creative craft industry will increase the income of small business communities living in the borderland areas.

Keywords : Development of Creative Economy, Bidai, Small Business

I. INTRODUCTION

Creative economic development is an effort to improve the capabilities of human resources in the borderland areas, especially in the District of Jagoi Babang, Bengkayang, to compete with their counterparts from neighboring countries. The economic development in the borderland areas in the regency of Bengkayang, such as the Bidai making, is still limited by traditional methods inherited from the previous generation and therefore, lack of innovation. However, it is still full with potential of further exploration on human resources through creativity. The goal is to improve eventually the welfare of local communities. Creative economy focusing on the borderland areas economic activity might well has multiplier effects on the local economy in terms of: potential towards financial success, market development, and last but not least, the increase of income. To put it bluntly, the objective of this research is to create a model for creative economy in the borderlands area focusing on the splint craft industry using the blue ocean marketing strategies. In line with this, the writer expects this study could be one of the theoretical foundations within the scope of the development of creative economy. The research development of creative economy is going through a *blue ocean* strategy that is believed to be capable of lifting the craft sector of the creative economy and increasing the income of the economy, especially for small businesses in the district of Jagoi Babang Bengkayang.

The research purpose is to create a model for the creative economy in the border area in the field of craft industry splint using marketing strategies of blue oceans in complete the economic creative models in the creative craft industry as an effort to increase the income of the border communities.

A. *Creative Economy*

Basically, the creative economic growth is driven by the capitalization, creativity and innovation in providing products or services with creative content. The key word is the creative content of a high level of input and output of this economic activity. The term creative economy is still relatively new. Not surprisingly, the sense is not clearly defined. In general it can be said that the creative economy is a system of human activities related to the creation, production, distribution, exchange and consumption of goods and services with cultural, artistic, aesthetic, intellectual, and emotional values for the customers in the market. The Creative economy consists of a broad group of professionals, especially those in the creative industries, which contribute to the forefront of the innovation. The creative intelligence, such as artists, performers, educators, students, engineers, and writers often have the ability to think and get a spread pattern with a new idea. Therefore, the creative economy can be regarded as a transaction system of supply and demand that originates in the economic activity of the creative industries.

B. *Guidelines for the Creative Economy Development Plan*

Some highlights of the Handbook for Creative Economy Development Plan 2009 - 2015 of the Ministry of Trade is,

among other things, that the creative economy is believed to be able to answer the challenges of the basic problems of short and medium term: (1) Relatively low the economic growth post-crisis (an average of only 4.5% / year). (2) The high unemployment rate (9-10%). (3) The high poverty rate (16-17%). (4) The low competitiveness of industry in Indonesia.

In addition to these problems, the creative economy is also expected to answer challenges such as the issues of:

- Global warming.
- Utilization of renewable energy.
- Deforestation, and
- Reduction of carbon emissions.

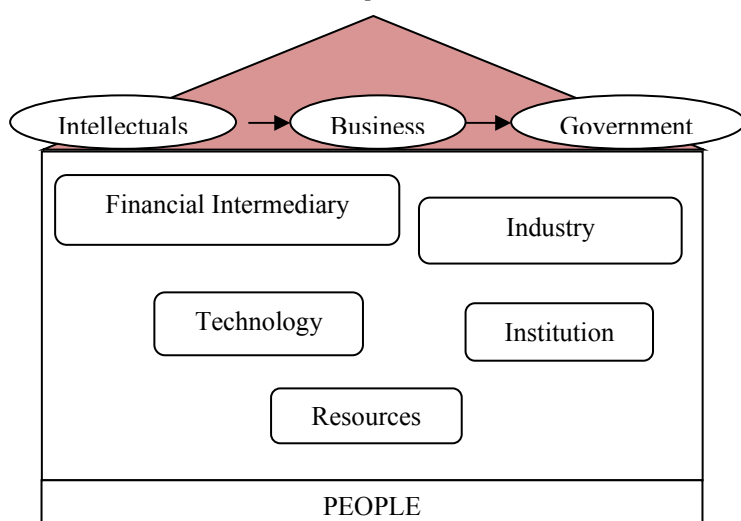
Because the direction of the development of creative industries will face a pattern of environmentally friendly industries and the creation of value-added products and services derived from the intellectual human resources, Republic of Indonesia realized that the creative economy, which focuses on the creation of goods and services by relying on the expertise, talent and creativity as intellectual property, is the hope for the Indonesian economy to rise, compete and achieve excellence in the global economy.

To develop the creative economy, it is believed that the collaboration of the various individuals involved in the creative industries, namely Scholars (Intellectuals), Business and the Government will be mandatory and are fundamental prerequisites. The 14 creative industry sub-sectors identified, generally have five main problems to be a subject of interest in the creative industry development plan for the achievement of 2015.

The foundation of the creative industries is human resources of (People) Indonesia which is the most important element in the creative industries. The uniqueness of the creative industries that characterize almost all industrial sectors which are in the creative industry is the central role of human resources as human capital compared to other production factors.

That's why, the development of a competitive creative industry in Indonesia should be guided by the skilled, trained, and empowered human resource development to grow and develop their knowledge and creativity. Knowledge and creativity are the main production factor in the creative industries.

The Triple Helix



In the chart we can see that the building of creative industries is housed within a relationship between Scholars (Intellectuals), Business and the government that is referred to as a system 'triple helix' which is the main driver of the birth of creativity, ideas, science and technology which is vital for the growth of the creative industries. A close relationship, mutual support and mutual symbiosis between all three actors in connection with the foundation and pillars model of creative industries will produce a creative industry that stands firmly and continuously.

A theory about the Triple Helix was originally popularized by Etzkowitz & Leydersdorff as a method of innovation-based policy development. This theory reveals the importance of creating synergy of three poles, such as academics, business and government. It is known in Indonesia as the concept of ABG. From that theory, the purpose of the ABG is the sustainable economic development of a knowledge-based. These synergies expected the circulation of knowledge that leads to innovation, namely with economic potential, or the capitalization of knowledge (knowledge capital). Triple Helix as the lead actor must always move the circulating to establish knowledge spaces, spaces of knowledge in which three actors own understanding and knowledge to match, who will direct the third actor to form a consensus space, space agreements where the three actors have started to make agreements and commitments on a matter that ultimately will lead to the formation of innovation spaces, spaces that can arrange the innovation into the economic value of creative products.

C. Blue Ocean Strategy

Blue Ocean Strategy is essentially a strategy for overcoming the competitors through the offer of innovative product features, which have actually escaped the attention of competitors. This product features usually radically different, which is already there and available in the market. What was done by the perpetrators of the creative economy today is to create an innovative product features a radically different, so understanding the concept of blue ocean strategy will need to be provided for them. Moving on from the mind-set blue ocean strategy, businesses are encouraged to enter a new market arena that is potentially ignored by competitors. Focusing on the value innovation, not in a position towards competitors, encourage companies to challenge all the factors that the scene of an industrial competition and do not assume that just because the competition is to do something meaningful about its value buyers. The purpose of the blue ocean strategy is to allow any organization - large or small, new or established for the challenges to use the blue ocean strategy to maximize opportunities and minimize risks.

Blue ocean strategy is characterized by unexplored market space, demand creation, and the opportunities a very favorable growth. Compete for market share contracted - as a fact in the business world - it may still be necessary, but not sufficient to support the excellent performance, then we have to go beyond competition to reap profits and new growth opportunities, namely by creating a blue ocean. The moment when the market space is getting crowded,

prospects for profits and growth can be reduced, and the product has also been shifted into a commodity.

Creating a blue ocean is not the achievement of a static but a dynamic process. When a company has created a blue ocean and strong consequences for performance is already known to competitors then sooner or later will appear imitators. It seems to have become a law of nature when the company's successful in expanding its blue ocean strategy, then more and more other companies would like to join in to the same strategy. Often a blue ocean strategy will go without significant challenges for 10 to 15 years. The obstacle for imitators is that the blue ocean strategy is a systemic approach that requires not only the function of each element correctly positioned, but also requires the integration of these elements into an integral system that can generate value innovation. Several factors make it difficult to replicate the blue ocean strategy is : (a) Value innovation; Often considered unreasonable for conventional logic company in general. (b) The blue ocean strategy may conflict with another company's brand image. (c) There is a natural monopoly rule of law, that the market usually cannot support or accept a second player or an imitation. (d) The existence of patent or legal aspects that block imitation. (e) The higher sales volume will generate rapid cost advantages for innovators values, and can discourage imitators to enter the market. (f) The network externalities blue ocean impedes other companies to do impersonation. (g) An imitation often will require changes in policy, operational and cultural significance. (h) Companies that value-innovate will gain popularity spread by word of mouth and form a loyal customer who tend deterring imitators.

The term innovation is often associated with the control of high technology, where as innovation can also not from the technology but from the resulting value. Innovation can be generated by creating new value. So adaptability and convergence in order to create new ideas requires imagination and visualization power, and this capability needs to be owned by the human-creative people in the creative industries. Therefore actors in the creative industries need to understand the blue ocean strategy initiated by W. Chan Kim and colleagues. Especially when competitors start value curves curve coincides with our values, the beginning of an effort to look for other innovations in order to create a new Blue ocean.

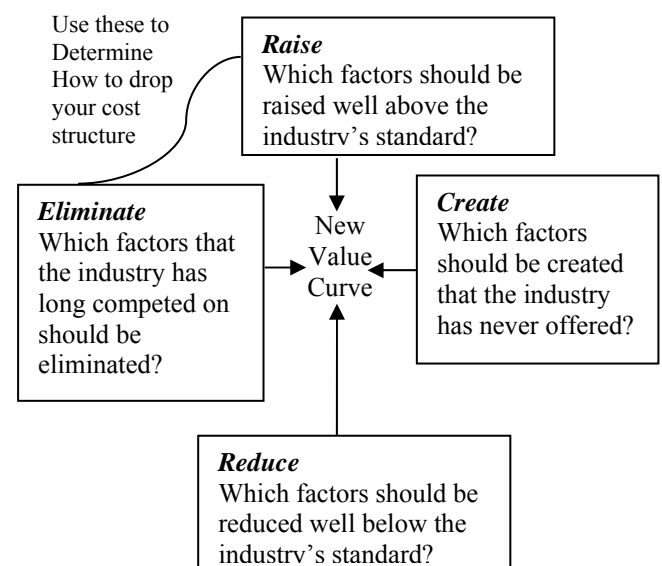
Creative economy focusing on the borderland areas economic activity might well has multiplier effects on the local economy in terms of: potential towards financial success, market development, and last but not least, the increase of income. To put it bluntly, the objective of this research is to create a model for creative economy in the borderlands area focusing on the splint craft industry using the blue ocean marketing strategies. Eventually, implementation of this complementary economic models in the creative craft industry will increase the income of small business communities living in the borderland areas. Directions creative economic development will lead to environmentally friendly industrial patterns and the creation of value-added goods and / or services that originate from the intellect of human resources owned by Indonesia. In the development plan handbook Creative Economy of the Republic of Indonesia, the Indonesian government directives

and a reference for industry players, businessmen, academics and other actors engaged in the creative industries or other related fields. Also, the benchmark of achievement or creative economic development in Indonesia. Here the research framework Creative Economy Development through the Blue Ocean Strategy for small businesses in the District Jagoi Babang Bengkayang.

Blue ocean strategy tools, methodologies and frameworks bring structure to what has historically been an unstructured problem in strategy-informing organizations' ability to create new market spaces systematically. With blue ocean strategy tools and analytics, companies can now pursue and create blue oceans of uncontested market space in an opportunity-maximizing, risk-minimizing way. The best way to beat the competition is to stop trying to beat the competition. Select from the icons below to learn more about the analytic tools of blue ocean strategy:

Four Actions Framework

To break the trade-off between differentiation and low cost and to create a new value curve, there are four key question to challenge an industry's strategic logic and business model



Four actions frameworks to break the trade-off between differentiation and low cost and to create a new value curve, there are four key questions to challenge an industry's strategic logic and business model. This question forces the creative economics to consider eliminating factors that companies in your industry have long competed on. This question forces the creative economics to determine whether products or services have been over designed in the race to match and beat the competition. This question pushes the creative economics to uncover and eliminate the compromises your industry forces customers to make. This question helps the creative economics to discover entirely new sources of value for buyers and to create new demand, and shift the strategic pricing of the industry. Use these to determine how to drop the cost structure. Reduce, which factors should be reduced well below the industry's standard? Eliminate, Which of the factors that the industry takes for granted should be eliminated? Raise, Which factors should be raised well above the industry's standard? Create, Which

factors should be created that the industry has never offered?
A New Value Curve

Besides, as a function of resources on the creative economy that is expected to encourage the participation of the public to contribute directly or indirectly in the development of creative economic activity. No other, it is the realization of a new optimism in facing the future of the country in order to improve the nation's pride as a citizen of Indonesia. The main challenge faced by small businesses is how they can align their activation system - including a network of potential partners - to create a blue ocean strategy sustainable.

The government recognizes that the creative economy is a concrete manifestation in the quest for sustainable development through creativity, as economic climate competitiveness. There is a focus for the development of the creative economy, namely the development of a focus on industry-based: (1) The cultural creative industry, (2) creative industry, and (3) copyright industry. Placing the value curve on the strategy plan is especially important to identify the value curve and the curve value of our competitors, so it will visually detectable the levels of impersonation, and have seen the extent to which our blue ocean turned into a red ocean. Because of the Blue Ocean is always present side by side, the practical realities require businesses to succeed and coping strategies in both of the ocean. However, because many companies are experienced and skilled to compete in the red ocean, then formulate and execute blue ocean strategy becomes more of a priority to undertake systematic efforts and practical as well as competing in the red ocean market. Inevitably, blue ocean strategy is one of the tactics which requires the actors in the creative industries, to continue to win the business competition. In this way, they can continue to create innovative products that will be increasingly loved by the customers. The diversity of products offered even makes the customer in love with the company. From this presentation, we need to realize that there is a complementary relationship between the blue ocean strategies with the development of creative economy.

II. CONCLUSIONS

Development of creative economy through the Blue Ocean strategy, innovators are able to systematically think through ways to create value for their target customers versus the competition. Obviously with each idea generated, more analysis would be necessary to validate whether those specific ideas were valuable to customers but the Blue Ocean Strategy approach provides a fast and analytical approach to ideation and innovation.

creative economy can be used as one of the solutions to the welfare of society as the creative economic system provides an added value to both the industry or human resources. The existence of the creative economy have a positive impact in reducing the unemployment rate and ultimately will increase the level of economic.

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EFFECT OF EMOTIONAL INTELLIGENCE AND OCCUPATIONAL HEALTH ON EMPLOYEE PERFORMANCE

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Abstract. This study aims to analyze the influence of emotional intelligence and occupational health either partially or simultaneously on employee performance. This research is a correlational study. The study population was employees CV. Percetakan Fajar Mojokerto, with a population of as many as 80 employees. The data collection is done by using a questionnaire that had been tested for validity and reliability. The data analysis used regression analysis with SPSS 16 for Windows. Based on the results of the regression analysis, it is known that emotional intelligence and occupational health partial effect on employee performance. And note also that emotional intelligence and health simultaneously influence on employee performance. Emotional intelligence has a dominant influence on employee performance. In this regard then, the company needs to provide additional self-development training, especially for emotional intelligence and maintaining the health of employees in order to improve employee performance and build productivity is good, and for future researchers in order to add variables other than the variables studied in this research so that research results can further enhance this research in order to improve employee performance.

Keywords: Emotional Intelligence, Occupational Health, Employee performance.

I. INTRODUCTION

Human capital is the main very important in an organization. He acted as a subject to be taken by entrepreneurs and corporate leaders. Humans are soulless complex and very complicated to understand because it is very different from machines and other work equipment. Humans have emotions when emotions are drawn to the positive things it will give good results, and vice versa, if the human emotions was drawn to the negative, the results obtained are also bad. This is called emotional intelligence.

Emotional intelligence someone nice will give a good boost to address job it faces, and will give a good productivity for the company. Results of research Fabiola (2005) found that emotional intelligence significantly influence employee performance, it is in line with research conducted by Adji (2012) which found that emotional intelligence has positive influence on employee performance.

Research Jordan, Ashkanasy and Hartel, (2002) found that emotional intelligence has an influence

on performance. High emotional intelligence can affect all aspects of management. Findings Steve (2004) showed that emotional intelligence affects the performance. Human performance is defined as the result of actions to achieve the objectives set by certain standards. This may include the actions or behavior of all mental processes (problem solving, decision making, program planning, reasoning) (Bailey and Robert, 2003). Emotion is an act of psychological powerful that can affect the behavior and performance (Brown et al., 1997).

In addition, labor productivity is also affected by occupational health Anizar (2009: 85) argues that the efforts of occupational health is an attempt harmonization between working capacity, workload and the work environment so that each worker can work in a healthy manner without endangering himself or people around them, in order to obtain optimal productivity. Average health, was referring to freedom from physical or emotional illness (R. Wayne Mondy. 2008: 82). Therefore, health is an important thing for the company to improve employee performance.

To enhance the high performance, required an increase in the optimal working and able to

leverage the potential of human resources owned by the employees in order to create organizational goals, so it will contribute positive for the development of the organization. In addition, organizations need to consider various factors that may affect employee performance.

Based on the above background, the researchers wanted to know how big the influence of emotional intelligence and occupational health on employee performance CV. Percetakan Fajar.

A. Emotional Intelligence

Emotion comes from the Latin "movere" which means moving, move plus the prefix-me to give meaning "moving away", implying that tendency to theactis absolute in emotion. While Wibowo, (2014: 76) argues that emotions in reaction to a complex, patterned, organismic on how we think and do business in the long term to survive and thrive and achieve what we expect for ourselves. Emotional Intelligence is the ability to recognize our own feelings and the feelings of others, the ability to motivate yourself, and the ability to manage emotions well in ourselves and relationships with others (Goleman, 2006: 513). Agustian (2010: 9) says that emotional intelligence is the ability to feel. While Wibowo(2014: 85) says that emotional intelligence is a set of the ability to feel and express emotion in thought, understand and reason with emotion, and connecting emotions in oneself and others. Wibowo (2014: 87) give a sense of emotional intelligence as the ability to organize themselves and interact with others in a mature way and constructive.

From the explanation above researchers can infer emotional intelligence is the ability of individuals to generate and emotions themselves and others and use that emotion to think and act. For further emotional intelligence is in use as a reference instrument making research using instruments developed by (Goleman, 2006) which includes; awareness, self-regulation, motivation, empathy and social skills.

B. Occupational Health

Definition of healthy always described as a state of physical, mental and social person who is not only free from disease or illness, but also demonstrate the ability to interact with the environment and its work. Occupational health is part of health science that aims to make workers to obtain a state of good health physical, mental, and social thus allowing to work optimally Handayani (2010). Meanwhile, according to Mathis and Jackson (2006: 245) occupational health is a condition that refers to the physical, mental and emotional stability in general. Healthy individuals are individuals who are free of disease, injury and mental emotional problems that can interfere with normal human activity in general. Mondy and Noe (2005: 360) argues that health is freedom from physical violence. Health risks are all factors in the work environment that is working beyond the specified time period, the environment stressful emotional or physical disorder.

From the explanation above researchers could conclude occupational health is physiological conditions-physical and

psychological labor caused by the environment labor provided by the company. If a company implement health measures work effectively, then fewer workers who suffer injury or illness short and long term as a result of their work at the company. While the health indicator work used was developed by Swasto (2011: 110) and Dessler (2009: 305) that comprises state, condition of the employee, Leisure, working environment and protection of employees

C. Employee Performance

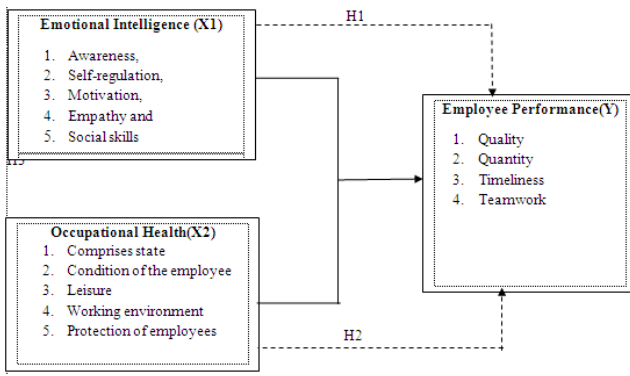
Aida (2004) stated that the performance is the result of work can be achieved by a person or group of people in an organization, in accordance with the authority and responsibilities of each in order to achieve organizational goals. Performance is the success of the personnel, team, or organizational units in realizing the goals of strategic preset with the expected behavior (Mulyadi, 2007: 337). According Nurfitriana (2004), the performance is the result of work that can be achieved by a person or group of people in a organization, in accordance with the authority and responsibilities of each, in order to achieve organizational goals in question legally, does not violate the law, in accordance with moral and ethical. Performance is generated by mobilizing the talent and ability to achieve the goals set earlier. While Purnama (2016) defines performance as the success of efforts to achieve the goal. According Nurfitriana (2004), the performance is the result of work that can be achieved by a person or group of people in an organization, in accordance with the authority and responsibilities of each, in order to achieve objectives. Performance is the appearance did, describe and produce something, both physical and non-physical in accordance with the instructions, functions and duties based on the knowledge, attitude and skills of Martin (2013). Tika (2006: 121) defines performance as the results of job functions / activities of a person or group in an organization that is influenced by various factors to achieve organizational goals within a specific time period.

Of the various opinions on the above it can be concluded that the performance is the result or level the success achieved by the employee in performing a work activity with reference to the tasks to be done. for the next level of success achieved by the employee who was used as the reference for the manufacture of research instruments using the instrument developed by Purnama (2014) and Miner (2004) which includes ;quality, quantity, timeliness and teamwork.

D. Conceptual Framework

The conceptual framework of this research is the result of inference from the generalization to a particular phenomenon, so it can be achieved to explain the various other phenomena of the same. Based on research problems and descriptions of the effect of emotional intelligence on the performance and health of employees. Then it can be used the conceptual framework in Figure 1 below.

Fig.1 Conceptual Framework



Source: from the various theories

Description:

- - - > (X1 / X2) Influential partially on (Y)
- (X1 and X2) Influential simultaneous to (Y)

II. METHOD

Accordance with its objectives, this study was designed as a correlation study. The results obtained in this study is expected to provide an explanation of how the influence of emotional intelligence and health affect the performance. Total population in the study all employees CV. Percetakan Fajar Mojokerto number of 80 employees.

The data was collected using a questionnaire that had been tested for validity and reliability. The data analysis used regression analysis with SPSS 16 for Windows.

III. RESULT AND DISCUSSION

A. Results

1. Results Test Validity

Test validity of the instrument was given to 80 respondents, and the results were analyzed using correlation product moment person. The results were compared with r table at significant level of 5% with $n = 80$, and is known to $r_{table} = 0.220$, validity test results can be seen in table 1 below.

Table 1. Summary of Research Instruments Test Validity

Variabel	Item	Validitas		Clarification
		r Test	r Tabel	
Emotional Intelligence (X1)	X1.1	0.792	0.220	Valid
	X1.2	0.543	0.220	Valid
	X1.3	0.664	0.220	Valid
	X1.4	0.662	0.220	Valid
	X1.5	0.464	0.220	Valid
	X1.6	0.345	0.220	Valid
	X1.7	0.711	0.220	Valid
	X1.8	0.750	0.220	Valid
	X1.9	0.598	0.220	Valid
	X1.10	0.519	0.220	Valid

Occupational Health (X2)	X1.11	0.695	0.220	Valid
	X1.12	0.563	0.220	Valid
	X1.13	0.508	0.220	Valid
	X1.14	0.622	0.220	Valid
	X1.15	0.455	0.220	Valid
	X1.16	0.269	0.220	Valid
	X1.17	0.701	0.220	Valid
	X1.18	0.515	0.220	Valid
	X1.19	0.550	0.220	Valid
	X1.20	0.646	0.220	Valid
	X2.1	0.599	0.220	Valid
	X2.2	0.460	0.220	Valid
X2.3	0.465	0.220	Valid	
X2.4	0.350	0.220	Valid	
X2.5	0.482	0.220	Valid	
X2.6	0.514	0.220	Valid	
X2.7	0.643	0.220	Valid	
X2.8	0.605	0.220	Valid	
X2.9	0.413	0.220	Valid	
X2.10	0.570	0.220	Valid	
X2.11	0.610	0.220	Valid	
X2.12	0.517	0.220	Valid	
X2.13	0.634	0.220	Valid	
X2.14	0.525	0.220	Valid	
X2.15	0.463	0.220	Valid	
X2.16	0.644	0.220	Valid	
Employee Performance (Y)	Y.1	0.570	0.220	Valid
	Y.2	0.449	0.220	Valid
	Y.3	0.297	0.220	Valid
	Y.4	0.483	0.220	Valid
	Y.5	0.233	0.220	Valid
	Y.6	0.427	0.220	Valid
	Y.7	0.586	0.220	Valid
	Y.8	0.666	0.220	Valid
	Y.9	0.561	0.220	Valid
	Y.10	0.543	0.220	Valid
	Y.11	0.414	0.220	Valid
	Y.12	0.428	0.220	Valid
	Y.13	0.687	0.220	Valid
	Y.14	0.267	0.220	Valid

Source: primary data were processed

From table 1, shows the results r test of the all item questionnaire on emotional intelligence variables, occupational health and employee performance has a value greater than $r_{table} = 0.220$. Thus the entire item questionnaire for the variables emotional intelligence, occupational health and employee performance are considered valid as a measuring tool and can be used to obtain the necessary data in this study

2. Results Test Reliability

After the validity test is passed with the reliability test to determine the extent of research instruments reliable. The criterion is if the correlation results alpha greater than 0,600, the instrument can be said to be reliable. Results summary of test reliability can be seen in table 2 below:

Table 2. Summary of Test Reliability Questionnaire

Variabel	Alpha Cronbach's	Cronbach's Alpha based on standardized	Clarification
Emotional Intelligence	0,747	0,600	Reliabel
Occupational Health	0,736	0,600	Reliabel
Employee Performance	0,713	0,600	Reliabel

Source: primary data were processed

From table 2 shows the reliability value of Alpha Cronbach's variable emotional intelligence, occupational health and employee performance has a value greater than $r_{table} = 0.600$. Thus the entire item questionnaire on emotional intelligence variables, occupational health and employee performance are considered reliable. "Reliabilities less than .60 are Generally Considered to be poor, Reviews those in the .7 range, to be acceptable, and Reviews those over .8 to be good "or" alpha values lower than 0.60 is generally said reliability is low, the alpha value ranging from 0.7 is said to be acceptable, and alpha value greater than 0.80 is said to be good "(Sekaran, 2000: 287).

3. Results of Regression Testing

Based on calculations using analysis program regression between the variables of the emotional intelligence (X1) and occupational health (X2) together to variable Y (the employee's performance), performed using SPSS 16 for windows and can be seen in table 3 as follows:

Table 3. Results Regression test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.492 ^a	.351	.129	5.750	.351	6.856	2	77	.002

a. Predictors: (Constant), EMOTIONAL INTELLIGENCE, OCCUPATIONAL HEALTH

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.492 ^a	.351	.129	5.750	.351	6.856	2	77	.002

b. Dependent Variable: EMPLOYEE PERFORMANCE

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	32.927	7.991		4.121	.000
	EMOTIONAL INTELLIGENCE	.262	.073	.382	.527	.001
	OCCUPATIONAL HEALTH	.230	.095	.236	.335	.004

a. Dependent Variable: EMPLOYEE PERFORMANCE

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	453.313	2	226.656	6.856	.002 ^a
	Residual	2545.487	77	33.058		
	Total	2998.800	79			

a. Predictors: (Constant), EMOTIONAL INTELLIGENCE, OCCUPATIONAL HEALTH
b. Dependent Variable: EMPLOYEE PERFORMANCE

B. Discussion

1. Effect of emotional intelligence on employee performance

From table 3, it can be explained that the correlation coefficient (r_{xy}) = 0.487 and $t = 3.709$ with a probability value of 0.000 and compared with r_{table} at significant level of 5% with $n = 80$ is 0.220 so the unknown $r_{test} 0.487 > r_{table} 0.220$. $valuet_{test} 3,709 > t_{table} 1,991$ and significant value. (2-tailed) is smaller than the level of significant ($\alpha = 0.05$), so the correlation coefficient X1 (emotional intelligence) with a variable Y (performance) is significant. Thus the conclusion is that the test results and regression analysis were performed using SPSS 16 for windows shows that emotional intelligence affect positive significant to employee performance.

This finding shows that the results are in line with what was expressed by Daniel Goleman, a psychologist famous, in his book once said that to achieve success in the world of work that is needed is emotional intelligence (Goleman, 2000). Daughter (2012) argues that emotional intelligence is the ability in the field of emotions is the ability to face frustration, the ability to control emotions, the spirit of optimism and the ability to establish relationships with others or empathy. This is the kind described Fabiola (2005) that the use of emotion that will effectively reach the goal in building productive relationships in the workplace success. Performance is not only seen by intellectual factors but also determined by his emotions. Someone who can control his emotions well it will be able to produce a good performance. This is consistent with that disclosed by Meyer (2002) that emotional intelligence is a factor that is as important as the combination of technical and analytical skills to produce optimal performance. One aspect of emotional intelligence is the

motivation. Goleman (2000) as described previously, to motivate yourself is the foundation of success and realization of high performance in all areas. That stance is in line with research conducted by Agustian (2001), based on research and experience in advancing the company argued that the existence of good emotional intelligence will allow an employee to show performance and works better. Other studies that have been done by Fabiola (2005) against some of the research subjects in some companies the results obtained showed that employees who score high emotional intelligence will yield better performance that can be seen from how the quality and quantity of a given employee to company. Chermis also revealed that although someone has a good performance but if he has qualities that are closed and do not interact with others as well, the performance will not be able to develop.

2. Effect of health on employee performance

From Table 3, it can be explained that the coefficient of correlation (r_{xy}) = 0.389 and $t = 3,193$ with a probability value of 0.004 and compared with t_{table} at significant level of 5% with $n = 80$ is 0.220 so the unknown r test $0.389 > r_{table}$ 0.220. $t_{test} 3,193 > t_{table}$ 1,991 and significant value. (2-tailed) is smaller than the level of significant ($\alpha = 0.05$), so the correlation coefficient X2 (health) with a variable Y (performance) is significant. Thus the conclusion is that the test results and regression analysis were performed using SPSS 16 for windows indicate that occupational health effect positive significant to employee performance.

This finding shows that the results are in line with what is expressed by Saputro (2008) which says that health work had a positive influence on job performance and Sudarmanta (2007) states that occupational health has a significant impact on work performance. Most people already have the drive to finish the job properly. Excitement in the work can increase production, enhance the quality of work. Most employees work very well judge the health of which can be seen from the good administration of the attention to health periodically, so ensuring the health of employees and health facilities are complete. Occupational health for employees is an objective to be achieved by the company to support the work of employees. Knowledge of occupational health will

be achieved well advanced and realistic is a very important factor in providing the excitement in the work (Ranupandojo and Husnan, 1998). A new paradigm in health aspect to strive for a healthy stay healthy and not just cure, treat or cure health problems or diseases. Therefore, the main concern in the health sector is more geared towards the prevention of the possibility of disease and maintenance of health as optimally as possible.

3. Effect of emotional intelligence and occupational health on employee performance

From Table 3, it is explained that the correlation coefficient (r_{xy}) = 0.489 are compared with the r_{table} the significant level of 5% with $n = 80$ is 0.220 so the unknown count $0.492 > r_{table}$ 0.220. With a probability value of 0.002, so the $F_{test} 6856 > F_{table}$ 3.12 and the Sig. (2-tailed) is smaller than the level of significant ($\alpha = 0,05$), so that the correlation coefficient X1 and X2 with Y is a significant variable. It can be concluded that the test results and regression analysis were performed using SPSS 16 for windows shows that emotional intelligence and health simultaneously affect positive significant to employee performance.

This finding shows that the results are in line with what is expressed by Goleman (2000) to achieve success in the world of work that is needed is emotional intelligence. Fabiola ((2005) that the use of emotion that will effectively reach the goal in building a productive relationship in the success of work. In particular employees need a high emotional intelligence because in the work environment employees will interact with people both inside and outside the workplace, emotional intelligence plays an important role in shaping the moral discipline of employees. In the world of work, problems and challenges that must be faced, such as intense competition. The demands of the task, working atmosphere uncomfortable and relationship problems with other people. The problems in the world of work the employee is not a things that require only intellectual ability, but in solving these problems the ability of emotion or emotional intelligence much more is needed. If an employee can resolve the problems in the world of work with stable emotions it will produce a better performance as well. In other words, the more good emotional condition of an employee, then the performance they will produce will be the better.

So is related to occupational health research conducted Sudarmanta (2007) that health has a significant impact on work performance; and Kriscawati (2007) if the occupational health well-managed by the company will increase employee performance. Physical fitness and spiritual is a supporting factor for employment. Mental conditions greatly affect a person's work performance (Ranupandojo and Husnan, 1998). Employee health can be observed from the good administration of periodic health concern both for their employees according to occupational disease prevention with periodic checks, it is the guarantee of health reasons when employees are sick do not need to go through a health insurance so the process is not too long. In addition, health facilities provided are complete as toilets were kept clean. From these things it is obtained that the health of employees so well that affect employee performance. Then found that there are positive and significant influence of health on work performance.

4. Effect of the dominant emotional intelligence and occupational health on employee performance

Based on Table 3 above, the value of ttest X1 (emotional intelligence) of 3,709 and X2 (occupational health) of 3,193. Thus the conclusion is that the test results and regression analysis were performed using SPSS 16 for windows indicate that that emotional intelligence has a dominant influence on employee performance.

This is consistent with that expressed by Meyer (2002) that emotional intelligence is a factor that is as important with a combination of technical and analytical skills to produce optimal performance. One aspect of emotional intelligence is the motivation. Goleman (2000) as described previously, to motivate yourself is the foundation of success and realization of high performance in all areas. Emotional intelligence is very important because you have emotional intelligence greatly affect the success and happiness of your life. Emotional intelligence helps you create stronger relationships, success in the workplace or in personal life. For people who know the importance of emotional intelligence they will try to further improve emotional intelligence than others. This is because a person's success depends heavily on the ability to read the signals or the situations of others and the ability to put yourself

all of which lie in the emotional intelligence of a person.

Hence the importance of emotional intelligence, increase emotional intelligence your absolute need for emotional intelligence mature will make you become more understanding, empathy, and being able to negotiate with others. Otherwise success will elude you well in careers and personal lives.

A study conducted on graduates of Harvard University both graduates of business, law, medicine and teaching show a correlation of zero or negatif between indicators of intelligence (score of entrance examination) with success next career, This shows the importance of emotional intelligence as intelligence quotient alone can not guarantee a person's success in the future. It is precisely the person who has the higher the emotional intelligence to achieve success in the future. Emotional intelligence is very important for you and your future. The importance of emotional intelligence else for you, among other influences: physical health If you can not control and manage emotions can result in you feeling depressed and stressed. If you can not manage your stress, can cause serious problems. Stress uncontrolled can increase blood pressure, suppress the immune system, increasing the risk of heart attack and stroke, as well as contributing to infertility and accelerate the aging process and can eventually increase the performance, has a high emotional intelligence can help you overcome the social complexity in the workplace, lead and motivate others and excel in a career.

IV. CONCLUSIONS AND SUGGESTION

A. Conclusions

Based on the results of research on emotional intelligence and health effects of work the employee performance can be summarized as follows. First, there is a significant positive effect on the emotional intelligence employee performance. Secondly, there is a significant positive effect on the occupational health employee performance. Third, there is a positive effect of emotional intelligence and occupational health simultaneously significant effect on employee performance. And the fourth, between Emotional Intelligence and occupational health that have a more dominant influence on employee performance is variable Emotional Intelligence.

B. Suggestion

In connection with the conclusion that there, below are given some suggestions in an effort to repair and as consideration for employees and the company, saran-

suggestions submitted are as follows: Based on the study conducted shows that emotional intelligence affects the performance of employees. First, the company was expected to have to provide additional training, particularly training on self-development that aims to improve employee performance. As teaches employees to express their feelings in everyday communication is lacking free and fair and be able to recognize these feelings, such as happy or angry. Second, that the health-related impact on employee performance. Companies must maintain health programs that have been implemented over the years, so that the employee's performance remains at a high level. And third, for the next researcher who intend to continue this research is expected to improve it is to use your other variables besides variable emotional intelligence and health that affect employee performance.

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EFFECT OF WORK MOTIVATION AND JOB SATISFICATION OF MARKETING RESEARCH PART PERFORMANCE OF EMPLOYEES IN PT.DECKA MARKETING

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Abstract. This study aims to identify and prove the existence of influence simultaneously and partially motivation and job satisfaction to employees performance in PT. Deka Marketing Research. This study took 84 sampling through techniques total study population, and the data collected through questionnaires in the form of *Likert* scale. Hypothesis test results show the value of $R^2 = 0.933$ coefficient of determination shows two independent variables (motivation and job satisfaction) capable of providing effective contribution to the employee's performance of 93.3%. Value $F = 560.277$; on $DF_2 = 81$ (k_2) values obtained $F_{table} = 14.57$; and $p = 0.000$ ($p < 0.01$) showed that the two independent variables (motivation and job satisfaction) together provide a very significant influence on employee performance variables. The influence of work motivation on the performance values obtained $t = 11,176$; $r = 0.322$; and $p = 0.000$ ($p < 0.01$), which means work motivation significantly influence the performance marketing. Job satisfaction on the performance values obtained $t = 3.327$; $r = 0.096$; and $p = 0.001$ ($p < 0.01$), which means job satisfaction have a significant effect on the performance marketing.

Keywords: work motivation, job satisfaction, performance marketing

I. INTRODUCTION

PT. DEKA Marketing Research is a company engaged in the field of surveying services established since 1993 are taking manpower or human resources from various universities, especially be true of employees of Marketing Research seeks to evaluate the performance of employees to achieve its targets first determine the level of employee turnover that occurs every year. In issues reviewed during this, an increase in turnover or turnover annually, it causes damage to the company of replacing employees and employees' social disorders that occur therein.

In addition, to be able to follow all the existing development and the achievement of a company then needs to be a motivation so that employees are able to work well, and one motivation is to fulfill the wishes of employees include: salary or wages were good, jobs safe, conducive working atmosphere, an appreciation of the work performed, led a fair and wise, directives and orders were reasonable, organization or workplace respected community or by seeking the incentives, which amount is proportional and also is progressive, which means in accordance with a career path, because the incentives are needed to spur the performance of the employees in order to always be at the highest level (optimal) according to their respective capabilities.

Giving motivation to work is expected to improve the performance of employees of companies that can be seen from the aspects or dimensions of job satisfaction, organizational culture and leadership that was obtained. It is expected to create the work in quality and quantity achieved

by the employee in performing their duties in accordance with the responsibilities assigned to him that will affect the performance.

In addition, each member of an organization has its own interests and goals when he joined the organization. For some employees, job satisfaction is an individual thing. Each individual will have a level of satisfaction varies according to the system of values prevailing in him. This is due to the differences in each individual. The more aspects of the work in accordance with the wishes of individuals, the higher the perceived level of satisfaction, and vice versa. Satisfaction is actually a state of nature is the result of subjective conclusions based on a comparison of what is received by an employee from work compared with the expected, desired, and thinking as the proper thing or entitled to it. While every employee or an employee subjectively determine how the work was satisfactory.

Employee satisfaction is heavily influenced by the attitude of the leadership in the leadership. Leadership participation gives job satisfaction for employees, for employees to participate actively in giving its opinion to determine the discretion of the company. Authoritarian leadership lead to employee dissatisfaction. Job satisfaction is a key driver of employee morale, discipline and employees' performance in supporting the realization of the company's goals.

Put simply illustrated that a good performance will produce a reward, which in turn will lead to satisfaction, this formula states that the cause of performance satisfaction through intermediate variables that reward. It can be said that between motivation and performance and between job satisfaction and performance, then to be able to carry out its duties and functions as well as possible is needed so that the good performance of the creation of good work as well for

the company. Of a good performance, employees can increase sales that may exceed the target. Of the sales results have exceeded the target of making the employees get incentive from the sale of which made him feel satisfied in their work. So their incentives to encourage employees who satisfy the employee's performance is increasing.

Based on the exposure that has been described, it can be explained that the performance and behavior is the result of work produced by an employee in accordance with its role in the organization in a given period. The performance of good employees is one very important factor in the effort to increase productivity. Therefore, it is one of the best ways to improve employee performance is to improve work motivation, job satisfaction and work for the achievement of each employee for the employee to further enhance its performance, so performance is increased and the company is able to produce competitive products.

A. Work Motivation

Generally work motivation is defined as a series of energizing forces that originate from both within and beyond an individual's self. Reviews These forces initiate work-related behavior and Determine the nature, direction, intensity and the duration of the individual's behavior. In an enterprise, the purpose of motivation for employees is very diverse, namely: (a) encouraging the passion and employee morale; (B) improve the morale den employee job satisfaction; (C) increase productivity; (D) maintain the loyalty den stability of the company's employees; (E) improve discipline and lower levels of absenteeism; (F) effective procurement employees; (G) create an atmosphere and a good working relationship; (H) promote creativity and participation, employees; (I) improve the welfare of employees; (J) enhance the sense of responsibility of employees towards their duties; (K) improve the efficiency of use of tools and raw materials [1].

Siagian defines motivation to work as "the impetus for people to contribute as much as possible for the organization's success in achieving its objectives". Stoner (1996) suggested that motivation is the human psychological characteristics which contribute to the person's level of commitment. This includes factors that cause, distribute, and maintain people behavior in the direction of a certain determination. Motivation is the management process to influence human behavior based on knowledge about "what makes people moved" [2].

there are two main concepts that must be considered in determining the motivation theory, namely: (1) The difference between the stimulus and the reason. That a reason (or directional) be able to consider internal style or need something that can generate external behavior. In addition to the stimulus, on the other hand is something beyond the individual and feels can be used as some excuse to do something, (2) There is a distinction between the kind of reason as the driving force. The reason can be divided into major and psychological needs or psychological and social needs or secondary.

According to Litwin & Feather the motivation to work is a term used in the field of behavioral science learning within the organization to explain the power contained in a person who is causing the level, direction, and persistence of the

efforts undertaken in terms of working , In connection with this characteristic (antecedent) work motivation refers to motivation process can be measured through indicators, including:

- a. Employees have the self-confidence, that their self-confidence in the capability to work independently, be optimistic and dynamic, and has the ability to self-regulate.
- b. Employees have originality, namely the ability to create new things, creative and proficient in many fields and have considerable knowledge and experience.
- c. Direct the behavior of the task oriented, the ability to analyze the events that will happen rationally based on the information or facts that support it.
- d. Employees have the risk taking, which is the ability to take risks for the things he was doing, and if they fail will blame others but always introspection against obstacles to achieve his goal.
- e. Goal orientation, is a standard in measuring the success of a person's abilities and thus provide confidence and motivation to attribution and affection. Goal orientation is set inclination or intention of behavior that determine how a person approaches and carry out an activity. [3]

B. Job Satisfaction

According Wexley and Yukl called job satisfaction is "is the way an employee feels about his her job, with the lines" positive emotional state " [4]. According to Locke, job satisfaction is something unpleasant emotional state or positive as a result of a person's work experience or judgment [5]. Job satisfaction appears on a person's perception of how well the job of giving something meaningful.

Dole and Schroeder said that job satisfaction can be defined as the feelings and reactions of individuals to the work environment, and Locke, job satisfaction is excitement or a statement of positive emotions result of wrong judgment one job or work experience [5], [6]. job satisfaction may be as pleasurable as positive emotional state the resulting from the appraisal of one's job or job experiences, state the resulting from the appraisal of one's job or job experiences , which means that job satisfaction is a positive emotional state can delight oneself or as a result of the outcome or assessment of one's work or during work experience [5].

The job satisfaction stems from various aspects, which, according to Porter, which states that a person's job satisfaction by calculating the difference between what should have been the perceived reality. Locke, explains that job satisfaction depends on the discrepancy between the person should be (expectation, needs or values) with what he feels or his perception has been obtained or achieved through work. Thus, people will feel satisfied when there is no difference between the desired perception of reality, because the desired minimum limit has been met. If obtained was greater than desired, then people will be more satisfied again despite the discrepancy, but it is a positive discrepancy. Instead the further fact that it is felt below the

minimum standard so that it becomes negative discrepancy, then the greater the dissatisfaction with one's job [4].

Robbins states that measuring job satisfaction can be done using beberapa approach, namely Single global rating method (SGRM) which measures the attitudes of employees to their work, and the summation score method (SCM), which measures about the introduction of work tasks and workloads, environment labor, supervisory relationships, career promotion opportunities, and relationships with labor relations [5].

Wood, Wallace and Zeffani states that the measurement of job satisfaction can use the method NSQ (Porter Need Satisfaction Questionnaire) and the success of the work on the wages or PSQ (Pay satisfaction Questionnaire). In this study measure job satisfaction refers to the model of summation score method (SCM), which took indicator of Robbins that has been adapted to the subject and research area, which includes the following indicators:

- a. Characteristics of work that is mentally challenging.
Most employees love the jobs that gave them the opportunity to use their skills and abilities and offers duty, freedom and feedback about how well they work. These characteristics make the work of mentally challenged.
- b. The reward is worth, the employees want the wage system and promotion policy they perceived as fair, and in line with their expectations.
- c. The working conditions are supportive, caring employees will better working environment for personal comfort and to ease the task. Studies demonstrate that employees prefer physical circumstances that are not harmful or troublesome.
- d. Coworker support, people are getting more than just money or tangible accomplishment of the work. For most employees, the work also fill a social need.
- e. Conformity personality to the job, in essence personality type of people who are congruent (congruent) with the work they choose should find that they have the talent and the right skills to meet the demands of their jobs. [5]

C. Performance Marketing

Stoner stated that performance is a function of motivation, skills, and perception of the role. Bernardin and Russel defines performance as the recording of the results obtained from job functions or activities for a certain period [7]. Bacal stated that performance as an organization's process to evaluate or assess the performance of employees [8], while Suntoro suggests that the performance is the result of work that can be accomplished person or group of people within an organization in order to achieve organizational goals within a specific time period [7].

Helfert explains that the performance (performance) is the result of many individual decisions are made constantly by management. Performance or performance generally be defined as a person's success in carrying out the tasks or jobs assigned to him. By As'ad was a success full role performance achievement obtained by a person or group of actions. This means that the higher the quality and quantity

of the work of employees, the higher the performance. So therefore, the performance was the quality and quantity of work that can be completed by the employee [4].

Anastasi states that the performance is the result of one's productivity on the job responsibilities in an organization where the person works [9]. Bernardin and Russel provides a definition of performance as is "performance is defined as the record of the outcome produced on a specified job function or activity during a specified time period, the performance is defined as a record of the results obtained through specific job functions or activities for a certain time temprary [7].

Muchinsky defines the performance is a systematic review of an individual employee's performance on the job which is used to Evaluate the effectiveness of his or her work ", which is a systematic review of the results of the work of individual employees in a job that is used to evaluate the effectiveness of the work [4].

Bernardin and Russel suggests some aspects of employee performance measurement as follows.

- a. Quality, is the result of hard work of the employees in accordance with the goals set by the company earlier.
- b. Quantity, is the result of the hard work of employees can achieve maximum scale that has ditentpkan by the company, with the result that has been set by the company, the performance of the employees is good.
- c. Timeliness is the ability of employees to work on the working time standards set by the company, by working in accordance with the standards specified time then the performance of the employee is good.
- d. Cost effectiveness, the use of employee resources efficiently and afeketif that can affect the cost savings incurred by the company and generate maximum profit.
- e. Need for Supervision, an employee's ability to work well without supervision from the company.
- f. Interpersonal impact, namely employees who have high self-esteem to their work so that employees strive to achieve the best results in doing the job. [10]

II. METHOD

A. Subject Research

Ghazali states the population is generalization region consisting of objects or subjects that have certain qualities and characteristics defined by the researchers to learn and then drawn conclusions [11]. The population in this study were employees of PT. Deka Marketing Research for East Java. Taking into consideration the number of members of the population, the sampling in this study digunakan total study population, which took up the entire members of the population, ie 84 employees as research subjects [12].

B. Taking Sampling

Primary data, is data obtained directly by observation and data gathered through observation on the activity of the employee during the research process is used as a reference for determining the subject matter, as well as determine the independent variables. Data collection techniques in this

study using a questionnaire. Questionnaires are a number of written questions that are used to obtain information on the subject in terms of a report on his personal or things known [12], [13]. This method is used to collect data as motivation, incentives, and performance measurement of employees.

C. Data Analysis

Proving the hypothesis is done by using a statistical test. The steps are performed using multiple regression analysis. Before the test the first hypothesis test results need to be presented regression equation as follows.

$$Y = -17,331 + \beta_1 x_1 (1446) + \beta_2 x_2 (0.391) + e (5\%)$$

Y has a constant value negative can be said that the performance appraisal with the motivation and job satisfaction in an error rate of 5% has a coefficient that turned, that is, when motivation and job satisfaction increases, the performance will be followed by a decline at the same rate. Value β_1 (x_1) shows that any increase in the motivation to work for 0,1,446 it will be followed by a decline in performance to the same degree. Likewise with β_2 (x_2) of 0.391 indicates that if increases job satisfaction, it will be followed by a decline in performance at the same rate. It can be said that the increase motivation and job satisfaction of employees of marketing is not always followed by an increase in performance.

III. RESULT AND DISCUSSION

Results of hypothesis testing together (simultaneously), the hypothesis that there is influence of motivation and job satisfaction on employee performance can be seen as follows.

Table 1

Simultaneous Hypothesis Test Results Summary

	R ²	F	df2	P
Var X1 and X2 to Y1	0,933	560,277	81	0,000

- R² value of 0.933 indicates the coefficient of determination two independent variables (motivation and job satisfaction) capable of providing effective contribution to the employee's performance of 93.3%.
- F value of 560.277; on DF2 = 81 (k2) values obtained $F_{table} = p = 0.000$ ($p < 0.01$) showed that the two independent variables (motivation and job satisfaction) together provide a very significant influence on employee performance variables. It can be said that the hypothesis that there is influence of simultaneous motivation and job satisfaction on employee performance is acceptable.

The results of partial hypothesis testing as foll

Table 2

Partial Summary Hypothesis Test Results

	B	t	part	p
(Constant)	-17.331	-2.314		.023
Job motivation	1.446	11.176	.322	.000
Job satisfaction	.391	3.327	.096	.001

Partial results of hypothesis testing shows job motivation obtain the value $t = 11.176$, $p = 0.000$ ($p < 0.05$), which means no work motivation influence on the performance marketing, with a correlation coefficient of 32.2%.

The results of partial hypothesis testing on job satisfaction variable values obtained $t = 3.327$, and $p = 0.001$ ($p < 0.05$), proving that affect job satisfaction to employee performance marketing, with a correlation coefficient of 9.6%. It can be said that the two variables (motivation and job satisfaction) partially affect the performance of employees, and variable work motivation to become the dominating factor employee performance marketing.

From the results of testing the hypothesis, known work motivation positive influence on employee performance. This shows that the higher the motivation felt by the employee, then the employee's performance will increase or vice versa, the lower the motivation to work, the lower the performance of employees. It can be caused that the indicators work performed by the employee gives employees the opportunity to learn about what he would do. Work performed by the employee has the necessary expertise to do so, because every employee is not necessarily to master a wide range of expertise, learning about what should be done to improve the performance of employees itself.

It can be said that the company has also been running a social function internally and externally to ensure the welfare of its members also have an impact on the company's survival. To be able to compete with other similar industries, the company must have a competitive advantage that is very hard to duplicate, will only be obtained from employees productive, innovative, creative, always eager and loyal. Employees who meet the criteria as it would only be acquired through the application of concepts and techniques of human resource management right with high morale and effective leader and a supportive working environment. Factors that can be used to improve employee performance, including motivation and job satisfaction, (Robbins, 2003).

This means that any activity undertaken by a person driven by a power that is in the person, the driving force is called motivation. Motivation of employees in an organization can be considered simple and can also be a complex problem, because humans are basically easy to be motivated to give what is his desire. Problems employee motivation can be difficult to determine what remuneration which are considered important for a person because of something important for someone is not necessarily essential for others.

When a person is motivated, he will try to do my best to realize what he wanted. But not necessarily a strong effort that will produce the expected productivity, if not channeled in the desired direction organization PT. Deka Marketing Research for East Java. That is the element of necessity means an internal state that causes certain results seem interesting. An unsatisfied need creates tension which stimulates impulses within the individual. This encouragement led to a search behavior to find certain goals which, if achieved will meet those needs and to encourage the reduction of stress.

PT. Deka Marketing Research is ready to compete so we need to have effective management. In addition to

motivation, to improve the performance of employees in effective management requires the support personnel who are knowledgeable and competent in their field. On the other side of coaching employees including those that should be prioritized as the main asset of the company. The learning process should be a corporate culture so that the skills of the employees can be maintained, even increased. In this case the competent employee loyalty must be considered, One of the factors that influence employee loyalty is employee satisfaction. Job satisfaction (job satisfaction) is an emotional state employee who happened or did not happen the intersection of the value of fringe benefits for employees and the company or organization to the level of the value of fringe benefits that are desired by the employee.

IV. CONCLUSIONS

Based on the analysis of evidence put forward hypotheses and discussion it can be concluded as follows.

- a. There is a simultaneous effect of motivation and job satisfaction to employee performance, as evidenced by F value of 560.277; and $p = 0.000$ ($p < 0.01$) showed that the two independent variables (motivation and job satisfaction) together provide a very significant influence on employee performance variables. R² value of 0.933 indicates the coefficient of determination two independent variables (motivation and job satisfaction) are able to contribute more effectively to the performance of employees of PT. Deka Marketing Research by 93.3%.
- b. Partial results of hypothesis testing shows job motivation obtain the value $t = 11.176$, $p = 0.000$ ($p < 0.05$), which means no work motivation influence on the performance marketing, with a correlation coefficient of 32.2%. It can be argued that employee motivation is able to give effect to the performance or achievements of employee performance in PT. Deka Marketing Research.
- c. The results of partial hypothesis testing on job satisfaction variable values obtained $t = 3.327$, and $p = 0.001$ ($p < 0.05$), proving that affect job satisfaction to employee performance marketing, with a correlation coefficient of 9.6%. It can be said that the job satisfaction of employees were able to give effect to the results performance or achievements of employees at PT. Deka Marketing Research.
- d. It can be said that the two variables (motivation and job satisfaction) partially affect the performance of employees, and variable work motivation to become the dominating factor employee performance marketing.

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FINANCIAL RATIO ANALYSIS FOR EVALUATION THE HEALTH AND DEVELOPMENT OF THE BUSINESS OF PEGADAIAN SYARI'AH (PERSERO) BRANCH SEI PANAS BATAM

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Abstract. The development of the financial position has particular significance for the company. To see whether or not a company's healthy not only be judged on his physical state. The most important factor to be able to see the development of a company lies in the financial element. One of the tools used to determine a company's financial condition can be either the financial statements. Pawnshop and PT (Persero) as one of the State Owned Enterprises also need to know their financial condition to determine the company's financial performance over the years. Based on the Decree of the Minister for State Owned Enterprises No. KEP-100 / MBU / 2002 regarding the rating of the State-Owned Enterprises, performance assessment SOEs in financial aspect is done by looking at some ratios. The ratio is the ratio of liquidity, solvency, activities and provitabilitas. The results of this study are Pawnshops financial performance of Sharia (Persero) Branch Sei Panas in 2011 to 2015 had an average healthy condition with category A. This is shown by the average assessment of financial performance obtained a value of 50.6 , This value is greater than the minimum limit of 45.5 healthy company that the first hypothesis which states that the level of financial health Pawn Shari'ah (Persero) Branch Sei Panas during the study period in compliance with the accepted classification healthy. The achievement of economic profitability from 2011 until 2015 tended to decrease, this is shown from the analysis results obtained berkoefisien negatife trend, amounting -3.60323 so that the second hypothesis which states that the pawnshop business development of Sharia (Persero) Branch Sei Panas during the study period increased rejected.

Keywords: Financial Performance, ROE, ROI, Current Ratio, Cash Ratio, TATO, Period Billing, Inventory Turnover, Total Equity to Total Assets

I. INTRODUCTION

PT. Pegadaian (Persero) is a State-Owned Enterprises (SOEs) which is engaged in the provision of cash loans, based on the law of pledge (Civil Code Article 1150 to 1160, Pandhuise No. 81/1982 and Government Regulation No. 10 of 1990) with nature typical of providing services for general use and at the same time fostering a profit based on the principles of business management.

The development of syariah-based products increasingly prevalent in Indonesia, including pawnshops. Provision of loan money is done in a way that is easy, fast, secure and cost-effective so as not to burden to people who apply for a loan and do not cause new problems for the borrower after receiving loans from pawnshops. Pawnshops issued a sharia-based product called Pegadaian Syariah. Basically, sharia-based products have characteristics such as not picking up the interest in various forms for usury, define money as a medium of exchange rather than as a tradable commodity, and do business to obtain a reward for service or profit sharing. Pegadaian Syariah, or known as Rahn, the operation is Mudharobah (profit sharing).

The concept of operation of the Pegadaian Syariah refers to a modern administrative system, namely the principles of rationality, efficiency and effectiveness that have been harmonized with Islamic values. Operating functions of Pegadaian Syariah itself is run by the offices of Pegadaian Syariah Branch / Sharia Pledge Service Unit (SPSU) as an organizational unit under the guidance of Other Business Division of Perum Pegadaian. SPSU is an independent business unit management of which is structurally separate from conventional pawning business. Pegadaian Syariah was first established in Jakarta under the name of Sharia Pawn Service Unit (SPSU) Branch Dewi Sartika in January 2003. SPSU establishment in Surabaya, Makassar, Semarang, Surakarta and Yogyakarta was followed later in the same year until September 2003. Still in the same year, four Pawnshop Branch Office in Aceh is converted to the Sharia Pawnshop.

PT. Pegadaian (Persero) is a State-Owned Enterprises (SOEs) which is engaged in the provision of cash loans, based on the law of pledge (Civil Code Article 1150 to 1160, Pandhuise No. 81/1982 and Government Regulation No. 10 of 1990) with nature typical of providing services for general use and at the same time fostering a profit based on the principles of business management

Thus, in addition to used to be a source of information, financial statements are analyzed using financial ratios, namely *Return on Equity*, *Retrun on Investment*, *Cash Ratio*, *Current Ratio*, *Collection Periods*, *Inventory Turnover*, *Total Assets Turnover*, *ratio of TMS to TA*. This is in accordance with the Decree of the Minister of State-Owned Enterprises No. KEP-100 / MBU / 2002.

Based on the background and the identification of problems that have been raised, then this study can be formulated as follows:

1. Do Pegadaian Shari'ah (Persero) Branch Sei Panas Batam, have met the a healthy classification, based on the financial performance criteria are applicable?
2. Is the business of Pegadaian Shari'ah (Persero) Branch Sei Panas Batam has shown progress when viewed from Rentability?

Pledge or termed rahn in Islam is a debt-receivable contract that use the guarantee from property of borrower on the loan he had received until debts are paid. Pegadaian Syariah is a financial institution that adopts a pawn, which is based on the Islamic principles and values (MUI Fatwa No.25 / DSN-MUI / III / 2002).

Pegadaian Syariah or Rahn is a kind of loan guarantees or pledge. (Sayyid Sabiq, *fiqhus Sunnah*, 169). Rahn is a system guaranteeing the debt with goods we have in which the debt could be paid with that guarantee, or from the proceeds. Rahn also be interpreted as holding one of the property owned by the guarantors as collateral for a loan received. The guarantee goods have economic value and those who hold it obtained a guarantee to be able to take back the whole or part of its receivables

Pawnshops according Dr.Kasmir (2014) is an activity to ensure valuables to a particular party, in order to earn some money and goods as collateral will be redeemed in accordance with the agreement between the depositor and pledge institutions. While Sigit Triandaru (2005: 179) states that the pawnshop is the only entity in Indonesia are officially authorized to carry out the activities of financial institutions in the form of a payment in the form of distribution of funds to the public on the law of pledge.

From the description above, it can be concluded that the pledge is a right earned by individuals who have receivable on a movable property submitted by the debtor as a guarantee of their debts and the goods can be sold by that has a receivable when the debtor is unable to settle its obligations when due , While the State-Owned Enterprises serves only to provide financing in the form of disbursement of credit to the public on the legal pledge. The development of Shariah pawnshops like mushrooms in the rainy season, in tune with the development of conventional pawnshops although the quantity office network, customers, turnover and profit is still not great. However, at least their development should be considered especially with the management policy in some areas where

Ratio analysis to measure health the Pegadaian

conventional pawn office network is totally converted into an network office of Pegadaian Syariah.

Pawn Shari'ah is a service product in the form of lending using the pledge system based on the principles of Islamic Shari'a, which among other things does not determine the tariff of the borrowed money.

Similarities and differences between sharia pawnshop with conventional pawnshop:

- A. Similarities between sharia pawnshop with conventional pawnshop
 1. The lien on the loan money.
 2. The presence of collateral as security for the debt.
 3. There should not take advantage of the pawned goods.
 4. The cost of the pawned goods are borne by the pledgor.
 5. If the time limit of borrowing money runs out, the pawned goods may be sold or at auction.
- B. Differences between sharia pawnshop with conventional pawnshop
 1. Conventional Pawnshop
 - a) In civil law, a lien is only valid on a moving object.
 - b) There are terms of interest (charging a fee in the form of interest which is accumulative and doubles)
 - c) In civil law, a lien is implemented through existing institutions in Indonesia called PT. Pegadaian (Persero)
 - d) Setting a interest at 10% -14% for a period of 4 months, plus insurance of 0.5% of the loan amount. A period of four months may be extended as long as the customer is able to pay the interest.
 2. Syariah Pawnshop
 - a) Rahn in Islamic law is voluntarily performed on the basis of mutual help without pursuing profit.
 - b) Rahn applies to all objects that either movable or immovable objects.
 - c) In Rahn there is no termed interest (cost of care, maintenance, custody and valuation). In short, the cost of a pawn Shari'ah is smaller and only once charged.
 - d) According to Islamic law, Rahn can be implemented without going through an agency.

The use of financial ratio analysis to measure levels of health and development the Pegadaian

Financial ratio analysis used as the basis for the assessment of financial soundness Housing mortgage has been arranged in Sk Minister for State Owned Enterprises kep.100 10 / MBU / 2002 dated June 4, 2002 which includes eight (8) ratios, namely:

1. Return On Equity (ROE).
2. Return On Investemen (ROI)
3. Cash Ratio / cash ratio.
4. The current ratio (current ratio).
5. Collection Periods (COP)
6. Inventory Turnover
7. Turnover of total assets / Total Assets Turn Over (TATO)
8. The ratio of equity capital to total assets.

Various Ratio for Measuring Health of the Pawnshop

Analysis of various financial ratios are used to measure the health and development of Perum Pegadaian.

Analysis of of financial ratios used as the basis for assessment of the financial soundness of Perum Pegadaian was regulated in Decree of the Minister for State Owned Enterprises kep.100 10 / MBU / 2002 dated June 4, 2002 which includes eight (8) ratios, namely:

Framework

The financial soundness of Perum Pegadaian Shariah (Persero) Branch Sei Panas Batam can be determined by analyzing financial statements using financial ratios, namely: *Return on Equity, Retrurn on Investment, Cash Ratio, Current Ratio, Collection Periods, Inventory Turnover, Total Assets Turnover, ratio of Total Own Capital to Total Assets*. This is in accordance with the Decree of the Minister of State-Owned Enterprises No. KEP-100 / MBU / 2002. From the results of this analysis, we can determine the condition of the financial health of Perum Pegadaian Sharia (Persero) Branch Sei Panas Batam whether healthy or unhealthy.

II. METHOD

Population and Sample

Data Collection Technique

To get the required information, the process of data collection is done through documentation. The data collection was done by collecting archives and existing records of the company.

The population used in this study are the financial statements of PT. Pegadaian Shari'ah (Persero) Branch Sei Panas, Batam. The sample of this study is the monthly financial statements of PT. Pegadaian Shari'ah (Persero) Branch Sei Panas Batam in 2011 until 2015.

Analysis Method

Financial Soundness Evaluation

In the evaluation of the financial soundness of Perum Pegadaian Branch Sei Panas, ratio analysis is used based on the Decree of the Minister of State Owned Enterprises No. KEP-100 / MBU / 2002 on the assessment of the financial soundness of the State Owned Enterprises which include:

a. Return on Equity

$$ROE = \frac{\text{Profit after tax}}{\text{Owner's equity}} \times 100\%$$

- 1) Profit after tax is net income minus the profit results.
- 2) Owner's equity.
- 3) Fixed Assets, in practice, is the position at the end of the fiscal year Fixed assets that are under construction.

b. Return on Investment

$$ROI = \frac{\text{EBIT} + \text{Depreciation}}{\text{Capital Employed}} \times 100\%$$

- 1) Depreciation is includes amortization and depletion.
- 2) Capital Employed is the position at the end of the fiscal year, total assets minus fixed assets in the implementation.

c. Cash Ratio

$$\text{Cash Ratio} = \frac{\text{Cash, Bank} + \text{Short-Term Securities}}{\text{Current Liabilities}}$$

d. Current Ratio

- 1) Current Asset is the position of Total Current Assets at the end of the fiscal year.
- 2) Current Liabilities is the position of Total Current Liabilities at the end of the fiscal year

e. Collection Period

- 1) Total Accounts Receivable is the position of accounts receivable minus accounts receivable allowance for possible, at the end of the fiscal year.
- 2) Total revenue is the total operating revenues for the fiscal year.

f. Inventory Turnover

- 1) Total Inventory is the entire inventory used for the production process at the end of the financial year consisting of raw materials, semi-finished goods inventory and finished goods inventory plus equipment supplies and spare parts.
- 2) Total operating revenue is total operating revenue in the fiscal year concerned.

- g. Total Asset Turnover
 - 1) Total revenue is the total revenue of the business and non business, excluding revenue from the sale of fixed assets.
 - 2) Capital Employed is the position at the end of the fiscal year, total assets minus fixed assets in execution.
- h. The ratio of total own capital to total assets
 - 1) Total capital itself are all components of own capital at the end of the book beyond the funds with the status has not been determined.
 - 2) Total assets are total assets minus funds with the status have not been determined at the position in the end of the fiscal year concerned.

In assessing the performance of Perum Pegadaian Syariah (Persero) Branch Sei Panas Batam, a basic standard that is acceptable in general is necessary, because the Perum Pegadaian is a business entity that is different from any other business entity. Assessment of financial performance based on the decision of the Minister for State Owned Enterprises No. KEP-100 / MBU / 2002, is the sum of the value of each indicator.

Financial Performance = *Return On Equity + Return On Investment + Cash Ratio + Current Ratio + Collection Periods + Inventory Turnover + Total Assets Turnover + Ratio of Own Capital to Total Aset.*

To determine the average financial performance over the study period, inductive statistical methods are used as follows (J.Supranto 2008):

To determine the financial performance of the company whether it is classified as healthy or not, then the amount of scores achieved in the study of financial performance Perum Pegadaian Branch Purwokerto is adapted to the classification of financial performance by the Minister of State Owned Enterprises No. KEP-100 / MBU / 2002 to know its health, ie when scores achieved was: Healthy, consisting of:

The first hypothesis testing criteria:

- If the total score of the financial performance achieved greater than 45.5, the first research hypothesis is accepted.
- If the total score of the financial performance achieved is less than or equal to 45.5, the first research hypothesis is rejected.

Analysis of Business Development

The development of Perum Pegadaian Shari'ah (Persero) Branch Sei Panas Batam, in terms of economic profitability during the period under study can be analyzed as follows:

- a. Calculating the Economic Profitability (RE) for the period under study, according to the formula (Bambang Riyanto, 2008)

$RE = \text{Profit Margin} \times \text{Operating Assets Turnover}$

- b. To test the second hypothesis, the linear trend analysis formula is used by the least squares method as follows (Djarwanto PS, 2001)

Hypothesis Formulation

$H_0: b \leq 0$ Development (economic profitability) is decreased or remained

$H_a: b > 0$ Development (economic profitability) is increased

The second hypothesis is accepted when H_0 is rejected, or H_a is accepted

Testing Criteria

- The business development of Perum Pegadaian Syariah Branch Sei Panas Batam is increased when the coefficient of the trend line (b) had a score of positive (+), which means the second research hypothesis is accepted.
- And conversely, the business development of Perum Pegadaian Syariah Branch Sei Panas Batam tends to decrease or constant if the trend line (b) had a score of negative (-), meaning the second research hypothesis is rejected.

III. RESULT

The Business Activities of Perum Pegadaian

Perum Pegadaian is the only government agency engaged in the provision of services in the form of loans to the public under the law of pledge in which collateral is movable property.

- 1. The core businesses consist of:
 - a. Quick Loans Secured (KCA)
 - b. services estimates
 - c. courier service
- 2. Other businesses consist of:
 - a. Unit Gold Shop Gallery "24 "
 - b. Gold Coins ONH
 - c. Installment Loans Fiduciary Systems (Creative).
 - d. Leasing Building
- 3. Sharia, the Islamic Pawn Service Unit

Analysis of the soundness of the company and Discussion

a. Return on Equity

Return on equity is investment return rate of our own capital held by the company. It was obtained by dividing the profit

after tax with our own capital. Calculation of return on equity can be seen in TABLE 1.

TABLE I. Return On Equity Pegadaian Syari'ah (Persero) Sei Panas Batam 2011-2015

Year	EBIT	Capital	Return on Equity	Value
(1)	(2)	(3)	(4)=(2):(3)x100%	(5)
2011	938.110.028,00	4.296.105.080,00	21,84 %	20
2012	1.441.708.622,00	5.529.772.111,00	26,07 %	20
2013	761.359.837,00	6.310.519.663,00	12,06 %	16
2014	998.267.714,00	8.692.369.582,00	11,48 %	16
2015	867.558.513,00	7.721.336.483,00	11,24 %	16
Jumlah	5.007.004.712,00	32.550.102.916,00	82,69 %	88
Rata-rata	1.001.400.942,40	6.510.020.583,20	16,54 %	18

According to the TABLE 11 it can be seen that the return on equity is ranged from 11.54% to 26.07% with an average of 16.54%. Which means that every Rp1.00 of own capital used will generate a net profit of Rp0.1654. The value of the return on equity in 2011 and in 2012 was 20. In 2013 to 2015 the value is 16 because the value is in the range 11 to 13%.

Return on Investments is investment return rate of foreign capital owned by the company. In the PP, the capital considered is apart from fixed assets; therefore the health assessment of financial performance, the investment value is taken into account only current assets. The result of the calculation of Return on Investments is presented in TABLE 2.

c. Return on Investment

TABLE 2. Return on Investment Perum Pegadaian Syari'ah Sei Panas tahun 2011-2015.

Year	EBIT	Accumulate	Capital	Return	Value
(1)	(2)	(3)	Employed	on Investment	(6)
			(4)	(5)={(2)+(3)}:(4)x100%	
2011	938.110.028,00	231.461.656,00	3.534.479.400,00	33,09%	15
2012	1.441.708.622,00	265.347.432,00	4.803.765.200,00	35,54%	15
2013	761.359.837,00	301.536.389,00	5.409.148.372,00	19,65%	15
2014	998.267.714,00	438.036.278,00	7.818.841.965,00	18,37%	15
2015	867.558.513,00	365.030.232,00	6.798.993.013,00	18,13%	15
Jumlah	5.007.004.712,00	1.601.411.987,00	28.365.227.950,00	124,78%	75

Rata-rata	1.001.400.942,40	320.282.397,40	5.673.045.590,00	24,96%	15
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Based TABLE 2 it can be seen that the return on Investments is ranged from 18.13% to 35.54%. Which means that every Rp1.00 used in investment will generate an operating profit of Rp0.1813 until Rp0.3554. Achievement of return on such Investments has a value greater than 18%, so that the value obtained from 2011 to 2015 was 15.

c. *Cash Ratio*

Cash ratio is used to determine the condition of the company's cash compared to current liabilities owned. This ratio is used to determine a company's ability to repay current liabilities and cash held. Cash consists of the value of the company's cash, bank deposits and securities. Perum Pegadaian Syariah Branch Sei Panas does not have securities, so that what is used in the analysis of the cash ratio can be seen in TABLE 3.

TABLE 3. Cash ratio Perum Pegadaian Syari'ah Sei Panas tahun 2011-2015

Year (1)	Cash and bank (2)	Current liabilities (3)	Cash ratio (4)=(2):(3)x100%	Value (5)
2011	174.176.400,00	3.104.022,00	56,11	5
2002	170.994.600,00	11.620.395,00	14,72	2
2003	123.584.800,00	49.846.341,00	2,48	0
2004	256.744.440,00	86.200.871,00	2,98	0
2005	223.256.035,00	75.492.586,00	2,96	0
Jumlah	948.756.275,00	226.264.215,00	79,25	7
Rata-rata	189.751.255,00	45.252.843,00	15,85	1

According to the TABLE 3 is known that cash ratio ranges from 2.48% to 56.11%, with an average of 15.85%, which means that every 1.00 current debt will be guaranteed by available cash and bank which immediately redeemable by Rp1584.8. In 2013 to 2015 it is equal to zero, this is due to the achievement of Cash ratio is less than 5%.

d. *Current Ratio*

Current ratio is the ratio used to measure a company's ability to pay obligations when billed. Current ratio is obtained by dividing the current assets by current liabilities. Current assets at PT. Pegadaian Syariah (Persero) Branch Sei Panas Batam are comprised of cash, bank, loans, and income receivable, accounts payable to partners, tax debt, and debt costs. The results of the analysis of the current ratio can be seen in TABLE 4.

TABLE 4. Current Ratio Perum Pegadaian Syari'ah Sei Panas tahun 2011-2015

Year (1)	Current Assets (2)	Current Liabilities (3)	Current Ratio (4)=(2):(3)x100%	Value (5)
2011	3.534.479.400,00	3.104.022,00	1.138,68%	5
2012	4.803.765.200,00	11.620.395,00	413,39%	5
2013	5.409.148.372,00	49.846.341,00	108,52%	3
2014	7.818.841.965,00	86.200.871,00	90,70%	1

2015	6.798.993.013,00	75.492.586,00	90,06%	1
Jumlah	28.365.227.950,00	226.264.215,00	1.841,34%	15
Rata-rata	5.673.045.590,00	45.252.843,00	368,27%	3

According to the TABLE 4 it can be seen that the current ratio is ranged between 90.06% and 1138.68%. This shows that the company is able to meet obligations if the billing is done on debts owned. Values obtained in 2011 and 2012 is equal to 5, this is because the current ratio which is greater than 125%. In 2013 the value was 3 because it was in the range of 100% to 110%, and in 2014 and 2015 the value is 1, because it was in the range of 90 to 95%.

e. Collection Period

Collection period indicates the company's ability to collect receivables from customers. A larger collection period indicates the time of collection of receivables is longer and smaller collection period indicates the time of collection of receivables is shorter. The results of the analysis of collection period can be seen in TABLE 5.

TABLE 5. Collection Period Pegadaian Syari'ah Sei Panas 2011-2015.

Year (1)	Receivables (2)	Income (3)	Collection Period (4)=(2):(3)x365hari	Value (5)
2011	3.148.563.700,00	1.235.049.348,00	930,51	0
2012	4.330.605.200,00	1.907.228.711,00	828,78	0
2013	4.980.092.180,00	2.183.686.291,00	832,42	0
2014	7.168.275.968,00	2.605.578.287,00	1.006,68	0
2015	6.248.935.624,00	2.265.720.249,00	1.006,68	0
Jumlah	25.876.472.672,00	10.197.262.886,00	4.605,07	0
Rata-rata	5.175.294.534,40	2.039.452.577,20	921,01	0

According to the TABLE 5, it can be seen that the collection period is in the range between 828.78 days to 1006.68 days, with an average of 921.01 days. This shows that the average collection undertaken by the company takes a long time. Values obtained from 2011 to 2015 are zero. This is due to the time of collection of receivables more than one year.

f. Inventory Turnover

Inventory turnover shows the company's ability to sell all inventories owned. The results of the analysis of inventory turnover can be seen in TABLE 6.

TABLE 6. Inventory Turnover Pegadaian Syari'ah Sei Panas 2011 - 2015

Year (1)	Inventory (2)	Income (3)	Inventory Turnover (4)=(2):(3)x365hari	Value (5)
2011	64.990.666,00	1.235.049.348,00	19,21	5
2012	7.617.935,00	1.907.228.711,00	1,46	5
2013	4.240.180,00	2.183.686.291,00	0,71	5
2014	3.818.628,00	2.605.578.287,00	0,53	5

2015	3.320.546,00	2.265.720.249,00	0,53	5
Jumlah	83.987.955,00	10.197.262.886,00	22,44	25
Rata-rata	16.797.591,00	2.039.452.577,20	4,49	5

Based on the TABLE, it can be seen that the inventory turnover ranges from 0.53 up to 19.21 days, with an average of 4.49 days. Value obtained from 2001 to 2015 is 5. This is due to inventory turnover occurred less than 60 days.

g. Total Asset Turnover

Turnover of total assets is used to determine the company's ability to generate revenue which is taken into account are all income other than income from sale of fixed assets.

TABLE 7. Total Asset Turnover Pegadaian Syari'ah Sei Panas 2011 - 2015

year	Income	Capital Employed	Total Assets Turnover	Value
(1)	(2)	(3)	(4)=(2):(3)x100%	(5)
2011	1.235.049.348,00	3.534.479.400,00	34,94 %	2
2012	1.907.228.711,00	4.803.765.200,00	39,70 %	2
2013	2.183.686.291,00	5.409.148.372,00	40,37 %	3
2014	2.605.578.287,00	7.818.841.965,00	33,32 %	2
2015	2.265.720.249,00	6.798.993.013,00	33,32 %	2
Jumlah	10.197.262.886,00	28.365.227.950,00	181,66 %	11
Rata-rata	2.039.452.577,20	5.673.045.590,00	36,33 %	2

According to the TABLE 7 it can be seen that the total asset turnover ranges from 33.32% to 40.37%, with an average of 36.33%. This indicates the company is successfully acquired 36.33% of every penny they have on the assets that were used to run a business. Values obtained in 2011, 2012, 2014 and

2015 are 2, because the total assets turnover obtained lies in the range of 20 to 40%. Whereas in 2013 the value obtained is 2.5% because it lies in the range of 40 to 60%.

h. Ratio of Total Own Capital to Total Asset

TABLE 8. Ratio of Total Own Capital to Total Asset Pegadaian Syari'ah Sei Panas 2011-2015

Tahun	Total Own Capital	Total Assets	Total Own Capital to total assets	Nilai
(1)	(2)	(3)	(4)=(2):(3)x100%	(5)
2011	4.296.105.080,00	4.299.209.102,00	99,93 %	7
2012	5.529.772.111,00	5.541.392.506,00	99,79 %	7
2013	6.310.519.663,00	6.360.366.004,00	99,22 %	7
2014	8.692.369.582,00	8.778.570.450,00	99,03 %	7
2015	7.721.336.483,00	7.796.829.069,00	99,02 %	7

Jumlah	32.550.102.917,00	32.776.367.131,00	496,98 %	33
Rata-rata	6.510.020.583,40	6.555.273.426,20	99,40 %	7

According to the TABLE 8 can be seen that the ratio of total own capital to total assets was approximately 99.40%, which means that any assets 1.00 will be financed by own capital of Rp0.9940. This shows that the companies use their own capital in large proportions, and the use of foreign capital only in smaller quantities. Values obtained in 2011 through 2015 was 6.5 for the ratio of total own capital to total assets lies in the range of 90 to 100.

TABLE 9. Total value of financial performance Pegadaian Syariah Sei Panas tahun 2011-2015

Year	Value	Category
2011	58,5	Healthy Category AA
2012	55,5	Healthy Category A
2013	48,0	Healthy Category A
2014	45,5	Healthy Category A
2015	<u>45,5</u>	Healthy Category A
Jumlah	253	
Rata-rata	50,6	Healthy Category A

According to the TABLE 9 can be seen that in 2011 the company was in good health with the AA category, because it is in the range of 56 to 66.5. In 2012-2015 the company is in a healthy condition A, because it is in the range of 45.5 up to 56. The average value of 50.6 or shows the average healthy performance in category A. Thus the first hypothesis which states that the performance of Perum Pegadaian Syariah Branch Sei Panas has met the healthy classification, based on the criteria of the applicable financial performance is acceptable.

Analysis of Business Development

Analysis of business development is done by analyzing the development of economic profitability. The development of economical profitability can be determined by the trend of economic profitability from 2011 until 2015. The economic

i. Total value of financial performance

Total value of financial performance is derived from the sum of all the values obtained on the results of the analysis of the ratio of return on equity, return on Investments, cash ratio, current ratio, collection period, inventory turnover, turnover total assets, and the ratio of total own capital to total assets. Total value of financial performance is shown in TABLE 9.

profitability is obtained by multiplying the profit margins with operating assets turnover. The results of the analysis of economic profitability can be seen in TABLE 9.

According to the TABLE 9, it can be seen that the profitability is ranged from 11.13% to 26.02%. Average economic profitability amounted to 16.46%, meaning that, on average, the company successfully runs its businesses efficiently, so that it can make a profit. A company is said to be efficient if the economic profitability gained is greater than the cost of capital. Capital employed by Perum Pegadaian Syariah Branch Sei Panas is its own capital, so the cost of owned capital is equal to the interest rates on deposits in commercial banks is equal to 12%.

Trend analysis used is the least square trend. Based on the calculation of least square trend in appendix 19 trend equation is obtained as follows:

$$Y = 16.46134 - 3.60323X$$

The constant has a value of 16.46134, which means that the economic profitability would be worth 16.46134 if the profit margin is zero or constant. The value of the regression coefficient of variable profit margin (X) is equal to 3.60323 which means that the higher the profit margin, the higher its economic profitability.

Based on these equations can be seen that economic profitability decreased from year to year amounted to 3.60323 percent. This decrease was also supported by the fact that the

economic profitability in 2015 only reached 11.13 percent, while in 2011 reached 21.82 per cent and in 2012 amounted to 26.0171 percent. Thus the second hypothesis which states that the development of the economic profitability of the Perum Pegadaian Syariah Branch Sei Panas tends to increase is rejected.

Economic profitability tends to decrease; this is caused by a decrease in profit margin. Although sales have increased, but the increase in sales, there was an increase in operating costs, resulting in increased operating profit was smaller than the increase in sales. In addition due to the decrease in profit margin, reduction in economic profitability was also caused by a decrease in turnover of operating assets, especially in 2015, from 0.30 becomes 0.29.

Based on financial performance analysis can be seen that the Perum Pegadaian Syariah Branch Sei Panas are in a healthy condition namely category A, because the average value of the financial performance of the years 2011-2015 has a value in the range of 45.5 up to 56. With the attainment of category A showing its financial performance is not maximized, because the classification of healthy, there are categories AA and AAA. Category AA is obtained if the value lies in the range of 56 to 66.5, while the category AAA category if the value is more than 66.5.

Although included in the healthy category, but still there is a financial ratio that declined, i.e. return on equity decreased to the lowest level in 2015 amounted to 11.24 percent, while in 2012 reached the highest value of 26.07. Likewise with the acquisition of return on investment is tends to decline, especially in 2015 reached the lowest value in the amount of 18.13 percent. This decline is a problem for the company due to the increase in assets, it turns out, is not followed by an increase in profitability, this shows that the company has not play its assets to the maximum, so that the assets held have not produced the maximum profit.

For the measurement of profitability, in addition to using the return on investment and return on equity can also be done with economic profitability. Similar to other profitability ratios, economic profitability also decreased which in 2012 amounted to 26,02persen, and in 2015 amounted to 11.13 percent. Decrease in any one of the profitability ratios turned out to result in a decrease in other profitability ratios, namely a decline in the ratio of return on investment, return on equity and economic profitability.

Cash value ratio also decreased, as shown by the cash ratio in 2011 which amounted to 56.11 percent, while in 2013, 2014 and 2005 to 2.48; 2.98; and 2.96 percent, respectively, or belong to the category of zero value. This decline in cash ratio is due to the increased current liabilities. Likewise, the current ratio is decreased, which in 2011 amounted to 1138.88 times to 90.06 times in 2015 due to an increase in current liabilities. In the assessment of financial performance there are also aspects of the collection period, namely the receivables collection period. Based on the analysis of collection period can be seen that the collection period is more than 300 days, so that the value obtained is zero. The average collection period amounted to 921.01; this means receivables collection

takes an average of 921.01 days. This means that the collection of accounts receivable takes too long and is not in accordance with the standards set by the company amounted to 300 days.

Turnover of total assets also decreased notably in 2014 and 2015 amounted to 33,32persen, whereas in 2013 amounted to 40.37 percent. The decline in total assets turnover is caused by an increase in working capital. Although sales have increased, but this increase is smaller than the increase in working capital (capital employed), so overall this led to a reduction in the total asset turnover.

Perum Pegadaian is able to maintain the composition of its capital which is indicated by the ratio of its own capital to total assets, with an average composition of 99.40 percent.

IV. CONCLUSIONS

Based on the results of data analysis and discussion, the conclusions are can be taken, namely:

1. The financial performance of the Pegadaian Syariah (Persero) Branch Sei Panas in 2011 to 2015 had an average healthy condition with category A. This is shown by the average assessment of financial performance that received a value of 50.6. This value is greater than the minimum limit healthy company, of 45.5, so the first hypothesis which states that the level of financial health of the Pegadaian Syariah (Persero) Branch Sei Panas during the study period has met a healthy classification is accepted.
2. The achievement of economic profitability from 2011 until 2015 tended to decrease, this is shown by the results of the analysis of the trend in which the negative coefficient is obtained, amounting -3.60323 so that the second hypothesis which states that the business development of the Pegadaian Syariah (Persero) Branch Sei Panas during the study period has increased is rejected.

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FISCAL DEPENDENCE ANALYSIS JOMBANG DISTRICT GOVERNMENT REGIONAL AUTONOMY ERA (JOMBANG DISTRICT LOCAL REVENUE AGENCY)

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Abstract. This research have go to to know area finance preparation Kabupaten Jombang in draft support execution of period area autonomy 2008 – 2012 and area finance ability Kabupaten Jombang in draft support execution of period area autonomy 2008 – 2012 with to use it Degree Indicator Fiscal Desentralisasi and Indicator of Ability in To finance Area Expense. Be surveyed from problems that be examined that is finance performance analysiical as long as 5 (five) year, so this research is peneliltian attitudy ones quantitative of descriptive. The data Source that to be used is APBD Kabupaten Jombang year budget 2008 – 2012. With its valid Invite No 32 and 33 Year 2004 to give it opportunity for area to to dig local potency and to level it its finance's performance in draft realize it stand aloneness of area. Invite No 32 Year 2004 to be cored about division authorization between center government and area government. While Invite – Invite No 33 Year 2004 contain about finance perimbangan between pudat's government and area government. From stand aloneness analysiical result be knowing that more and more high of ratio containing stand aloneness meaned that area hanging level in center government assisting more and more low so as well on the contrary. connection Pattern between center government with area government also area finance ability Kabupaten Jombang in budget 2008 – 2012 be to level of stand aloneness with interval 0-25%. this Matter mean that Kabupaten Jombang government to has Instructive connection pattern, where center government role more dominant than area government stand aloneness or with other word area hanging to center government still very high, especially in the facy center government-assisting DAU and DAK.

Keywords: Fiscal Hanging, Autonomy Area, Finance Management, Jombang

I. INTRODUCTION

A long with national leadership change in new era toward reformation, the system of the central government relationship with the regional government also change. If before we adopted centralized government system that caused injustice in around regions. Financial relations between the central and local which was previously applied had an impact on the relatively little contribution of the local revenue (PAD) to the Regional Budget (APBD). All this time, the implementation of Law No. 5 of 1974 resulted in inability to assist region in increasing the local financial independence. This is due to Law No. 5 of 1974 tend to be centralized and limit the implementation of fiscal decentralization policy in financial management often gets difficulties in practice. In terms of making policies mainly about local government fiscal decentralization policy must obey laws and regulations that applied. So that these policies do not harm society.

Based on preliminary observations, the policy undertaken in the framework of decentralization and regional autonomy in the local financial more focused on expenditure aspect compared to acceptance aspect. The role of Local Revenue (PAD) Jombang regency in supporting its local acceptance is still minor. One of the reason of the minor local revenue due to lack of the local taxes objects and levies.

A. Indirect Expenditure

Table 1. Indirect Expenditure

Year	Budget (rp)	Realization (rp)	Increase / decrease	
			Rp	%
2010	559.589.392.961,00	524.195.150.953,54	(35.394.242.007,46)	6,33
2011	608.511.719.925,07	595.602.583.749,00	(12.909.136.176,07)	2,12
2012	733.995.365.419,00	713.919.997.107,00	(20.075.368.312,00)	2,74

Sumber Data : DPPKAD Kabupaten Jombang

Table 2. Direct Expenditure

Year	Budget (rp)	Realization (rp)	Increase/ decrease	
			Rp	%
2010	365.417.607.851,00	311.649.059.141,87	(53.768.584.709,13)	14,71
2011	362.160.653.975,55	328.415.263.917,91	(33.745.390.057,64)	9,32
2012	337.638.467.957,00	298.760.922.064,82	(38.877.545.892,18)	11,52

Data source : DPPKAD Jombang Regency

Table 3. General Allocation Fund and Special Allocation Fund

YEAR	DAU (RP)	DAK (RP)
2010	591.773.865.000,00	26.024.000.000,00
2011	601.460.180.000,00	49.308.000.000,00
2012	606.942.500.000,00	50.279.900.000,00

Data source : DPPKAD Jombang Regency

Table 4. Local Revenue (PAD)

Year	Budget (rp)	Realization (rp)	Increase/ decrease	
			Rp	%
2010	74.279.789.975,41	97.601.053.792,45	23.321.263.817,04	31,40
2011	83.553.261.780,45	90.214.137.927,09	6.660.876.146,64	7,97
2012	101.264.900.929,73	109.197.126.077,86	7.932.225.148,13	7,83

Data source : DPPKAD Jombang Regency

From the table above, it appears that generally the achievement of the local revenue target (PAD) Jombangregency has exceeded the target. Based on the above background, the formulation of the problem in this research are as follows: How ready is Jombang area financial to support the implementation of regional autonomy by applying the ability indicator in Financing local expenditure? and How Jombang financial capacity to support the implementation of regional autonomy by using indicators Degree of Fiscal Decentralization.

B. Previous research

Various research has been conducted, such as Sanusi Fattah and Irman (2009) "Local Government Fiscal Dependency Analysis In the province of South Sulawesi In the Era of Regional Autonomy" concluded for performance / financial capacity of local government in South Sulawesi, which is done by using indicators Degree of Fiscal Decentralization (DDF) in the era of regional autonomy can be explained that the role of central government is more dominant than the independence of local governments in South Sulawesi.

Furthermore, Timothy C. Irwin (2012), in her research "Accounting Devices and Fiscal Illusions", describes fiscal illusion. Fiscal illusion occurs when the level of local independence in the era of regional autonomy has decreased. The regional government even more depends upon DAU than strive to increase Revenue (PAD) as contained in the composition of the budget, where the largest revenue from DAU.

C. Regional Autonomy

Under Law No. 32 of 2004 Article 1 point 5 gives the definition of local autonomy rights, authorities, and obligations of autonomous regions to set up and manage their own affairs and

interests of local communities appropriate with the laws.

D. Fiscal Decentralization

Fiscal decentralization is an authority and responsibility in arranging, implementing and monitoring local budget (APBD) by the regional government.

Several factors affect the financial situation of the region (Azhari, 1995: 41), the area, the number of residents, the region's economic potential, the level of the intelligence community, the level of expensiveness, and the length of the straight path. As stipulated in article 79 of Law No.22 / 1999, PAD is a pure revenue sources of region from other business and part of local revenue. Policies in the region income oriented to increase the region's ability to finance its own internal affairs, giving priority to the excavation mobility of the sources of local revenue in addition to tax revenues, subsidies, borrowing, income ROE (Regional Owned Enterprises), and other legitimated income.

On the other hand, local finance is as tool of government fiscal, an integral part of the state finance in allocating economic resources, evenly distributing the development Result and creating economic stability. In addition to social and political stability, the role of local finance is increasingly important, in addition to the lack of funding that can be transferred to the area as DAU and DAK, but also because of the increasing complexity of the issues faced by the region and its solution requires the active participation of local societies.

E. Local Revenue (PAD)

Local Revenue (PAD) is a regional income derived from regional finance sources such as local taxes, levies, profit share of enterprises, admission departments and other revenues.

II. RESEARCH DESIGN

In a descriptive study, the researcher can compare certain phenomena that is comparative study.

A. Operational Definition and Variable Measurement

Variables Measurement of in this study is the Fiscal Dependence on Regional Autonomy to be able to measure the readiness and capability of local governments.

To measure the scale of interval ability in financing regional expenditure is done by using the following categories:

Table 5. The scale of interval ability to finance regional expenditure

%	Region Financial Capability
00,00 – 20,00	<i>D.</i> Very less
20,01 – 40,00	<i>F.</i> Less
40,01 – 60,00	<i>H.</i> Enough
60,01 – 80,00	<i>J.</i> Good
80,01 – 100	<i>L.</i> Very good

Source : Sanusi Fattah and Irman, 2009.

To measure the level of regional capacity, Scale Interval Degree of Fiscal Decentralization is done by using the following categories:

Table 6. Scale Interval Degree of Fiscal Decentralization

%	Region Financial Capability
00,00 – 10,00	<i>O.</i> Very less
10,01 – 20,00	<i>Q.</i> Less
<i>R.</i> 20,01 – 30,00	<i>S.</i> Enough
30,01 – 40,00	<i>U.</i> Medium
40,01 – 50,00	<i>W.</i> Good
<i>X.</i> >50,00	<i>Y.</i> Very good

Source : Sukanto Reksohadiprojo, 2001

Table 7. Interval Relationship Patterns and Regional Capability Levels

Z. Ability / Financial Dependence	AA. Percentage (%)	BB. Relation patterns
<i>CC.</i> Very low	<i>DD.</i> 0 – 25	<i>EE.</i> Instructive
<i>FF.</i> Low	<i>GG.</i> 25 – 50	<i>HH.</i> Constructive
<i>II.</i> Medium	<i>JJ.</i> 50 – 75	<i>KK.</i> Partisipative
<i>LL.</i> High	<i>MM.</i> 75 - 100	<i>NN.</i> Delegative

Source: Sanusi Fattah and Irman, 2009

B. Research Site

This study was conducted on Government of Jombang Regency precisely in the Department of Revenue, Finance and Asset Management (DPPKAD), Jombang is located at K.H. Wahid Hasyim street No. 43 Jombang.

C. Type of data

The type of data collected by researcher includes: Primary Data, data obtained directly from the field related to research object and secondary data is data that can support the description of the primary data.

D. Data source

The data used in this research is secondary data.

E. Method of data collection

Methods of data collection in this research conducted by the following manner: Library Studies and Field Studies (Observation) and Documentation.

F. Data Analysis Technique

To discuss the problems in this study, which is done as the following:

1) Seeing the readiness of local government to face regional autonomy, especially in financial management with the ability Indicators to finance Expenditure (Sanusi Fattah and Irman, 2009: 6):

- The Comparison of PAD with TB = $\frac{PAD}{TB}$
- The Comparison of PAD + BHPBP with TB = $\frac{PAD+BHPBP}{TB}$

Information:

PAD: Local Revenue

BHPBP: Tax Revenue Share and Non-Tax

TB: Total Expenditure

2) Measuring fiscal capacity of Region using Degree Indicators of Fiscal Decentralization (Sukanto Reksohadiprojo, 2001: 5):

- The Proportion of PAD to TPD = PAD/TPD
- The Proportion of BHPBP to TPD = $BHPBP/TPD$
- The Proportion of SD to TPD = SD/TPD

Information:

SD: Local Donations

TPD: Total Revenue Region

III. RESULT

A. Research Result

In this study, the data of Jombang fiscal year 2008 - 2012 are used to calculate financial ratios areas include: Local Revenue, Tax Revenue Share and Non-Tax, Regional Contribution, Total Local Revenue and Total Expenditure.

Overall, the acquisition of data derived from observation and documentation process in detail can be seen below:

Fiscal Year 2008 – 2012

Table 8. Fiscal Data Of Jombang Regency

Information	2008	2009	2010	2011	2012
PAD	97.601.053.792,45	90.214.137.927,09	109.154.035.427,86	124.799.217.856,05	164.389.353.734,76
BHPBP	54.816.995.569,00	61.877.483.237,00	72.499.335.088,00	76.207.639.668,00	93.684.408.900,00
SD	38.163.795.901,00	79.308.490.579,00	180.404.279.292,00	304.233.324.379,00	277.384.270.168,00
TPD	808.379.708.662,45	882.158.477.743,09	1.019.280.049.807,86	1.212.775.368.903,05	1.439.221.547.802,76
TB	835.844.210.095,41	924.017.847.666,91	1.001.954.919.161,82	1.143.438.346.873,62	1.363.382.391.746,28

Source: DPPKAD Jombang Regency

B. Capability Indicators in Financing Local Expenditure

To determine the readiness of the local government in facing regional autonomy, especially in the financial sector, measured by how far the ability of affairs when financing is funded entirely by the Local Revenue and Profit Sharing can be concluded with the following calculation:

$$\text{The comparison of PAD with TB} = \frac{\text{PAD}}{\text{TB}}$$

$$2008 = \frac{97.601.053.792,45}{835.844.210.095,41} \times 100\% = 11,68\%$$

$$2009 = \frac{90.214.137.927,09}{924.017.847.666,91} \times 100\% = 9,76\%$$

$$2010 = \frac{109.154.035.427,86}{1.001.954.919.161,82} \times 100\% = 10,89\%$$

$$2011 = \frac{124.799.217.856,05}{1.143.438.346.873,62} \times 100\% = 10,91\%$$

$$2012 = \frac{164.389.353.734,76}{1.363.382.391.746,28} \times 100\% = 12,06\%$$

Table 9. The Comparison of PAD with TB Jombang Regency 2008 - 2012

Year	PAD	TB	Growth PAD (%)	Category Change (%)	Category PAD
2008	97.601.053.792,45	835.844.210.095,41	11,68	00,00 - 20,00	Very less
2009	90.214.137.927,09	924.017.847.666,91	9,76	00,00 - 20,00	Very less
2010	109.154.035.427,86	1.001.954.919.161,82	10,89	00,00 - 20,00	Very less
2011	124.799.217.856,05	1.143.438.346.873,62	10,91	00,00 - 20,00	Very less
2012	164.389.353.734,76	1.363.382.391.746,28	12,06	00,00 - 20,00	Very less
Rata - Rata			11,06	00,00 - 20,00	Very less

Source: DPPKAD Jombang Regency, data processed (2013)

From the data table 4.5 above, can be graphed the ratio ability to finance the comparison of local expenditure PAD Jombang Regency from fiscal year 2008-2012.

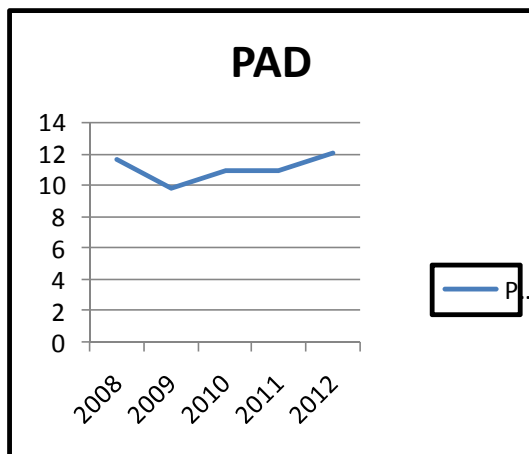


Fig.1. The Comparison of PAD with TB Jombang Regency 2008 - 2012

$$\text{The Comparison of PAD + BHPBP with TB} = \frac{\text{PAD+BHPBP}}{\text{TB}}$$

$$2008 = \frac{97.601.053.792,45+54.816.995.569,00}{835.844.210.095,41} \times 100\% = 18,24\%$$

$$2009 = \frac{90.214.137.927,09+61.877.483.237,00}{924.017.847.666,91} \times 100\% = 16,46\%$$

$$2010 = \frac{109.154.035.427,86+72.499.335.088,00}{1.001.954.919.161,82} \times 100\% = 18,13\%$$

$$2011 = \frac{124.799.217.856,05+76.207.639.668,00}{1.143.438.346.873,62} \times 100\% = 17,53\%$$

$$2012 = \frac{164.389.353.734,76+93.684.408.900,00}{1.363.382.391.746,28} \times 100\% = 18,93\%$$

Table 10. The Comparison of PAD + BHPBP with TB Jombang Regency 2008 - 2012

Year	PAD + BHPBP	TB	Growth	Category	Category
			PAD (%)	Change (%)	PAD
2008	152.418.049.361,45	835.844.210.095,41	18,24	00,00 - 20,00	Very less
2009	152.091.621.164,09	924.017.847.666,91	16,46	00,00 - 20,00	Very less
2010	181.653.370.515,86	1.001.954.919.161,82	18,13	00,00 - 20,00	Very less
2011	201.006.857.524,05	1.143.438.346.873,62	17,58	00,00 - 20,00	Very less
2012	258.073.762.634,76	1.363.382.391.746,28	18,93	00,00 - 20,00	Very less
Rata - Rata			17,87	00,00 - 20,00	Very less

Source: DPPKAD Jombang Regency, data processed (2013)

From the data table 4.5 above, can be graphed the ratio ability to finance the comparison of local expenditure PAD + BHPBP Jombang from fiscal year 2008-2012.

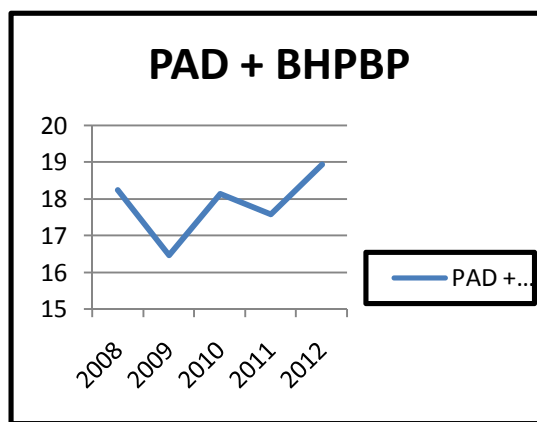


Fig 2. The comparison of PAD + BHPBP to TB Jombang Regency 2008 - 2012

The analysis of local financial independence that made to the report calculation of APBD Jombang Regency fiscal year 2008 - 2012 aims to determine the pattern of the relationship between the central government and local governments.

The proportion of PAD to TPD = $\frac{PAD}{TPD}$

2008 = $\frac{97.601.053.792,45}{808.379.708.662,45} \times 100\% = 12,07\%$

2009 = $\frac{90.214.137.927,09}{882.158.477.743,09} \times 100\% = 10,22\%$

2010 = $\frac{109.154.035.427,86}{1.019.280.049.807,86} \times 100\% = 10,70\%$

2011 = $\frac{124.799.217.856,05}{1.212.775.368.903,05} \times 100\% = 10,29\%$

2012 = $\frac{164.389.353.734,76}{1.439.221.547.802,76} \times 100\% = 11,42\%$

Table 11. The proportion of PAD to TPD Jombang Regency 2008 - 2012

Year	PAD	TPD	Growth PAD (%)	Category Change (%)	Category PAD
2008	97.601.053.792,45	808.379.708.662,45	12,07	10,01 - 20,00	Less
2009	90.214.137.927,09	882.158.477.743,09	10,22	10,01 - 20,00	Less
2010	109.154.035.427,86	1.019.280.049.807,86	10,70	10,01 - 20,00	Less
2011	124.799.217.856,05	1.212.775.368.903,05	10,29	10,01 - 20,00	Less
2012	164.389.353.734,76	1.439.221.547.802,76	11,42	10,01 - 20,00	Less
Rata - Rata			10,94	10,01 - 20,00	Less

Source : DPPKAD Jombang Regency, data processed (2013)

From the data in Table 4.2 above, can be graphed ratio proportion of local financial capacity PAD Jombang Regency from fiscal year 2008-2012.

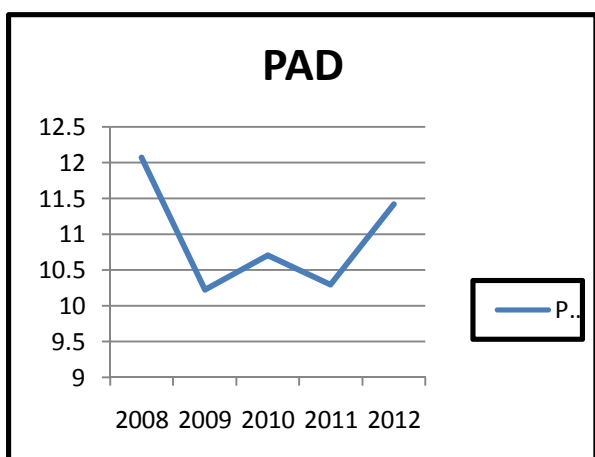


Fig. 3. The proportion of PAD to TPD Jombang Regency 2008 - 2012

The proportion of BHPBP to TPD = $\frac{BHPBP}{TPD}$

2008 = $\frac{54.816.995.569,00}{808.379.708.662,45} \times 100\% = 6,78\%$

2009 = $\frac{61.877.483.237,00}{882.158.477.743,09} \times 100\% = 7,01\%$

2010 = $\frac{72.499.335.088,00}{1.019.280.049.807,86} \times 100\% = 7,11\%$

2011 = $\frac{76.207.639.668,00}{1.212.775.368.903,05} \times 100\% = 6,28\%$

2012 = $\frac{93.684.408.900,00}{1.439.221.547.802,76} \times 100\% = 6,51\%$

Table 12. The proportion of BHPBP to TPD Jombang Regency 2008 - 2012

Year	BHPBP	TPD	Growth BHPBP (%)	Category Change (%)	Category BHPBP
2008	54.816.995.569,00	808.379.708.662,45	6,78	00,00 - 10,00	Very less
2009	61.877.483.237,00	882.158.477.743,09	7,01	00,00 - 10,00	Very less
2010	72.499.335.088,00	1.019.280.049.807,86	7,11	00,00 - 10,00	Very less
2011	76.207.639.668,00	1.212.775.368.903,05	6,28	00,00 - 10,00	Very less
2012	93.684.408.900,00	1.439.221.547.802,76	6,51	00,00 - 10,00	Very less
Average			6,74	00,00 - 10,00	Very less

Source : DPPKAD Jombang Regency, data processed (2013)

From the data in table 4.3 above, can be graphed ratio proportion of local financial capacity BHPBP Jombang Regency from fiscal year 2008-2012.

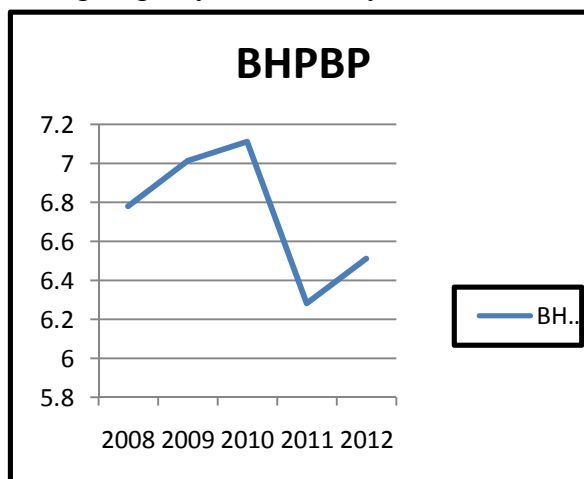


Fig. 4. The proportion of BHPBP to TPD Jombang Regency 2008 - 2012

The proportion of SD to TPD = $\frac{SD}{TPD}$

2008 = $\frac{38.163.795.901,00}{808.379.708.662,45} \times 100\% = 4,72\%$

2009 = $\frac{79.308.490.579,00}{882.158.477.743,09} \times 100\% = 8,99\%$

2010 = $\frac{180.404.279.292,00}{1.019.280.049.807,86} \times 100\% = 17,70\%$

2011 = $\frac{304.233.324.379,00}{1.212.775.368.903,05} \times 100\% = 25,09\%$

2012 = $\frac{277.384.270.168,00}{1.439.221.547.802,76} \times 100\% = 19,27\%$

Table 13. The proportion of SD to TPD Jombang Regency 2008 - 2012

Year	SD	TPD	Growth SD (%)	Category Change (%)	Category SD
2008	38.163.795.901,00	808.379.708.662,45	4,72	00,00 - 10,00	More less
2009	79.308.490.579,00	882.158.477.743,09	8,99	00,00 - 10,00	More less
2010	180.404.279.292,00	1.019.280.049.807,86	17,70	10,01 - 20,00	Less
2011	304.233.324.379,00	1.212.775.368.903,05	25,09	20,01 - 30,00	Enough
2012	277.384.270.168,00	1.439.221.547.802,76	19,27	10,01 - 20,00	Less
Average			15,15	10,01 - 20,00	Less

Source : DPPKAD Jombang Regency, data processed (2013)

From the data in table 4.4 above, can be graphed ratio of local financial capacity of SD Jombang from fiscal year 2008-2012.

Picture 4 The proportion of SD to TPD Jombang Regency 2008 – 2012



IV. DISCUSSION

A. The Indicators of Ability to Finance Regional Expenditure Comparison PAD with TB

Based on the chart above shows that the original income (PAD) to finance the total area expenditure is still very poor. In fiscal year 2008 amounted to 11.68%, and then decreased in fiscal year 2009 of 9.76%. This occurs because less than the maximum in the withdrawal of the original income in 2009. In fiscal year 2010, 2011, and 2012 always increase, i.e. respectively 10.89%, 10.91% and 12.06%. The average percentage of revenue over expending, Total area is 11.06%.

B. The Comparison of PAD + BHPBP with TB

Based on the graph it can be seen that the comparison of PAD and BHPBP in funding the total of expenditure in the fiscal year concerned. In fiscal year 2008 amounted to 18.24%, and then decreased quite rapidly in the 2009 fiscal year amounted to 16.46%. In fiscal year 2010 increased by 18.13%. The most prominent increase occurred in fiscal year 2012 in the amount of 18.93%.

The Comparison of PAD + BHPBP against the total expenditure of area average percentage of 17.87% per year, It shows that in the era of regional autonomy, local government fiscal dependence on the central government is still high at around 82.13%. Funding the local expenditures in fiscal year 2008 - 2012 is very less.

C. The Indicators of Fiscal Decentralization Degree.

1) The proportion of PAD to TPD

Based on the graph shows that revenue in fiscal year 2008 amounted 12.07% and then decreased in fiscal year 2009 amounted to 10.22%. This decline occurred because in 2009 the amount of revenue realization is lower than the previous year, but the total amount of local revenue increases. This illustrates that in 2009, the revenues of Jombang Regency, much of the revenues other than PAD. In fiscal year 2010 rose to 10.77% and in fiscal year 2011 dropped to 10.29%. Different from the year 2009, a decrease in the ratio of PAD in 2011 due to the high income areas, especially on the income transfer. The proportion of PAD to TPD with the average per year, which amounted to 10.94%, when viewed from the ratio of the pattern of the relationship and level of ability or independence of a region that would be classified in a pattern of Instructive relation. So it can be concluded that the level of local financial independence is still low. This shows that in the era of regional autonomy, local government fiscal dependence in Jombang on the central government is still high. With the central government contribution to the budget amounted to 89.06%.

2) The proportion of BHPBP to TPD

Based on the graph shows that BHPBP in fiscal year 2008 amounted to 6.78% and then increased in fiscal year 2009 and 2010, which each amounted to 7.01% and 7.11%. In fiscal year 2011 decreased by 6.28%, this decrease is due to the high income areas, especially coming from the central government transfer income - Adjustment Fund. In fiscal year 2012 increased by 6.51%.

The proportion of BHPBP to TPD with the average per year, which amounted to 6.74%, when viewed from the ratio of the pattern of the relationship and level of ability or independence of a region that would be classified in a pattern of Instructive relation. So it can be concluded that the level of local financial independence is still low. This shows that in the era of regional autonomy, local government fiscal dependence in Jombang on the central government is still high. With the central government contribution to the budget amounted to 93.26%.

3) The proportion of SD to TPD

Based on the graph shows that SD Jombang Regency experiencing a rising trend in

fiscal year 2008 - 2012 is very good, that SD describes financial condition that is growing very fast. In fiscal year 2008 amounted to 4.72%, this is because the largest revenue in 2008 is the proportion of SD to TPD with the average per year, which amounted to 15.15%. So we can say that the degree of fiscal decentralization (local autonomy) as seen from the percentage of SD to TPD in the era of regional autonomy strengthened. However, when viewed from the ratio of the pattern of the relationship and level of ability or local financial independence, then it will be categorized in the pattern of Instructive relation, which means that the role of central government is more dominant than the independence of local governments in Jombang.

Based on the analysis of the independence that the higher the independence ratio implies that the level of regional dependence on external parties help (especially central and provincial governments) are getting lower and vice versa.

V. CONCLUSIONS AND RECOMMENDATIONS

The conclusions from the analysis of the readiness of the local government in facing regional autonomy, particularly in the financial sector measured by how far the ability of Local Government in Jombang in expenditure area when fully funded by revenue (PAD) and Tax Revenue Share and Non-Tax (BHPBP), then when seen average percentage ratio of the Total Expenditure PAD area of 11.06 and also the average percentage of PAD + BHPBP to Total Expenditure amounted to 17.87% area, it can be concluded that the readiness of Local Government in Jombang in field finances in the financing of regional expenditure is still lacking. This indicates that the level of fiscal dependency Local Government in Jombang against the central government in the era of regional autonomy is still high, ranging from 82.13% to 88.94%.

From the discussions above so the researcher recommended that: (a) Local Government of Jombang Regency should gradually reduce the level of dependence of local finance, especially for the DAU or DAK from the central government. The efforts to do are by the intensification and extension to PAD. Intensification of PAD can be done by improving the institutional aspects of the

management of PAD that is on education, extending the PAD exploring sources of new PAD, but without the burden of society. (b) The Government of Jombang Regency should be more frugal in expending areas, it is intended to prevent the increase of local expenditure to pay for all the programs and activities that are essential and valuable productive to improve public services. In addition, local governments of Jombang should increase PAD by optimizing natural resources and human resources owned by Jombang. (c) Policies issued by local governments in improving HR performance should pay more attention to the needs which are more urgent and more important in advance, such as inadequate facilities and infrastructure for motor vehicles and computerized decent. (d) In an effort to increase the region's autonomy of local governments are also required to optimize potential income-owned and one of them gives the proportion of greater capital expenditure for development in the productive sectors in the region.

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IMPACT ANALYSIS SERVICE PERFORMANCE IN ESTABLISHING CUSTOMER SATISFACTION AND LOYALTY

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Abstract. Researchers interested in researching on the effect of the performance of *service performance* and satisfaction in the formation of customer loyalty, so this study has the objective to test the direct effect of *service performance* on customer loyalty, and examine the effect of the interaction of *service performance* and customer satisfaction on customer loyalty. This study uses regression analysis. This research was conducted in Pontianak with research objects Kalbar Bank Headquarters. Samples were taken through approach *purposive sampling* as much as 100 respondents who returns 96 respondents from questionnaires distributed. The results showed that the service performance and customer satisfaction impact on customer loyalty. This makes the customer a reason to remain loyal as a customer and saving money in Bank Kalbar. The results of this study indicate that other factors referred to is customers outside local government employees, communities of West Kalimantan still choose to save in Bank Kalbar is because there is an emotional attachment as citizens of West Kalimantan.

Keywords: service performance, customer satisfaction, customer loyalty.

I. INTRODUCTION

According Tjiptono (2000) is a commitment to customer loyalty to a brand, store or supplier based on the nature of the very positive in the long-term purchase. That is, that brand loyalty is obtained because of the combination of satisfaction and complaints. While customer satisfaction that comes from how big the company's performance to cause satisfaction with minimizing the complaint in order to obtain long-term purchases made by consumers.

A satisfied customer is a customer who was getting *value* from producers or service providers. *Value* can be derived from the products, services, system or something emotional. *Value* for the customer can be created through atributatribut marketing company that could be the elements of stimulation for the companies to influence consumers in the purchase.

Loyalty include the possibility of further purchases or change a service agreement or otherwise how likely customers will switch to another brand or service provider. Some studies have shown a significant influence among grades, quality of service and satisfaction to customer loyalty.

The existence of Pontianak as the capital of West Kalimantan province allows for the development of good banking institutions Bank Kalbar, state-owned banks and private banks. Pontianak Kalbar Bank Headquarters on his way to compete with other banks operating in Pontianak. This is shown by the increasing number of customers from year to year. Although the majority of customers of Bank Kalbar is making local government employees because salaries have to go through a bank, which is owned by the Provincial Government of West Kalimantan, but people can and become a customer in Bank Kalbar due to their emotional attachment

that Bank Kalbar community property. The results showed that the second highest percentage after local government employees are customers who have jobs as private employees and self-employed / entrepreneurs.

Bank Kalbar be the first choice place to save and keep loyal customers, caused by the services provided by a bank officer. This opinion was reinforced by Parasuraman, Zeithaml, and Berry (1994) which states that service performance is a measure of the quality of service is the performance of the service / services received by consumers themselves and consumers will only assess the quality of service that they really feel. Meanwhile, according to Czepiel in Saghier and Nathan, (2013) stated that the quality of service is defined as a customer's perception of how the service met or exceeded their expectations. The results show that customers remain loyal savings in Bank Kalbar due to the services provided.

According to Valerie (2006) Customer satisfaction is influenced by the quality of services and also by situational factors, product quality, price and personal factors and five factors that will lead to the emergence of customer loyalty. The opinion was reinforced by Dick and Basu, (1999) which states that satisfaction is only one among several causes of the formation of customer loyalty. The results also show that customers are quite satisfied with the services and facilities provided by Bank Kalbar. The results showed

Therefore, researchers are very interested to analyze whether the *service performance* has a direct influence significant toward customer loyalty Bank Kalbar, and the extent to which the role of customer satisfaction on customer loyalty Bank Kalbar, Pontianak.

II. METHOD

population and Technics Withdrawal Sampling

The study population was individual customers aged 20 years or older who have a savings account in Bank Kalbar. The sampling using stratified random sampling method, whereas the sample of respondents was conducted by accidental sampling. Samples are Bank Kalbar and savings customers have felt the service / conduct transactions on behalf of its own in Bank Kalbar addressed Headquarters in Jalan Rahadi Oesman No. 10, Pontianak. In this research method survey was conducted using questionnaires that were distributed to 100 respondents who returns as many as 96 respondents. This study used two independent variables, namely service performance (X1) and customer satisfaction (X2), as well as the dependent variable, namely: customer loyalty (Y), which can be diagram following:

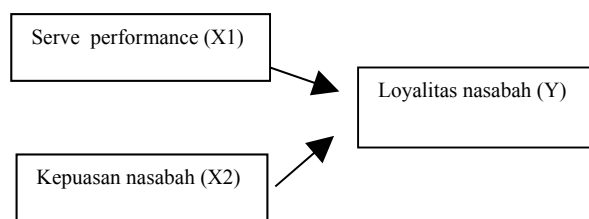


Fig. 1 diagram of loyalty costumer, serve performance and satisfaction costumer.

III. CONCLUSIONS

Based on questionnaires eligible analyzed and meet the requirements, of the 96 respondents divided into seven parts, namely the characteristics of the respondent (male 57, female 39 is a customer of Bank Kalbar Branch Pontianak with characteristics of age as shown in TABLE 1.

TABLE 1. Characteristics of Respondents

		Age			
		F	Valid Percent	Cumulative Percent	
Valid	20-25 years	14	14.6	14.6	14.6
	26-35	24	25.0	25.0	39.6
	36-45 years	27	28.1	28.1	67.7
	46-55 years	19	19.8	19.8	87.5
	55 years	12	12.5	12.5	100.0
	Total	96	100.0	100.0	

Based on the TABLE it can be seen that customers are saving money in Bank Kalbar between the ages of 36-45 years by 27 respondents. It shows in the productive age customers make transactions and become loyal customers. The results showed although they have savings of more than one bank but the Bank Kalbar remains the top choice. The results showed that the highest formal education was completed S1 respondents. The type of work most customers are local government employees. While it was the highest monthly income that a customer is ranging between 4-6 million. Meanwhile, the proposer to save or become customers because local government officials, followed by their own accord and got information from friends or neighbors.

TABLE 2. Descriptive Analysis

		Statistics		
		Service performance	Customer satisfaction	Customer loyalty
N	Valid	96	96	96
	Missing	0	0	0
Mean		4.1250	3.9115	4.1094
Std. Deviation		.62913		.40230
		.53555		

Based on TABLE 2, we can see that nothing is lost (missing case) respondents agree with the performance of services received and has been perceived as a whole although based on the perception that more diverse. In addition, respondents also feel satisfied with the banking services received from the Central Bank of West Kalimantan Pontianak and respondents also tended to be less homogenous for loyal today and in the future as a client of the Central Office of Bank Kalbar, Pontianak.

Code independent variable by SPSS

TABLE 5. variables categorical Codings

		F	parameter coding
			(1)
Interpretasi_kepuasan_nasabah	quite satisfied	48	1.000
	satisfied	48	.000
Interpretasi_service_performance	good enough	42	1.000
	either	54	.000

This study used two independent variables are categorical that *service performance* and customer satisfaction. In TABLE 5, it can be seen that as many as 48 customers were satisfied and as many as 48 customers also are quite satisfied with the services and facilities provided by Bank Kalbar. As for *service performance*, as many as 54 customers assess that *service performance* Bank Kalbar good and as many as 42 customers assess good enough.

TABLE 3. Dependent Variable Encoding

Original Value	Internal Value
sufficiently loyal	0
loyal	1

Based on TABLE 3 according to the coding SPSS, which included a successful category is loyal customer loyalty.

TABLE 4. Variables categorical Codings

		F	Parameter coding
			(1)
Interpretasi_kepuasan_nasabah	quite satisfied	48	1.000
	satisfied	48	.000
Interpretasi_service_performance	good enough	42	1.000
	either	54	.000

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Test the significance of the model
coefficient of determination (R^2)

TABLE 5. Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	93.921 ^a	.413	.305

Estimation terminated at iteration number 4 Because parameter estimates changed by less than .001.

Based on TABLE 5, it can be concluded that the coefficient of determination of 41.3%. This means that the *service performance* and customer satisfaction provide a strong direct influence amounted to 41.3% on customer loyalty or in other words customer loyalty explained by other factors amounted to 58.7%. Another factor that is referred to in this case shows that clients outside the local government officials, communities of West Kalimantan still choose to save in Bank Kalbar is because there is an emotional attachment as citizens of West Kalimantan.

TABLE 6. Omnibus Tests of Model Coefficients

	Chi-square	df	Sig.
Step	34.966	2	.000
Step 1 Block	34.966	2	.000
Model	34.966	2	.000

TABLE 6 is used to view the test results simultaneously the influence of the independent variables.

the test: hypothesis:

H_0 : there is no independent variables that affect customer

H_1 : loyalty. at least one independent variable the effect on customer loyalty.

H_1

Criteria for decision-making:

1. If the Sig $\alpha <$, then H_0 rejected
 2. if the Sig $\alpha >$, then H_0 accepted
- α used was 5% (0.05)

From TABLE 6 it can be seen that the Sig. models of 0.000. Because the value of Sig $\alpha <$ it can be concluded that the H_0 rejected, which means that at least one independent variables that influence customer loyalty.

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ASYMMETRY INFORMATION: INVESTORS TRUST REFLECTION TOWARD QUALITY OF EARNINGS

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Abstract. This article aims to describe the investors' trust toward quality of earnings reflection proxied by earnings response coefficient (ERC). The study was conducted on 296 manufacturing companies that meet the criteria of observations in 2011 to 2015. The variables used in this research is the board of directors, audit committee, the independent board as exogenous variables, information asymmetry as an intervening variable and earnings response coefficient (ERC) as an endogenous variable by means of persistency as control variables. The board of directors and the independent board in this article as a proxy of corporate governance show the effect on the information gap represented by information asymmetry, while the audit committee showed the opposite effect. Information gaps provide explanatory power on the reflection of investor confidence in the quality of earnings that are reported company.

Keywords: earnings coefficient response, information asymmetry, corporate governance

I. INTRODUCTION

Semi-strong efficient market theory assumes prices reflect all publicly available information. Efficient capital market implications explained that companies must disclose as much information as possible. Efficient capital markets are not concerned with the disclosure form but the content of the information. Capital markets efficiently also more interested in the relevant information from various sources, not just from the financial statements, because of the financial statements is only one source of information for capital markets (Beaver, 1979) [1].

The content of information referred to is information that describes the profit, because profit is the most response by investors because it provides an overview of the company's performance, but the earnings information alone is sometimes not enough to serve as a basis for decision making of investors because there is a possibility that information bias. To measure the level of informativeness profit, can use variables Earning Response Coefficient (ERC.) The strong market reaction to the earnings information reflected in high earnings response coefficients (ERC), If earnings reported to have a response force (power of response). It shows quality of reported earnings.

Studies conducted by Beaver et al (1979) [1] showed that the profit has information content which is reflected in the stock price. While Lev (1989) [2] using Earning Response Coefficient (ERC) as an alternative for measuring the value relevance earnings information. Low Earning Response Coefficient (ERC) showed that profit is less informative for investors to make economic decisions.

The need for inter-company profit benchmarking and to understand the differences in quality are used as an assessment that is based on income, it is necessary to do the measurement of quality. Earnings quality has no absolute size, but there is a qualitative and quantitative approach that can be used to analyze and explain the quality of earnings. A quantitative approach using ratio analysis, while the qualitative approach based on opinion (judgment) or outlook based on logic, experience, and insight. Earnings quality was not associated with higher or lower reported earnings, but according to Siegel (1990) [3] includes the understatement and overstatement of income (net), the stability of the components in the income statement, the realization of risk assets, the maintenance of the capital, and can be a predictor of future earnings (Predictive value).

Scott (2010:154) [4] states earnings Response Coefficient (ERC) to measure the magnitude of abnormal returns stock in response to the expected components of a company's reported earnings. Several studies have shown no variation Earning Response Coefficient (ERC) (Kormendi and Lipe, 1987) [5], in other words Earning Response Coefficient (ERC) is relatively stable. Instead of research Easton and Zmijewski (1989) [6] and Collins and Kothari (1989) [7] shows that the market response to earnings varies depending on the type of company and timescales.

Asymmetry Information is a kesenjangan happened because one group has better information or more timely than another group, sehingga allows managers to act oportuni (Healy and Palepu, 2001) [8]. Information asymmetry is expected to affect investors in response to earnings reported by the company. Investors in the theory of Efficient Market Hypotheses indicated react immediately to new information coming in the market, which caused the stock price will adjust. Individual investors and institutional investors always follow the information and price movements in the market.

This is because investors when their funds is taking into account the company's prospects both short- and long-term (Gumanti, 2010) [9].

In an agency relationship effectiveness of mechanisms that can be done to minimize the information gap between managers and owners can do with the implementation of Corporate governance, which can help align the interests of management with the interests of shareholders and improve the reliability of information financial as well as the integrity of the reporting process financial (Watts and Zimmernan, 1986) [10]. Deterioration of investor confidence in the information financial will affect the market response so as to impact the share price which in turn will result in public confidence fades (Avianti, 2006) [11].

Some mekanisme used to implement Corporate governance, among others the board of directors, audit committees and independent directors, Chtourou et al. (2001) [12] provide evidence that the board of directors and the audit committee effectively improve the quality and quantity of information disclosed by the company, thus reducing information asymmetry. Research Veronica and Bachtiar (2005) [13] examined the effect of audit committees, audit quality and independent commissioners of the asymmetry of information by using method of bid ask spread to measure the degree of asymmetry of information.

The purpose of this study was to examine, analyze and explain the influence langsung and indirectly Corporate governance (board of directors, audit committees and independent directors) on the quality of earnings (earnings Response Coefficient) through the gap of information (asymmetry of information).

II. THEORY AND HYPOTHESES

This section will describe the theory underlying the earnings response Coefficient, asymmetry of information and corporate governance.

A. Earnings Response Coefficient

Earnings quality may be indicated as the ability to gain information to respond to the market. In other words, earnings are reported to have a response force (power of response). The strong market reaction to earnings information reflected by the earnings response coefficients (ERC), shows the quality of reported earnings. Scott (2000) [4], Cho and Jung (1991) [14] states that Earning Response Coefficient (ERC) measures how much returns stock in response to the profit figures reported by the company that issued the securities. In other words Earning Response Coefficient (ERC) is a reaction to the earnings was announced (published) by the company. This reaction reflects the quality of a company's reported earnings. And high and low Earning Response Coefficient (ERC) is determined force responsive reflected from the information (good/bad news) contained in earnings. Earning Response Coefficient (ERC) is one measure or proxy is used to measure the quality of earnings (Collins et al. 1984) [7]

Investors have ekspektasi calculation of income long before financial statements are issued. Towards moments will release financial reports, investors will have more information to do an analysis of periodic earnings. Investors will use all the information available in the market to do an analysis of the company's performance and to make predictions (Scott, 2010) [4].

Understanding coefficient Response Gain (Earnings Response Coefficient) according to Cho and Jung (1991) [14] is as follows:

"The coefficient Response Gain defined as the effect of each dollar of unexpected earnings on returns, stock and is usually measured by slope coefficient in the regression of abnormal returns of stocks and unexpected earnings." Cho and Jung (1991) [14] classifying the theoretical approach Earning Response coefficient (ERC) into two groups: (1) assessment model which is based on economic information (information economics based valuation model) as developed by Holthausen and Verrecchia (1988) [15] and Lev (1989) [2] which showed that the strength of investor response to the information signal gain is a function of the uncertainty in the future. The greater the noise in the system of reporting companies (the lower the quality of earnings), the smaller Earning Response Coefficient (ERC) and (2) assessment model based on time series earnings (timeseries based valuation model) as developed by Beaver, Lambert and Morse (1980) [16].

Calculation of Earnings Response Coefficient (ERC) can be done in two ways, namely:

1. Cross Sectional or known by the pool regression, in this case the ERC will be the same for all companies, usually in one industry. (Imhoff and Lobo, 1992) [17].
2. Time Series or firm specific coefficient, that each company has a number ERC obtained from forecast previous years. (Teets and Wasley, 1996) [18].

Accuracy of Time Series is higher than the pool regression, since the value of R-square generated methods Time Series is higher than the pool regression (Chandrarin, 2002) [19].

Beaver (1968) [1] defines, Earning Response Coefficient (ERC) or earnings response coefficient is the slope coefficient on earnings. Earnings response coefficients measure the strength of the stock price in response to the accounting profit. Coefficient accounting profit may indicate the quality of corporate profits.

Scott defines Earnings Response Coefficient (ERC) as follows:

An earnings response coefficient measures the extent of a security's abnormal market return in response to the unexpected component of Reported earnings of the firm issuing that security. (2010: 154) [4].

Prediction of behavior of investors in response to the financial statements according to Scott (2010: 145) [4] is:

- a) Investors have confidence in the future performance of the company, including dividends, cash flow and profit, with the rate of return and risk of company stock. This initial trust will be the basis for general information, including market prices, up to the company's net income information at this time. Although based on information in general, core beliefs is not the same for every investor, because each investor has a difference in the amount of information obtained and their ability to interpret the information.
- b) At the time of the announcement of the net income of the current year, investors will have more information at analyzing the revenue figures. For example, if the high-income or higher than expected, there will be Good News. If so, the investor in accordance with theory, Bayes will be revised upwards to earnings and performance of the company in the future, and will make an additional investment. Other investors who have expectations too high against the company, may end up as net income the same will be interpreted as the Bad News.
- c) Investors are changing beliefs about the future performance of the company into the higher will tend to buy the company's shares at the current market price, and vice versa for the change lower confidence. Investors also re-evaluate the risk of shares which may be revised.
- d) Investors expect to be able to observe the volume of shares traded increased when the company announced its net profit. Furthermore, differences in initial confidence of investors and their interpretation on the financial statements should be much larger. If investors interpret the company's net profit as Good News (and then their expectations of profitability and returns the company increased) exceeds that of investors who interpret as Bad News, we can expect a rise in stock market prices and vice versa.

Theoretically volume of shares will be changed as soon as the company did bulletin on corporate profits. When that happens is GN there will be increase in the market price of shares in the relevant company, and in case of BN then the reverse will decrease the market price of the stock. Increases and decreases in the market price of the shares will be accumulated at Cumulative Abnormal Return (CAR) of each share of the company.

The persistence of accounting profit according to Scott (2010) [4] is a revision in accounting profit is expected in the future (expected future earnings) that is implied by the accounting profit the current year (current earnings). The magnitude of these revisions indicates the level of earnings persistence. Innovation to profit now is informative to the expected future earnings, the future benefits earned shareholders. The share price is the

present value of the expected future benefits earned shareholders. The smaller the value of the revised accounting gain future (increasingly persistent accounting profit), the stronger the relationship the accounting profit with abnormal return (the greater the earnings response coefficient) (Kormendi and Lipe, 1997) [20].

The higher the persistence of earnings, the higher Earning Response Coefficient (ERC), this is related to the strength of earnings. The persistence of earnings reflects the quality of corporate profits and show that the company can retain earnings over time. Kormendi and Lipe (1987) [20] showed that the persistence of earnings is positively related to Earning Response Coefficient (ERC). Collins and Kothari (1989) [7] also found a positive relationship between the estimated ERC and persistency by using changes in earnings as a proxy for unexpected earnings. In contrast to Ali and Zarowin (1992) [21] who found that the estimated error on Earning Response Coefficient (ERC) is negatively associated with persistence. This is due to several previous analyzes of the relationship between Earning Response Coefficient (ERC) and persistency is excessive.

B. Asymmetry Information

Agency theory implies the existence of information asymmetry between managers (as agent) with the investor (as principal). Agency theory assumes that humans are basically own selfishness (self interest), limited rationality (bounded rationality), and avoid the risk (risk aversion) (Eisenhardt, 1989) [22]. These conditions encourage the agency problems that arise because the agent has more information on the potential transaction in the company than the principals, the so-called information asymmetry (Watts and Zimmerman, 1986) [23].

Given the presentation of financial information by the company will bring economic consequences for the company and its investors (Zeff, 1978) [24], the presentation of quality information is expected to be consequential on lowering the asymmetry of information between the company and its investors the consequences of the economic quality of financial reporting arising for investors' assessment that is information asymmetry.

Measurement of information asymmetry can be done with a variety of measurements. Cohen (2003) [25] measure of information asymmetry by proxy bid ask spread. Leuz and Verrecchia (2000) [26] states that the bid-ask spread is common knowledge as a tool to measure the asymmetry of information explicitly. The reason is that the bid-ask spread shows problem the adverse selection arising from the shares due to investor information asymmetry. Instead the low asymmetry of information, impact on the low adverse selection, as well as the impact on low bidask spread.

C. Corporate Governance

Corporate governance is a concept based on agency theory, is expected to serve as a tool to give confidence to investors that they would receive a return on funds they invest. Corporate Governance is concerned with how investors believe that managers will benefit investors. Research on corporate governance produce a variety of mechanisms that aim to ensure that management acts in harmony with the interests of shareholders (particularly minority interest). mechanisms Corporate governance are divided into two groups: (1) be internal mechanisms (internal mechanism) such as the composition of the board of directors / commissioners, managerial ownership and executive compensation. (2) external mechanisms such as control by the market and the level of debt financing (Barnhart & Rosentein, 1998) [27].

The principles corporate governance applied of provides benefits such as: (1) minimizing agency costs by controlling conflicts of interest that may occur between the principal agent; (2) minimize the cost of capital by creating a positive signal to the capital providers; (3) enhance the corporate image; (4) increasing the value of companies that can be seen from the cost of capital is low, and (5) improving financial performance and perceptions of stakeholder the company's future better.

Mechanism Corporate governance consists of a board of directors, audit committees and independent directors. Board of commissioners at a company with more emphasis on the monitoring of policy implementation functions of directors. The Board of Commissioners is expected to minimize the problems that arise between the agency's board of directors and shareholders. Board of commissioners is at the core of governance corporate should be able to guarantee the quality of the information contained in the financial statements.

The audit committee is responsible for overseeing the financial reports, overseeing external audit and examine its system of internal control (including external audit). So the audit committee serves as a mediator between internal audit and external audit. Independent commissioner in corporate governance can act as penengah in discord between the internal managers and carry out the monitoring functions in order to create a company that good corporate governance (Fama and Jensen, 1983) [28].

The hypothesis in this study consisted of a hypothesis test the effect directly and not direct Corporate governance (board of directors, audit committees and independent directors) on the quality of earnings (earnings Response Coefficient) through the information gap (asymmetry of information).

hypothesis direct influence:

H₁ = board effect on earnings Response Coefficient

H₂ = the audit committee has an effect the earnings Response Coefficient

H₃ = independent Commissioners effect on earnings Response Coefficient

hypothesis indirect effect:

H₄ = board effect on earnings quality through information asymmetry

H₅ = the audit committee has an effect on earnings quality through information asymmetry

H₆ = independent Commissioner effect on earnings quality through information asymmetry

III. RESEARCH METHOD

A. Design research

Design research in the form of equations that are hypothesized as follows:

hypothesis directly:

$$ERC = \beta_0 + \beta_1 \text{Board} + \beta_2 \text{Audit} + \beta_3 \text{Independent} + \beta_4 \text{asymmetry} + \epsilon$$

Hypotheses indirectly:

$$ERC = \beta_0 + \beta_1 \text{Board} + \beta_2 \text{Audit} + \beta_3 \text{Independent} + \beta_4 \text{Asymmetry} + \beta_5 \text{Board} * \text{Asymmetry} + \beta_6 \text{Audit} * \text{Asymmetry} + \beta_7 \text{Independent} * \text{Asymmetry} + \epsilon$$

Where:

ERC	= Earnings Response Coefficient
Board	= commissioners
Audit	= Audit Committee
Independent	= Independent Commissioner
Asymmetry	= Asymmetry of information

This study was designed to clarify influence of the corporate governance (board of directors, audit committee and independent commissioner) to Earning response Coefficient (ERC) with earnings persistence as control variables directly or indirectly through the variable intervening asymmetry of information on companies listed in Indonesia Stock Exchange for the years 2011-2015. This study took the data of financial statements, annual reports, market price data stock and the stock price index, earnings pershare, return daily stock, market return of manufacturing companies listed in Indonesia Stock Exchange.

The study population includes all manufacturing companies listed on the Indonesia Stock Exchange 2011-2015. Sampling using purposive sampling method. In this technique the samples taken are samples that have certain criteria in order to represent the population. Companies sampled must meet the following criteria:

- 1) companies whose shares remain active in operation from 2011 until December 2015, and to publish financial statements audited on a regular basis.
- 2) businesses have never experienced delisting from the Stock Exchange during the estimation period.
- 3) the company did not stop its activities in the stock market, did not stop its operation and does not enter into merger and does not change the status of the industrial sector.
- 4) the company did not experience a loss during the estimation period.
- 5) it has a complete data were used as variables in this study and is consistently reported at Bapepam

From sample criteria above can be seen companies can be sampled in this study are as shown in table 1:

TABLE 1
PROCESS WITHDRAWAL of SAMPLE

No.	Description	amount Companies
1.	the manufacturing company listed on the Stock Exchange in 2015	143
2.	new IPO and delisting	(18)
3.	changes sector / core industry because of mergers, acquisitions	(4)
4.	experiencing damages on one or more years of the study period	(40)
5.	data for the study variables are incomplete	(21)
5.	Total sample company	60

Source: BEI, processed

B. Variable Operational Definition And Measurement Scale

Operational variables will outline the operationally variable refers to the conceptual definition and measurement scale. In this study may be explained definitions operational in Table 2 as follows:

TABLE 2
OPERATIONAL VARIABLES

Variable	Indicator	Formula	Scale
ERC	Cumulative Abnormal Return (CAR) Unexpected Earnings (UE)	ERC obtained from regression between the CAR and the EU	Ratio
Information Asymmetry	offer price lowest selling (Lowest ask) price of buying demand the highest (highest bid)	Spread = $\frac{(\text{Ask} - \text{Bid})}{2} (\text{Ask} - \text{Bid})$	Ratio
Independent Commissioner	Number of independent directors	proxied by the number of independent directors of a company in the period of observation.	Ratio
of Audit Committee	Number of audit committee	is proxied by the number of audit committee of a company in the period of observation.	Ratio
BOC	Number of commissioners	is proxied by the number of council commissioner of a company in the period of observation.	Ratio

C. Data analysis Techniques

Technical analysis of the data in this study will be conducted using Path analysis with aplikasi Analisis of Moment Structure (AMOS). in this study, conducted through direct testing and it indirectly on the dependent variable.

1. testing directly between board of directors, audit committee, independent commissioner, the asymmetry of information on Earning Response Coefficient.

Testing hypotheses using path analysis to determine the relationship of the variables tested simultaneously. Relationships theoretical phenomenon, empirical research and development of hypotheses can be seen from the pathdiagram. P-value in this study using a level of significant 5% (alpha 0.05). In the process of testing the hypothesis if $p > 0.05$ means that the hypothesis has any real or significant influence between the variables in the hypothesis, and vice versa.

2. The test is not directly between the board of directors, audit committees and independent directors to Earning Response Coefficient through information asymmetry

In the testing, intervening basis for a decision is to compare the coefficient indirect effect coefficient direct influence. Coefficient direct influence of two variables in the table Standardized Direct multiplied Effect. Then the results will be compared, if the coefficient indirect effect (Indirect Effect) greater than / equal to than the coefficient of direct influence (Direct Effect), then the variables tested anvariable, intervening and vice versa.

IV. EMPIRICAL RESULT AND CONCLUSION

A. Empirical Result

This study aims to test influence of the corporate governance on the quality of earnings directly and indirectly through the asymmetry of information.

the following figure 1 is the research model by using path analysis AMOS.

Table 3 is the result of model test, the SEM analysis, there is no means of statistical tests single measure or test hypotheses about model. Generally, the various types of fit index used to measure the degree of correspondence between the model hypothesized by the data presented. Here are the results of testing the suitability of the model obtained from the model used in

accordance with the conformance test statistics along with a cut-off value used in their test whether a model can be accepted or rejected.

Result Test normality of the data obtained value or kurtosis of 0.366 means that the whole or multivariate distribution normal data because it is in the range of -1.96 to 1.96. In multivariate normal distribution of data, then the univariate normal distribution of data as well so that the data met the assumptions of normality and data in this study deserves to be used for subsequent estimates.

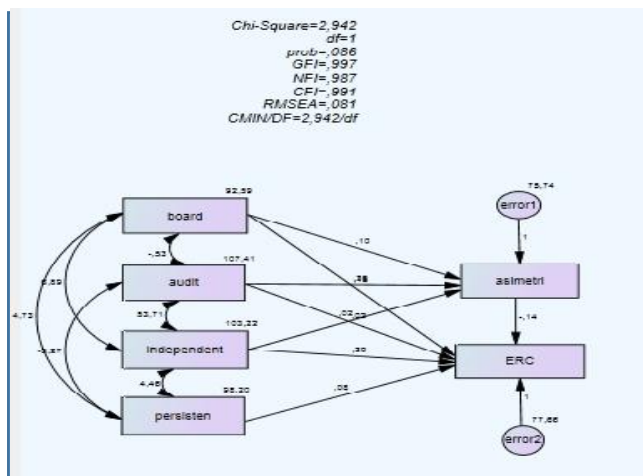


Figure 1. Research Model

TABLE 3
FITNESS MODEL TEST

Goodness of Fit Index	Cut-Off Value	Results Model
Chi-Square	<3.343 *	2.942
	Probability > 0.05	0.086
	GFI > 0.9	997
	NFI > 0.9	987
	CFI > 0.9	991
CMIN / DF	<2	2,942 / df

Data source: Output Amos, processed

*) Values Chi_Square on df = 1 with a significant level of 0.05 (p = 5%)

hypothesis testing results directly and indirectly on the path analysis as presented in table 4 and table 5.

TABLE 4
TEST RESULTS HYPOTHESIS DIRECTLY

hypothesis	P-Value	results
H ₁	0.005	Significant
H ₂	0.710	Not significant
H ₃	0.000	Significant

H₁ for a direct influence on the ERC commissioners and H₃ to directly influence the independent commissioner of the ERC shown significant results. While H₂ for a direct influence of the audit committee of the ERC showed nonsignificant results.

TABLE 5
TEST RESULTS HYPOTHESIS INDIRECTLY

Hypothesis	Direct Effect	Indirect Effect	Result
H ₄	-0.1350.099 *	-0.013	Significant weak
H ₅	-0.1350.409 *	-0.055	Significant weak
H ₆	-0.1310.022 *	-0.003	significant weak

Tests indirectly influence the board of directors, audit committees and independent directors of the ERC through intervening variables showed significant influence of information asymmetry weak with a value below or less than 0.50.

B. Conclusion

The board is at the core of corporate governance should be able to guarantee the quality of the information contained in the financial statements. The existence of the commissioners directly provide role in the monitoring of the implementation of the policy of the board of directors. The role can be explained that the more active the board of directors in carrying out its role more it will ensure the quality of information presented to the market. The composition of the board of commissioners may be one of the mechanism corporate governance that can explain the strength responsive than earnings or earnings quality.

The audit committee is responsible for overseeing the financial reports, overseeing external audit and examine its system of internal control (including external audit). In this study, the number of audit committee can not provide explanatory that the quality of financial reporting, the better. The role of the audit committee is to mediate between internal audit and external audit.

Commissioners are independent in corporate governance can provide explanatory responsive to the strength or quality of earnings. The composition according to the independent directors on mechanisms corporate governance will support the implementation of the function of transparency, disclosure, accountability and objectivity of the financial statements.

The mechanism of corporate governance by the Board of directors, audit committees and independent directors on the quality of reported earnings showed the role that will minimize the problems agencies arise between the board of directors by the shareholders at this research annotated with information asymmetry.

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ENVIRONMENTAL MANAGEMENT STRATEGIES IN FISH PROCESSING BY IMPLEMENTING CLEANER PRODUCTION

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Abstract

This study is a case study of cleaner production in the fish processing industry in Pasuruan, East Java Province. The study aimed to determine strategy of environmental management on small industry of fish processing by implementing cleaner production approach. The early stage was to identify various alternatives of cleaner production possibly implemented. The next stage was to undertake efficient use of energy and water, to minimize waste generated, and to carry out a better goodhousekeeping. The results showed that implementing cleaner production was able to reduce energy use by 4%, water use efficiency by 40% and raise the company's profits.

Keywords: cleaner production, environmental, goodhousekeeping, small industry, waste

1. Introduction

East Java Province is the largest contributor to the national Gross Domestic Product (GDP) in fisheries sub-sector by contributing to 11.98 percent (Huda, 2015). It makes East Java having an important role in developing national fisheries. The high potential of the East Java provincial fishery is supported by the high seafood consumption. In the domestic market, Indonesian fish consumption had reached 35.62 kg per capita in 2013 and increased to 38 kg per capita in 2014. This encourages the growth of majority of small and medium industries (SMEs) of fish processing. In East Java, the existence of SMEs has supported the economic growth. It is proved by 54.98 % of Gross Regional Domestic Products of fish processing industries. Moreover, the SMEs also absorb nearly 98% of labours. Considering to these conditions, SMEs might be considered as one

of the pillars of sustainable development (Blackman, 2006).

In the contrary to its role as the backbone of the national economy at present and future, SMEs also contribute to the environmental pollution. Hillary (2000) stated that the SMEs approximately provide 70 percent of the overall environmental pollution. It is due to the limitations of technology, knowledge and capital in implementing environmentally friendly innovations (Ramjeawon, 2004). Therefore, up to present time, the environmental improvement efforts on SMEs have remained as a challenge.

Environmental problems management is mainly hampered by the lack of skills and knowledge on the problems appearing on the small-scale industries. It is required a simple method which is easily implemented for SMEs, so environmental improvements can be sustainably conducted in order to create greener industry.

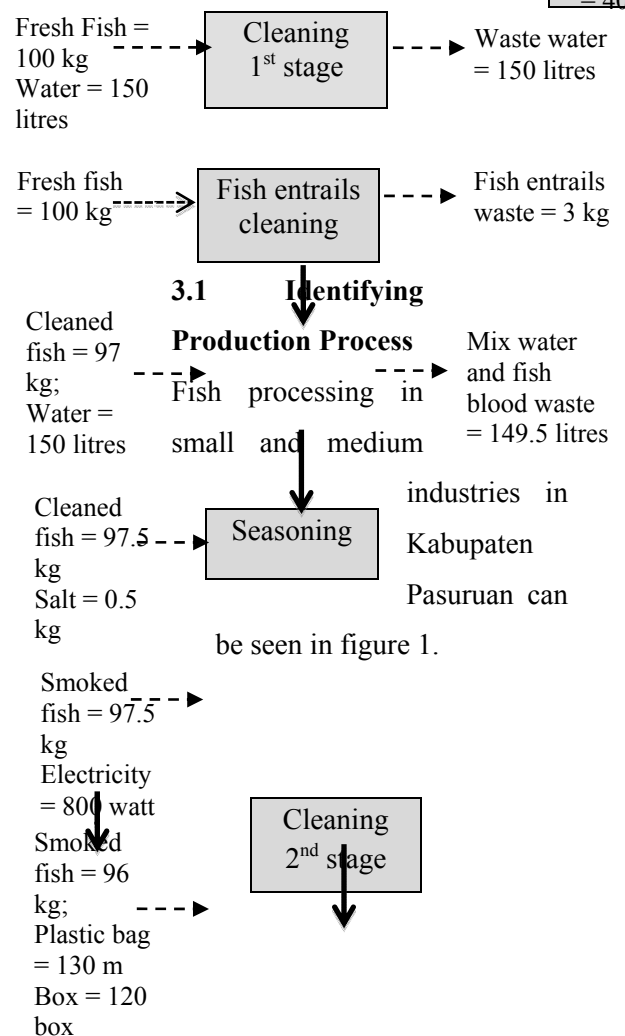
A promising concept of pollution control in SMEs is cleaner production. Pollution is also considered as an indicator of inefficiency. Production inefficiencies can lead to waste of resources, economic losses, poor working conditions and environmental pollution (Frijns and Vliet, 1999). Cleaner production is environmental pollution prevention strategies which orientates to reduce the environmental burden associated with the industrial process in SMEs (Baas, 2006). Implementing cleaner production becomes more attractive approach because of its prevention method of waste productions rather than end of pipe waste management that costs more.

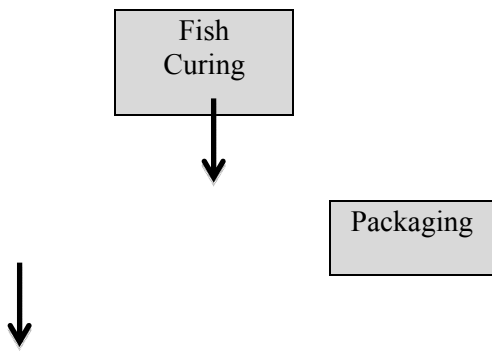
Nowdays in Indonesia, implementing cleaner production majority has been performed by large industries as part of the environmental management efforts. Implementing cleaner production in small and medium industries is necessary in order to compete in global trade in the 21st century. Cleaner production method is dynamic. Although it has been used for more than two decades, This method is still possible to be developed further (Rahmadyanti and Witjaksono, 2016). This study aimed to determine the possibility of implementing cleaner production in small and medium industries of fish processing.

2. Material and Methods

Data had been collected for 1 year in the small industries of fish processing in Pasuruan. Data collection methods were direct observation, document review and detail audit. Waste and energy audits were conducted thoroughly on every stage of production. Based on the findings, there were several options formulated which was later selected to be implemented.

3. Results and Discussion





Cleaning

The first stage of cleaning process is to clean 100 kg fresh fish from dirt by separating the dirt on the fish body. This process requires 150 litres of clean water stored in plastics containers. Generally the wastewater is directly discharged without prior treatment. The next process is to clean the entrails from 100 kg fish.

Fish Entrails Cleaning

After first stage of cleaning process, the next stage is to separate the flesh from its entrails before curing process. In this process solid waste generated was 3 kg fish entrails. Normally, this waste is directly disposed without any waste treatment. Furthermore, 97 kg of cleaned fish without entrails is ready for next process.

Cleaning

The second stage of cleaning process is to clean the fish flesh from the blood after separating the entrails. In this process, 150 litres of water is used and generates 149.5 litres of wastewater mixed with blood. There is about 0.5 litres of water absorbed in the flesh. Therefore, hanging is required in order to

accelerate the draining process. 149.5 litres wastewater mixed with blood was discarded without any waste treatment. The next stage is seasoning process; the 97.5 kg fish will be mixed with the seasoned.

Seasoning

Seasoning for 97.5 kg fish, after cleaned and added with 0.5 kg salt, needs 30 minutes to marinate the fish in order to pervasive the seasons.

Fish Curing

Fish curing for 97.5 kg requires an electric smoke machine with 800 watts power for 4 hours at temperature of 45°C. During this process, there is no liquid and solid waste generated. After the curing process, 96 grams fish will be cooled to room temperature before packaged.

Packaging

The packaging process 96 grams smoked fish uses vacuum sealer with 150 watt power and needs 2 hours. This process is necessary in order to maintain the freshness length durability without using any preservatives. Packaging uses *polypropylene* plastic which is vacuumed and boxed. After boxing, the products are stored in a special room.

Storing

Storing process is carried out to collect the production before distributed to customers. Storing process needs a special room with 40 watt lighting. The products cannot be stored longer than 24 hours before distributed.

3.2 Resources Utilized and Waste Generated

Based on a detailed audit conducted on small and medium industries of fish processing, the result on the resources utilized and waste generated is seen in Table 1. The production process has carried out for 26 working days averagely in a month. Water consumption required during the production process, cleaning in first and second stage as well as on the fish entrails cleaning process, requires 7.8 m³/month. Electricity consumption mainly for curing, packaging and storing processes requires 25.4 kWh/month. Generally, the waste generated from the production process consists of two components; namely solid waste as fish entrails was about 78 kg/month and liquid waste as wastewater with blood resulted from cleaning process was about 7.787 m³/month.

Table 1 Resources utilized and Waste generated

Resources utilized/waste generated	Amount
Water consumption	7,8 m ³ /month
Electricity consumption	25,74 kWh/month
Wastewater generation	7,787 m ³ /month
Solid waste generation	78 kg/month

3.3 Cleaner Production Implementation Options

The results on the audit of cleaner production showed that the most waste generated was the wastewater which was directly discharged without any waste treatment in advance. The efficiency can be

done during the first stage of the cleaning process, separating dirt on the fish. From the first stage, the wastewater can actually be reused for the second cleaning process, taking out the fish entrails. And it made the water consumption saved up to 40% or about 60 litres which can be reused in the second stage of cleaning process. Moreover, this can create efficiency on the electricity consumption, especially during the storing. Supposedly after packaging process, the products are directly distributed to resellers which mean eliminating the storing stage. It is considered more advantageous because it is also able to maintain the freshness of the product. If it is thoroughly carried out the electricity consumption can be saved up to 1.04 kWh/month or 4% every month.

Conclusion

Based on the results of a case study on one of the small and medium industries of fish processing, implementing cleaner production, goodhousekeeping, could undertake efficiency on water consumption by 40 percent and electricity consumption by 4 percent.

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JOINT ECONOMIC LOT SIZE IN THREE LEVEL SUPPLY CHAIN WITH PROBABILISTIC DEMAND

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Abstract. This research will develop a model Joint Economic Lot Size (JELS) three levels of the supply chain with probabilistic demand. Also, this study also compared the pattern without the Joint Economic Lot Size (JELS) with a model of the Joint Economic Lot Size (JELS) among players in the supply chain. This model confirms that the policy of the Joint Economic Lot Size (JELS) supplier-manufacturer-buyer gives the performance of the entire system is better than the policy without coordination between supplier-manufacturer-buyer.

Keywords: Inventory, Three Level, Demand Probabilistic, Joint Economic Lot Size.

I. INTRODUCTION

With the advent of a free market, there is no denying the increasing business competition in all areas of business. To survive and win the match the business, one way is the company implementing Supply Chain Management (SCM) well, so it can be said that the increase in business competition has become one of the triggers emergencies of supply chain management.

Simchi-Levi et al. [1] definitions that supply chain management is an approach to inventory management and distribution are integrated between suppliers, manufacturers, and retailers distributor to minimize overall system cost. According to Thomas and Griffin [2] supply chain management can be divided into three aspects: (1) aspects of the manufacturer and the buyer, (2) aspects of production and distribution, and (3) aspects of the inventory and distribution that aims to minimize the total cost of inventory for the entire supply chain inventory policy which involved so obtained is optimal for the whole system. Therefore, the determination of lot size should observe a mutual interest to minimize the total cost of the combined inventory in the supply chain system. Determining the size of the lot that takes into account mutual interests known as the Joint Economic Lot Size (JELS).

The models of coordination in the supply chain have been widely studied as ([3];[4];[5];[6]). Model Supply Chain (SC) coordinating the two levels has been developed by many researchers such as ([4];[5];[6]), the model developed successfully deliver cost savings SC. The model of coordination on three levels has been developed [6] and [5] developed a model of a three-level SC to state involved with multiple buyers, multiple manufacturers and sole supplier, while the Jaber and Goyal [5] developed a model of coordination at three levels SC for multi suppliers, manufacturers, and multi-buyer in addition, both models

generating total cost of the SC are minimal if the coordination between the players in the three levels of the supply chain is applied.

Some of the models that have been developed many are assuming that the demand is deterministic and constant, except Anshori et al [7] who developed models of supplier-buyer with probabilistic demand, but it is also a model that was developed over mostly only for a single buyer unless [6] and [5], as well as [7]. This study tried to relax the model [7] on two levels SC into three levels SC, for the situation of the buyer, manufacturer and sole supplier.

II. METHOD

The assumptions used in this model is the probabilistic situation demand in buyers for a particular period (year) where the manufacturer knows the average demand (μ) and standard deviation (σ). Cost savings on the buyer assumed to be more expensive than the cost savings to the manufacturer, as a consequence, the manufacturer will hold the inventory until the buyer requires for the next delivery. For policies lot for lot value of $\lambda_v = 1$, the cost of storage at the manufacturer will be reduced to zero. All parameters associated costs are known and fixed. The decision variables λ_v is a positive integer. The profile of the three levels of the SC consisting of a buyer-manufacturer-suppliers can be seen as in Figure 1 below:



Figure 1. Illustration of the network structure three levels of the supply chain

Notation

The notation used in the development of this model, is as follows:

b	is the buyer
v	is the manufacturer
s	is a supplier
k	is the number of components of the units of the product
μ	is the number of product demand from buyers (unit / year)
σ	is the standard deviation in product demand from buyers (unit / year)
A_b	is a booking fee per cycle from the buyer (\$/cycle)
A_v	is the setup cost per cycle manufacturers (\$/cycle)
A_s	is the setup cost per cycle suppliers (\$/cycle)
$a_{v,i}$	is a booking fee i-th component, where $i = 1, 2, \dots, k$
h_b	is the cost of storage products of buyers (\$/unit/year)
h_v	is the cost of storage of the product at the manufacturer per year (\$ / unit / year)
$h_{v,i}$	is a storage fee of i component in the manufacturer per year (\$ / unit / year)
$h_{s,i}$	is the cost of storage i component in supplier per year (\$ / unit / year)
S	is a cost shortfall (\$ / unit / year)
C_s	is the procurement cost per unit of item i (\$ / unit)
T	is a cycle time of booking from the buyer (years)
I_{max}	is the maximum inventory of each cycle (unit)
I_{tl}	is remnant inventory each cycle (unit)
Q_{TL}	is the amount of orders placed buyers in each cycle (unit)
λ_v	is the number of buyers ordering shipping
λ_s	is the number of manufacturers booking delivery

Total cost of buyer's

Total cost to the buyer consists of the cost of product ordering and storage costs as well as costs backorder. The decline in the formula to find the expected number of backorder follow the existing model on Chopra and Meindl (2001). Total cost of the buyer (TC_B) can be formulated as follows:

$$TC_b = \left[\frac{A_b}{T} + h_b \left[\frac{\mu T + Z\sigma\sqrt{T}}{2} \right] + \frac{S}{T} ES \right] \quad (1)$$

Where:

$$ES = -ss(1 - F_s(ss/\sigma)) + \sigma f_s(ss/\sigma)$$

Cycle reservations optimal buyer follows the EOQ model, where:

$$T^* = \sqrt{\frac{2A_b}{h_b\mu}} \quad (2)$$

Average amount of bookings made every cycle T (Q_{TL}) is the inventory maximum (I_{max}) minus the inventory at the time T (I_{TL}) and added to expectations shortage that occurred (ES) is formulated as follows:

$$Q_{TL} = \mu T + Z\sigma - I_{TL} + ES \quad (3)$$

Total cost manufacturers

Total costs borne by the manufacturer is the sum of the setup costs of production, the cost of product storage, the purchase cost of raw materials or components, and storage costs of raw materials or components. Total cost of the manufacturer (TC_v) formulated as follows:

$$TC_s(\lambda_s) = \left(\frac{A_s}{\lambda_s \lambda_v T} + \frac{\lambda_v}{2} \left(\sum_{i=1}^{k_s} h_{s,i} u_i \right) (\lambda_s - 1) (Q_{TL}) \right) \quad (4)$$

Total costs in supplier

Manufacturers have one supplier to supply k items. When buyers order as much Q unit to the manufacturer each T, to meet the demand of the manufacturers ordered to suppliers as much for each item i. Costs incurred in the supplier are as follows:

$$TC_s(\lambda_s) = \left(\frac{A_s}{\lambda_s \lambda_v T} + \frac{\lambda_v}{2} \left(\sum_{i=1}^{k_s} h_{s,i} u_i \right) (\lambda_s - 1) (Q_{TL}) \right) \quad (5)$$

Total Supply Chain Management Cost

The total cost of the supply chain (TC_{chain}) = total cost of the buyer + total cost of the manufacturer + total cost suppliers. If the supplier, manufacturer, and buyers are not coordinated (buyer decide for themselves the size of reservations optimal), then the formula that is used to get the total cost of the supply chain (TC_{chain}) is the following equation:

$$TC_{chain}(\lambda_s, \lambda_v, T) = \left[\frac{A_b}{T} + h_b \left[\frac{\mu T + Z\sigma\sqrt{T}}{2} \right] + \frac{S}{T} ES \right] + \left\{ \frac{A_v + \sum_{i=1}^k a_{v,i}}{\lambda_v T} + \frac{h_v + \sum_{i=1}^k h_{v,i} u_i}{2} (\lambda_v - 1) (Q_{PI}) \right\} + \left(\frac{A_s}{\lambda_s \lambda_v T} + \frac{\lambda_v}{2} \left(\sum_{i=1}^{k_s} h_{s,i} u_i \right) (\lambda_s - 1) (Q_{PI}) \right) \quad (6)$$

If the decision made by the Joint Economic Lot Size (JELS) (buyer follows the pattern of ordering the manufacturer),

then the total combined cost of the above formula can be rewritten as follows:

$$\overline{TC}_{chain}(\lambda_s, \lambda_v, T_{chain}) = \left[\frac{A_b}{T_{chain}} + h_b \left[\frac{\mu T_{chain} + Z\sigma\sqrt{T_{chain}}}{2} \right] + \frac{S}{T_{chain}} ES \right] + \left\{ \frac{A_v + \sum_{i=1}^k a_{v,i}}{\lambda_v T_{chain}} + \frac{h_v + \sum_{i=1}^k h_{v,i} u_i}{2} (\lambda_v - 1) (Q_{PI}) \right\} + \left(\frac{A_s}{\lambda_s \lambda_v T_{chain}} + \frac{\lambda_v}{2} \left(\sum_{i=1}^{k_s} h_{s,i} u_i \right) (\lambda_s - 1) (Q_{PI}) \right) \quad (7)$$

To find the optimal ordering cycle is done by first lowering the T chain is equal to zero. Search optimal cycle both models without coordination or by Jels can be seen in the

attachment. Optimal ordering cycle (T^*_{chain}) can be formulated as follows:

$$T^*_{chain} = \sqrt{\frac{\lambda_s \lambda_v A_b + \lambda_s \left(A_v + \sum_{i=1}^k a_{v,i} \right) + A_s}{\lambda_s \lambda_v \left(\frac{\mu h_b}{2} + \frac{h_v + \sum_{i=1}^k h_{v,i} u_i}{2} (\lambda_v - 1) (\mu) + \frac{\lambda_v}{2} \left(\sum_{i=1}^{k_s} h_{s,i} u_i \right) (\lambda_s - 1) (\mu) \right)}} \quad (8)$$

III. PROBLEM AND RESULTS

Problems

Input parameters used in the numerical example used to test a model similar to that used by Jaber and Goyal (2008) for buyers and suppliers of the first course, but it also contained additional parameters such as σ and S are used by Anshori et al. as well as to the first buyer, these parameters are:

- booking fee buyer (A_b) = \$ 30 / messaging
- storage costs buyer (h_b) = \$ 16 / unit / year
- fee deficiency (S) = \$ 20 / unit / year
- average demand (μ) = 100,000 units / year
- standard deviation (σ) = 5,000 units / year

Being in charge at the manufacturer is a feed setup ($A_v =$ \$ 200 / setup), and the cost savings and $h_v =$ \$ 10 / unit. Every single unit of product requires five items making up the product ($i = 1, 2, \dots, 5$), for the booking fee per item is the same product that is equal to ($a_{v,i} =$ \$ 10), while the needs of

each item forming products (u_i) and cost savings and item ($h_{v,i}$) can be seen in Table 1 below:

table. 1 Input parameters u_i and $h_{v,i}$

i	u_i (unit)	$h_{v,i}$ (\$/unit)
1	11	0,208
2	5	0,416
3	5	0,250
4	3	0,624
5	1	0,833

In the first year, there are 250 days.

For a fee there is the cost of the supplier can be seen in Table 2 below.

table. 2 The input parameters u_i and $h_{s,i}$

A_s	i	$C_{s,i}$	u_i	$I_s(\%)$	$h_{s,i}$
400	1	0,5	11	20	0,100
	2	1,0	5	20	0,200
	3	0,6	5	20	0,120
	4	1,5	3	25	0,375
	5	2,0	1	25	0,500

Results

Development of a model that has been done is to model the supply chain coordination between the supplier, the buyer and the manufacturer. Objectives achieved is to minimize the costs incurred in the supply chain. Therefore it is the necessary comparison between the total cost of the supply chain of suppliers, manufacturers and sole buyer if there is no JELS among the players with a lack of JELS.

Table 3 is a comparison table between models without JELS and with the JELS model.

Model tanpa adanya koordinasi antar level						
λ_v	λ_s	T^* (hari)	TCB (\$)	TCV (\$)	TCS (\$)	TC Chain (\$)
4	3	1,00	16.920	26.620	15.090	58.630
Model dengan adanya koordinasi antar level						
λ_v	λ_s	T^* chain (hari)	TCB (\$)	TCV (\$)	TCS (\$)	TC Chain (\$)
1	1	7,29	35.590	8.575	13.720	57.885
1	2	6,12	31.120	10.210	13.340	54.670
2	1	3,39	20.740	21.640	14.740	57.120
2	2	2,73	18.390	21.440	13.770	53.600
2	3	2,43	17.400	21.770	15.070	54.240
3	1	2,25	16.850	25.730	14.840	57.420
3	2	1,80	15.740	24.760	13.820	54.320
3	3	1,59	15.460	24.750	15.050	55.260
3	4	1,46	15.420	24.990	16.810	57.220
4	1	1,70	15.600	27.870	14.740	58.210
4	2	1,36	15.430	26.440	13.790	55.660
4	3	1,20	15.700	26.200	15.050	56.950
4	4	1,10	16.180	26.290	16.820	59.290
5	1	1,37	15.440	29.230	14.570	59.240
5	2	1,10	16.170	27.520	13.730	57.420
5	3	0,98	17.040	27.100	15.070	59.210
5	4	0,89	17.790	27.090	16.910	61.790

From Table 3 above shows that the difference between with JELS and no JELS visible to the buyer ordering cycle, the number of buyers ordering delivery from the manufacturer as well as the number of manufacturers ordering delivery from suppliers. Models without JELS indicate that the ordering cycle buyers do every 1 day, and the manufacturer sends the buyer's order (λ_v) as much as four times as well as suppliers to fulfill orders the manufacturer to make deliveries (λ_s) 3 times, with the total cost of the supply chain it amounted to \$ 58,630. Model JELS recommends that the ordering cycle time buyers should be done every 2.73 days and manufacturers shipping to the buyer to do as much as two times as well as shipping suppliers to manufacturers as much as two times, with a total supply chain costs by \$ 53,600. The savings that can be made of the coordination model compared to the model without coordination at \$ 5,030, where the savings occurred on the manufacturer (for \$ 5,180) and suppliers (for \$ 1,320), while the buyer has just raised a fee of \$ 1,470.

IV. CONCLUSIONS

This study has proved that the model the Joint Economist Lot Size (JELS) buyer, manufacturer and sole supplier to produce the total cost of the supply chain that is smaller than the model without Joint Economist Lot Size (JELS). Percentage savings on manufacturers and suppliers

respectively by 19.46% and 8.75%, while the buyers increased the fee of 8.69%.

Model supplies that have been developed in this study can be elaborated by the characteristics of different problems. In this research model compensation from the manufacturer can be considered to be given that sort of coordination could run well. Existing models can also be developed into a more complex issue such as multi-buyer and multi suppliers.

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LINEAR TREND ANALYSIS IMPACT OF INCREASING INVESTMENT IN AREA OF DEVELOPING COMMERCIAL PROPERTIES

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Abstract. Growth of the middle class and purchasing power of domestic consumers, boost property business in some parts of Indonesia. Domestic investment / PMA Housing sector, Industrial and Office from January to September 2015 reached Rp. 5,888.02 billion plus US \$ 1,481.3 million. The high investment property sector in accordance with government programs that focus on the Strategic Development Area 35 in Indonesia with the support of funding the state budget, the budget and PMN, the appropriate Government Work Plan 2016 "Accelerating Infrastructure Development for Strengthening Development Foundation of Quality". Based *Linear Trend Analysis* on Domestic Investment and Foreign Affairs over the period 2014-2015 a trend of significant increase in investment in West Java, have an impact on the growth trend in commercial property price index period of the third quarter of 2015, with the highest increase in property Apartment (69,15%) and retail properties (58.42%). Robust investment of Internal Affairs in South Sulawesi (Makassar and vicinity) impact on the growth trend in commercial property price index period of the third quarter of 2015, with the highest increase in the property Hotel (59.29%) and property Industrial Land (59.29%). Robust Foreign investment in Banten impact on the growth trend in commercial property price index period of the third quarter of 2015, with the highest increase in property Industrial Land (104.48%) and property Apartment (86.91%)

Keywords: Investments, Commercial Properties , *Linear Trend Analysis*

I. INTRODUCTION

Economic growth is stable, the political-security is relatively restrained, rich natural resources and strong investment climate has increased the number of middle class people in Indonesia. The increase in middle class population brought a wave of consumer spending one of them in the form of ownership / investment property (BCG, 2013). The strong growth of the middle class and purchasing power of domestic consumers, boost property business in some parts of Indonesia (Setiawan et al,2014). The Investment Coordinating Board noted from January to September 2015 Housing sector investment, Industrial and Office for Domestic Investment (DCI) reached Rp. 5,888.02 billion, slightly lower than 2014 investments worth 13,111.8 billion, while for Foreign Direct Investment (FDI) reached US \$ 1,481.3 million, an increase higher than investments in 2014 worth US \$ 1.168 million (BKPM,2015).

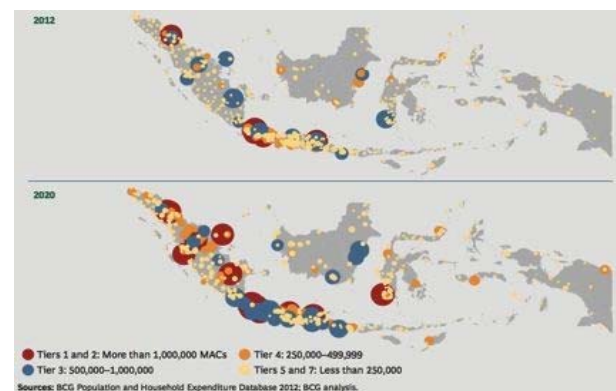


Figure 1. The population of Indonesia in the Middle Class 2012 & 2020
(source: BCG, 2013)

the Government has launched the 2016 Government Work Plan (RKP) "Accelerating Infrastructure Development for Strengthening Development Foundation of quality". Infrastructure Development by the Ministry of Public Works Pera approach Regional poured in 35 Regional Strategic Development (WPS), where it is a development approach that combines the development of the region with a "market driven", consider the carrying capacity and environmental capacity and focus on the development of infrastructure in a

strategic region in order to support the accelerating growth of strategic areas and to reduce disparities between regions in the WPS. The integration of infrastructure in the development of a strategic area in the form of connectivity WPS urban development, industry, and maritime / port industry (BPIW,2015). WPS supported development funding in part from the state budget in 2016, covering most of the 2016 Budget of the Ministry of Public Works Pera Rp. 104.1 trillion, the Ministry of Transportation Rp. 48.5 trillion, the Ministry of CTF Rp. 13.8 trillion, Rp Tourism Ministry. 5.4 trillion, the Ministry of Industry Rp. 3.3 trillion, as well as the transfer to the Regions and Dana Village Rp. 770.2 trillion. In Budget 2016 also include financing of non debt (State Capital) to support the development of good infrastructure facilities and transportation infrastructure, settlements, water and sanitation, and energy infrastructure through the allocation of government investment funds, and the obligation to guarantee, includes: (1) PT Sarana multi Infrastruktur Rp 4.2, trillion, to participate in the financing of strategic infrastructure projects, (2) Indonesia infrastructure guarantee Rp 1.0 trillion, to strengthen the capital structure and increase the capacity of PT PII to guarantee in infrastructure projects, (3) PT Sarana Multigriya Financial Rp 1.0 trillion, to improve the capital structure and increase the capacity of business to expand the secondary mortgage market, (4) PT Jasa Marga Rp 1.3 trillion, to carry out the construction of new toll road projects, (5) PT Utama Rp 3.0 trillion, to carry out the assignment of the Government in the toll road concession in Sumatra, (6) PT Wijaya Karya Rp 4.0 trillion, to implement infrastructure projects include power plants, Industrial Area Kuala Tanjung, Water Development treatment Plant as well as the motorway, (7) PT Pembangunan Perumahan Rp 2.3 trillion, to implement infrastructure projects such as ports and industrial estates, port and toll road, (8) Perumnas Rp 250 billion (cash) and Rp 235.4 billion (principal debt conversion RDI), to speed up land acquisition and provision of houses, both houses of the site and flats for the middle to lower, (9) PT Peln Rp 564.8 billion (principal debt conversion SLA) to enhance the ability of the company in funding investment, (10) PT Angkasa Pura II Rp 2.0 trillion, is used in the context of land acquisition for the construction of runway 3 of Soekarno-Hatta, (11) Amarta Rp 32.1 billion (principal debt conversion SLA) to increase the capacity of business and acceleration of program priorities related government energy infrastructure, (12) PT Pelindo III Rp 1.0 trillion, to implement development programs and the development of marine accessibility; port development in Eastern Indonesia; as well as the development of the passenger terminal, the cruise port of the people and supporting facilities. (Ministry of Finance,2015).

II. INVESTMENT IN REGIONAL

infrastructure projects *multiyear* into the motor pertumbunganinvestment in South Sulawesi. Makassar as the capital of South Sulawesi province and the largest city in eastern Indonesia has a population of 1.3 million and the GDP of Rp. 12 million / capita. Supported infrastructure Hasanuddin Airport (7.5 million passengers / year), the Port of Soekarno Hatta (550

thousand TEU) as well as 3 Industrial Area Industrial Area which Maros (Manufacturing), Gowa (Food, Beverages and Tobacco) and Takalar (Manufacturing) (BPIW,2015).Makassar Development New Port has been implemented *Groundbreaking* by the President in May 2015, total investment reached more than Rp. 8 Trillion. In addition to Makassar New Port project, several infrastructure projects will push forward the economy of South Sulawesi, among other railway projects Makassar-Pare Pare, Jeneponto power plant project, the construction of three smelters in Bantaeng, and plan the development of Wind Power (BI, 2015)



Table 1. infrastructure Projects in South Sulawesi (source: BI, 2015)

No	Nama Proyek	Rencana Pengembangan	Perkembangan Terakhir
1	Proyek KA Makassar-Parepare	<ul style="list-style-type: none"> Merupakan bagian dari proyek perkeretaapian Trans Sulawesi ditargetkan akan sepanjang 2.000 km dari Makassar ke Manado. Rencana pembangunan 23 stasiun dari total panjang 145,23 km 	<ul style="list-style-type: none"> Konstruksi telah mencapai 10 Km. Pembebasan lahan tahap I sepanjang 30 Km telah selesai 90%. Alokasi anggaran 2015 <ul style="list-style-type: none"> APBD Rp100 milyar APBN Rp971 milyar Alokasi anggaran 2016 <ul style="list-style-type: none"> APBN Rp1,3 triliun
2	PLTU Jeneponto tahap II	<ul style="list-style-type: none"> Tahap I telah dioperasikan pada tahun 2012 Kapasitas PLTU Jeneponto tahap II 2x135 MW (gross capacity) atau 2x125 (net capacity). Rencana pembangunan 18 bulan Nilai proyek (turn key) sebesar Rp 3 triliun 	<ul style="list-style-type: none"> Groundbreaking pada bulan Maret 2015
3	Smelter PT. A	<ul style="list-style-type: none"> Total Investasi : 6 Triliun Rupiah Produk utama : Feronikel. Kapasitas Produksi : 1 Juta metrik ton per tahun 	<ul style="list-style-type: none"> Progress terakhir : Pematangan Lahan Estimasi produksi : 2016
4	Smelter PT. B	<ul style="list-style-type: none"> Total Investasi : USD 130 Juta Produk utama : Feronikel. Kapasitas Produksi : 50.000 metrik ton per tahun 	<ul style="list-style-type: none"> Progress terakhir : Proses Konstruksi Estimasi produksi : 2016
5	Smelter PT. C	<ul style="list-style-type: none"> Total Investasi : USD 300 Juta Produk utama : Feronikel. Kapasitas Produksi : 300 ribu metrik ton per tahun 	<ul style="list-style-type: none"> Progress terakhir : Pembebasan Lahan Estimasi produksi : 2016
6	PLT Tenaga Angin	<ul style="list-style-type: none"> Rencana lokasi di Kabupaten Jeneponto dan Sidrap. Sumber dan APBD Rencana kapasitas 80-250 KW tenaga listrik 	<ul style="list-style-type: none"> Studi Kelayakan

Banten Province became one of the areas with major infrastructure development in western Indonesia. Soekarno Hatta (420 thousand low) as the *entrance* of Jakarta Capital International conveniently located in Banten, the automatic boost investment in Banten. Industrial Development Zone sustain Tangerang Tangerang city with 1.9 million inhabitants and the GDP of Rp. 6.544 million. Tanjung Lesung Special Economic Zone on an area of 1,500 ha to center-based economics Banten travel. Tanjung Lesung supported infrastructure development Attack Toll-Panimbang along 83.9 KM (2018 operations), the construction of airstrips (airfields along the 1.2 KM), the development and construction of service Panimbang Cruise Terminal / Region Marina. Tanjung Lesung direct contact with the National Tourism Strategic Area Ujung Kulon area of 122 thousand hectares with International appeal covers the landscape, tourism and marine national parks. Other infrastructure development is the Sand Dams Kopo, Karian (2,225 ha; 9.1 m3), Tanjung and Talawan (BPIW, 2015)

Bandung as the National Events Centre in West Java with a population of 2.46 million people, highly strategic and supported a number of infrastructure development. The completion of strategic infrastructure and Toll Jatigede Cipali, as well as the development of Gedebage Industrial Zone (20 ha), Rancaekkek (200 ha) (BPIW,2015). Besides the construction of Toll Cisumdawu (Rp. 10.158 trillion), Kertajati International Airport (Rp. 8.299 trillion), Toll Soroja (Rp. 1.43 trillion), TPA Sarimukti-Leuwigajah (Rp. 561 billion), development Husein Sastranegara Airport (IDR . 77 billion). Besides the development of public private partnership (PPP), namely *cablecar*, at Rp. 20 trillion for the corridor along the 40 km (Bappeda Jabar, 2015)

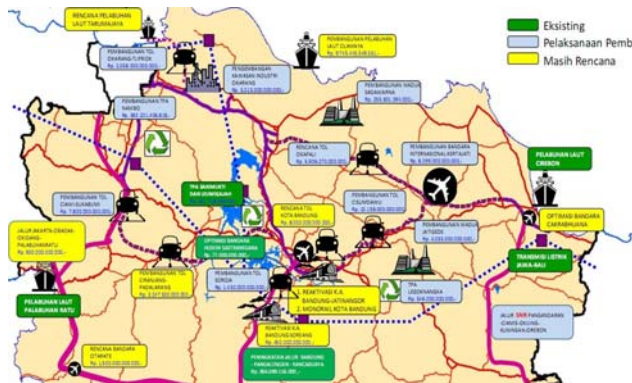


Figure 3. Infrastructure Bandung and surrounding areas (Source: Bappeda Jabar, 2015)

III. DEVELOPMENT OF COMMERCIAL PROPERTIES IN THE AREA

The development of commercial properties increased at the end of 2015, in particular the supply of apartments with the number of apartments is continuing development of advanced tower like *Majestic Point*, *Medina* and *U-Residence* (Banten) and a number other areas. The supply of industrial land in Banten will grow through project Griya Idola *Industrial Park* (GIIP) of 50 ha developed by PT Griya Tirta Asri, in Makassar on the project Kawasan Industri Makassar 2 and Zone Industrial Gowa strengthened the position of Makassar as Centre (Hub) of eastern Indonesia. The occupancy rate also increased hospitality at the end of 2015 by easing the implementation of MICE in Hotel, both in Banten, Bandung and Makassar for implementation by government agencies. The increase in demand for industrial land and warehousing query comes from companies that have a share of foreign ownership, especially those related to the food industry and *consumer goods*. The increase in demand for residential apartments, especially in Banten due to the shift of consumers from Jakarta to Banten due to the price factor and the factor of more comfortable residential environment integrated with the development of a new city. LTV rules easing demand for apartments has not increased significantly, but the ease of installment payments by extending the DP as well as the rest of the installments by Developer leverage increased demand for apartment units (BI,2015).

IV. METHODOLOGY

Quantitative research methods. Data sourced on secondary data Investment in the Investment Coordinating Board in 2014-2015 and secondary commercial property price index in Bank Indonesia in 2014-2015. Data are presented per Quarter (Three Months). Research sites in Banten, Bandung and Makassar. Analysis technique uses *Trend Analysis*.

Table 2. Development of Commercial Property Price Index in Banten, Bandung and Makassar per quarter year 2014 to 2015 (source: BI, 2015)

MAKASSAR	2014(2)	2014(3)	2014(4)	2015(1)	2015(2)	2015(3)
perkantoran	95.03	99.04	105.93	112.43	119.12	119.5
perkantoran sewa	95.03	99.04	105.93	112.3	119.12	119.5
ritel	96.86	101.16	101.98	114.88	120.64	127.77
ritel sewa	96.86	101.16	101.98	114.88	120.64	127.77
apartemen	94.65	98.88	106.48	110	112.41	115.88
apartemen jual	94.65	98.88	106.48	110	112.41	115.88
hotel	99.16	100.38	100.47	79.99	78.73	83.62
lahan industri	93.86	101.53	104.61	124.75	143.94	159.29
BANDUNG	2014(2)	2014(3)	2014(4)	2015(1)	2015(2)	2015(3)
perkantoran	124.41	127.96	129.43	134.45	136.89	138.09
perkantoran sewa	124.41	127.96	129.43	134.45	136.89	138.09
ritel	180.14	180.73	180.77	191.52	197.29	200.66
ritel sewa	141.07	142.06	143.29	147.77	155.36	156.82
apartemen	183.6	184.16	184.42	195.51	201.04	204.62
apartemen sewa	116.57	115.74	114.63	125.78	129.6	133.68
apartemen jual	151.33	169.65	202.27	216.96	200.4	244.98
hotel	116.56	115.72	114.59	125.74	129.57	133.63
lahan industri	143.23	145.77	136.24	117.88	101.68	125.56
BANTEN	2014(2)	2014(3)	2014(4)	2015(1)	2015(2)	2015(3)
ritel	130.39	133.11	133.82	154.7	155.71	155.7
ritel sewa	112.73	114.55	115.17	116.08	117.67	119.19
ritel jual	130.79	133.54	134.25	155.48	156.73	156.74
apartemen	147.27	148.65	150.27	174.88	185.06	186.91
apartemen jual	147.27	148.65	150.27	174.88	185.06	186.91
hotel	100.33	95.47	106.09	75.45	70.71	121.06
lahan industri	166.3	177.06	177.06	185.34	202.09	204.48

Table 3. Realization of Domestic Investment and Foreign Affairs in Banten, Bandung and Makassar per quarter year 2014-2015 (source: BI, 2015)

INVESTASI PMDN (Rp. Miliar)	2014(2)	2014(3)	2014(4)	2015(1)	2015(2)	2015(3)
JAWA BARAT / West Java	2,443.00	3,306.90	4,889.00	10,618.40	4,801.27	8,614.66
BANTEN / Banten	4,901.30	1,395.40	1,412.00	801.70	4,209.40	2,951.50
SULAWESI SELATAN / South Sulawesi	189.30	1,890.90	2,513.00	69.60	2,697.31	2,062.40
INVESTASI PMA (US\$ Juta)	2014(2)	2014(3)	2014(4)	2015(1)	2015(2)	2015(3)
JAWA BARAT / West Java	1,463.90	1,434.40	1,896.30	1,942.50	1,701.91	1,544.26
BANTEN / Banten	482.40	448.60	512.60	490.50	518.84	606.75
SULAWESI SELATAN / South Sulawesi	121.00	65.20	47.50	41.70	77.15	45.51

V. DATA ANALYSIS

Trend growth in commercial property price index in Banten, Bandung and Makassar, grouped covers retail property, the property Apartment, property and hotel properties industrial land.

Table 4. Trend Commercial Property Price Index in Banten per Quarter Year 2014-2015 (source: BI, 2015)

COMMERCIAL PROPERTIES	2014 (2)	2014 (3)	2014 (4)	2015 (1)	2015 (2)	2015 (3)
RETAIL	24.64%	27.07%	27.75%	42.09%	43.37%	43.88%
APARTMENTS	47.27%	48.65%	50.27%	74.88%	85.06%	86.91%
HOTEL	0.33%	-4.53%	6.09%	-24.55%	-29.29%	21.06%
INDUSTRIAL LAND	66.30%	77.06%	77.06%	85.34%	102.09%	104.48%

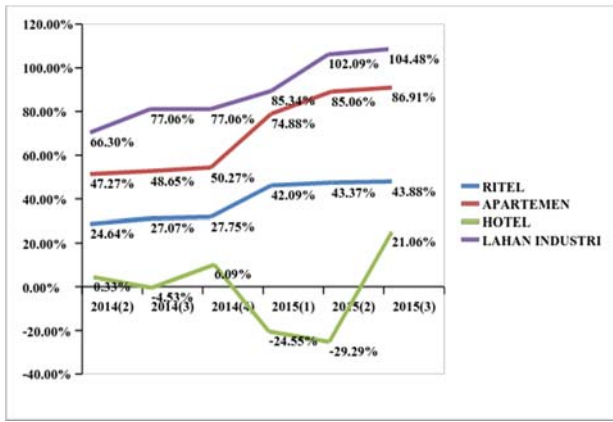


Figure 4. growth of Commercial property Price Index in Banten per Quarter Year 2014-2015 (source: BI, 2015)

Trend growth in commercial property price index in Banten include retail properties, property Apartment, property and property Industrial Land Awards, based on data Quarterly during 2014-2015 showed an increasing trend in all the properties in the period of the third quarter of 2015, with the highest growth in property Industrial Land (104.48%) and property Apartment (86.91%)

Table 5. Trend property Price Index Commercial in Bandung per Quarter Year 2014-2015 (source: BI, 2015)

COMMERCIAL PROPERTIES	2014 (2)	2014 (3)	2014 (4)	2015 (1)	2015 (2)	2015 (3)
RETAIL	42.51%	44.68%	45.73%	52.05%	56.61%	58.42%
APARTMENTS	50.09%	49.95%	49.53%	60.65%	65.32%	69.15%
HOTEL	16.56%	15.72%	14.59%	25.74%	29.57%	33.63%
INDUSTRIAL LAND	43.23%	45.77%	36.24%	17.88%	1.68%	25.56%

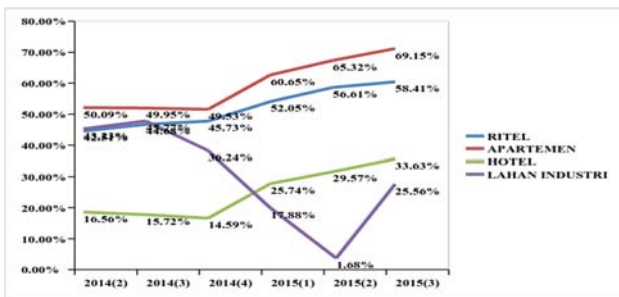


Figure 5. Growth Property Price Index Commercial in Bandung per Quarter year 2014-2015 (source: BI, 2015)

Trend growth in commercial property price index in Bandung area includes retail properties, property Apartment, property and property Industrial Land Awards, based on data per quarter during the year 2014-2015 shows Trend increased on all properties in the period of the third quarter of 2015, with the highest growth in property Apartment (69.15%) and retail properties (58.42%)

Table 6. Trend Commercial property Price Index in Makassar per Quarter year 2014-2015 (source: BI, 2015)

COMMERCIAL PROPERTIES	(2)	(3)	(4)	(1)	(2)	(3)
Retail	-4.06%	0.10%	3.96%	13.62%	19.88%	23.64%
APARTMENTS	-5.35%	-1.12%	6.48%	10.00%	12.41%	15.88%
HOTEL	-6.14%	1.53%	4.61%	75%	43.94%	59.29%
INDUSTRIAL LAND	-6.14%	1.53%	4.61%	24.75%	43.94%	59.29%

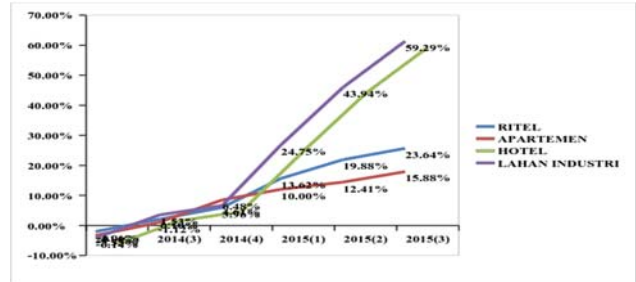


Figure 6. Growth of Commercial Property Price Index in Makassar per Quarter years 2014-2015 (source: BI, 2015)

Trend growth in commercial property price index in Makassar include retail properties, property Apartment, property and property Industrial Land Awards, based on data per quarter during the year 2014-2015 showed an increasing trend at all properties in the period of the third quarter of 2015, with the highest growth in the property Hotel (59.29%) and property Industrial Land (59.29%)

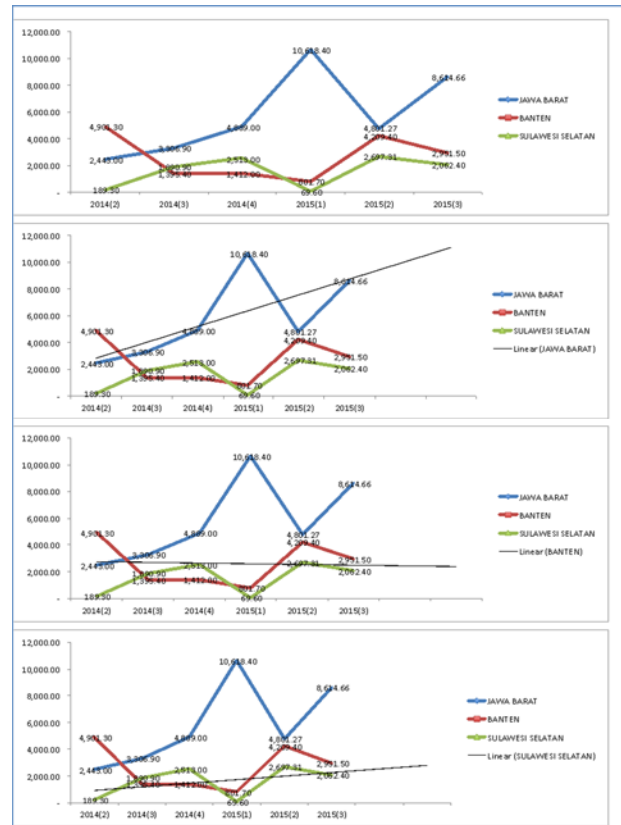


Figure 7. Linear Trend Analysis Domestic Investment (Rp. Billion) in West Java, Banten and South Sulawesi per Quarter Year 2014-2015 (source: BKPM, 2015)

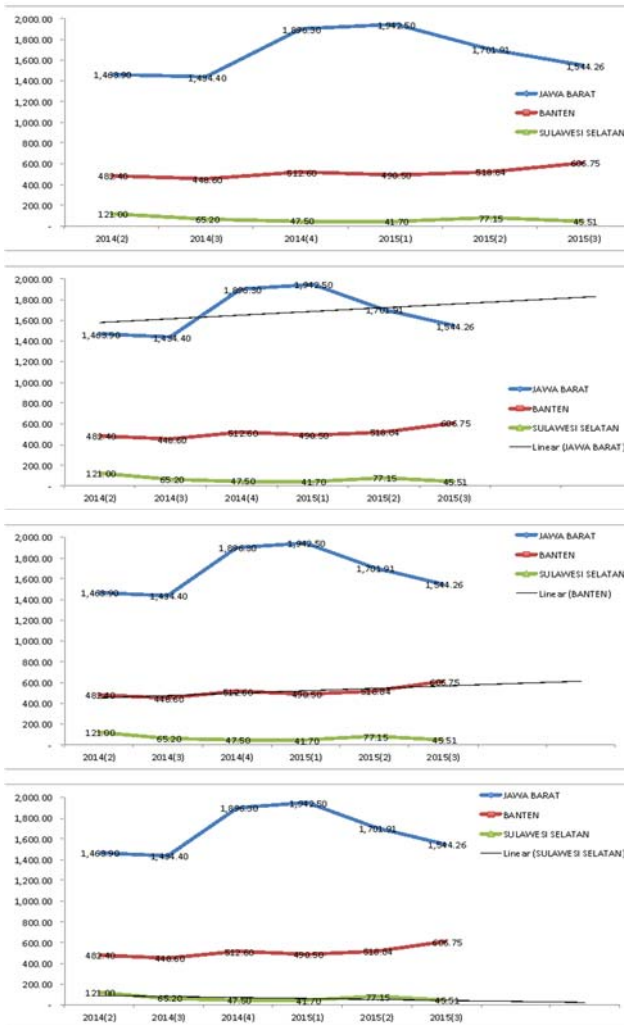


Figure 6. *Linear Trend Analysis* of Foreign Investment (US \$ Million) in West Java, Banten and South Sulawesi per Quarter Year 2014- 2015 (source: BKPM, 2015)

Based on the *Linear trend Analysis* on Domestic investment over the period 2014-2015 in the area of West Java, Banten and South Sulawesi, West Java region dominant seen scores of investment, there was a significant trend of increased investment in Java west (Bandung and surrounding areas), as well as a trend of improvement in the area of South Sulawesi (Makassar and its surroundings), but little happened the downward trend in Banten.

Based *Linear trend Analysis* on Domestic Investment over the period 2014-2015 in the area of west Java, Banten and South Sulawesi, visible region of West Java dominant obtain the value of investments, a trend of increase in a significant investment in West Java (Bandung and surrounding areas), as well as a trend of an increase in Banten, but a bit of a trend of decline in South Sulawesi (Makassar and its surroundings).

VI. CONCLUSION

- Based on *Linear trend Analysis* on Domestic investment and Foreign Affairs over the period 2014 to 2015 a trend of significant increase in investment in West Java. It has an impact on the growth trend in commercial property price index period of the third quarter of 2015, with the highest increase in property Apartment (69.15%) and retail properties (58.42%)
- Based on the *Linear Trend Analysis* on Domestic Investment and Foreign Affairs during the period years 2014-2015 in the region of South Sulawesi (Makassar and vicinity), a trend of increasing investments of the Interior but little happened Foreign investment decreasing trend. Robust investment of the Interior has an impact on the growth trend in commercial property price index period of the third quarter of 2015, with the highest increase in the property Hotel (59.29%) and property Industrial Land (59.29%)
- Based on the *Linear Trend Analysis* on Domestic Investment and Foreign Affairs over the period 2014-2015 in Banten, a trend of increasing investment Foreign Affairs but little happened trend decline in investment of the Interior. Robust Foreign investment has an impact on the growth trend in commercial property price index period of the third quarter of 2015, with the highest increase in property Industrial Land (104.48%) and property Apartment (86.91%)

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LOCAL WISDOM AS AN IMPORTANT ASPECT IN THE SPIRITUAL CAPITAL OF TRADITIONAL KINSHIP

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Abstract. In a kinship of a traditional society, spiritual capital has an important role in sustainable development. Based on an observation of the traditional society, the local wisdom which is lived in their daily life has made some values that influence their social behavior. This social behavior then forms a development community that becomes a good means to improve local economy or political life. Therefore, a local wisdom which is lived by a development community will be an important aspect of spiritual capital in traditional kinship.

Keywords: spiritual capital, traditional kinship, development

I. INTRODUCTION

Local wisdom which is contained in any traditional kinship is often overlooked. In fact, its existence has a possibility to be a spiritual capital which can form a development community and driving development.

In the condition of area is far from the central government, the presence of a spiritual capital which can form a development community will be more needed. This becomes interesting because usually the development and arising of the economy associated with financial capital and human capital. However, in this paper will be shown that the spiritual life of a society can also directly related to community development that has ability to arise local economy and improve political life.

II. THE VALUES OF KINSHIP AND SPIRITUAL CAPITAL

Weber (2003) has raised the relationship between Protestantism and capitalism ethics. Ethics encourages people to work hard, discipline, and saving in order to obtain property that is trusted by them as a sign of God's blessing. For those people who are still living on earth, their state of grace will be known according to their situation during the life of the world. Therefore, everyone is competing to become the chosen people so that they become dynamic and progressive. Weber's research is closely related to spiritual matters because the real changes of the nation ascetical in America has supported their economic behavior. This ascetical especially concerning the acquisition of earthly possessions.

Similarly in India, there are certain tribes that lost roots of settlement, so fully alive to perform services for other tribes. In its efforts to assimilate to the Hindu community, then they get the title as a pariah rate, a lower social class that occurs due to the spiritual life (Andreski 1989). However, as they managed to adapt to the spiritual life of the local people, they can survive and relatively overcome the poverty that originally did not have a place to stay at all.

The arising of economy in Jatinom, Central Java, also due to the spiritual life of local people (Abdullah 1994). People in Jatinom believe in the one God so that

entrepreneurs in Jatinom feel they have to build the values of Islamic culture through the work with the help of God's grace. All the struggles and sacrifices followed by obedience, sincerity, and devotion to God. Spiritual teaching of Islam they translate into their economic activities, namely *san* (straight), *Open* (diligently maintain), and *tlatén* (diligent). *San* in the sense that they are not ashamed to do any work as long as it is halal. *Open* in the sense of diligently caring for and collect things to accumulation. This concept also refers to economic meticulous attitude. The *tlatén* means working diligently and assiduously to run its business. Islamic religious teaching that honesty and faithfully hold the promise have supported the success of business in Jatinom.

Through a research in Mojokuto, Geertz (1977) have found that the entrepreneurs are *santri*.¹ At the ideological level, this group identified themselves as a perfect storage of religious values and great moral in the society at large. On the other side, research of Geertz in Tabanan shows entrepreneurs group there actually were from the nobility. We can guess that this is related also to the spiritual motivation for every clan in Bali related to the temple where they worship. Radically doctrine held by entrepreneurs in Modjokuto is reform of Islam that wants to cleanse Islam of heterodok elements which are still common in general. Meanwhile the ideology of the entrepreneurs in Tabanan is more liberal and restorationist. However, the motivation behind the economic behavior of entrepreneurs both in Modjokuto and Tabanan are the "true" values according to their spiritual life which is not the same to ordinary values. These spiritual life values then become the spiritual capital driving economic development in Modjokuto and Tabanan.

Yusuf (2011) observed that the spiritual capital in Malaysia has affected the micro and macro economics of the country. It is found that Islamic Financial Institutions, Institutions Zakat, and Waqf Institutions in Malaysia has influenced on savings behavior, consumption, and

¹ Santri is a student at Muslim school, strick adherent of Islam. (Source: Kamusku Apps)

investment for Muslims in Malaysia, as well as influenced the economic growth and poverty reduction.

Arising of economic in the eastern part of Asia is also influenced by the role of spiritual capital. Research of Bellah (1992) shows the relationship between Zen Buddhism in Japan with economic ethics. At the Ashikaga period ((1392-1573), the Zen monks gave an important role in economy. The Zen spiritual life emphasized a productive activities and live in spartan simplicity and frugality. Unlike other Buddhist sects who ask for alms, the monks Zen emphasized hard work. Work is seen as something sacred because it is an expression of gratitude for graces received. In the later period, Confucianism has a big influence in Japan which is used to illuminate understanding of the relationship between the economy and the state (Bellah 1992). This also characterizes the Tokugawa rulers² in giving attention to the economy. Confucian core economic policy then encourage the production and reducing consumption, so that the wealth can guarantee the welfare of the people. This ascetical behavior takes the form of a reduction in consumption and spiritually ascetical.

There are two views that characterize the values of Japan in economic terms. First, one way dynamism to achieve a common goal, and the second, a genuine spirit of selfless sacrifice in order to achieve this common goal. The attitude of diligent and frugal living are contained in these two views. The views of political economy which is born from the values of the Japanese people is translated into government policies to increase the Japanese economy. One of policy is the government provides a lot of facilities and tax breaks to encourage the opening of the fields so that at the beginning of the Tokugawa government, agricultural in Japan grew very fast. One famous area that have rapid economic development is Yonezawa. Typical efforts in the era of Togukawa is sending preachers who instill virtue of diligent, honest, and efficient in the ceremonies of the Confucian among people.

One of the values that is lived in Japanese society is the value of filial piety to parents and ancestors. This value has a huge impact on the economy of Japan. Diligent and hard working attitude fostered not for personal profit but for the sake of family profit. Everyone continues in business for the sake of fragrance family's name and do the best to not give embarrassment to the ancestor. Thus, personal integrity is the thing that should be always maintained. The positive impact was created *trust* so that the practice of payment by credit entered into business and evoke the world of business. Chen (1976 in Alatas 2002) also conducted research on Asian values. Through his research, he sees Asian values like teamwork spirit, mutual help, filial piety towards parents, and friendship, can play a role in correct things that are not pleasant due to the effects of modernization.

Bellah (1992) analyzed that Japan is prioritizing values because of their spiritual life. The central notch of politics in Japan mainly occurs because of the value of loyalty to superiors. Loyalty is seen as an input in integrative system or public institutional of the country. The output is a

² Tokugawa is a Japanes egin that lasted from 1600 until 1868. The administration is terminated by the Meiji Era (1868-1911).

coordination authority. The one who holds political authority is obliged to bestow *ON* (blessing) to his people. This *ON* can be in the form of peace from war, poverty reduction programs, salaries, and so on. However, for the Japanese loyalty has nothing to do with *ON*, but loyalty is the absolute duty. This loyalty despite an absolute duty but does not contain the element of force for the people of Japan. This occurs because the identification of the people who saw the whole nation as a large family. Emperor is divine, the prince, and the father of all the national family. While people are worshipers, servants, and children. Thus, fidelity is nothing but a supreme obedience of a child. This is what is meant by the *Kokutai* principle, which is a state concept that blends the principles of kinship, political, religious, and inseparably. *Kokutai* be an identification of the religious and political entities at the same time so that political activity became synonymous with religious activities (Bellah 1992: 141-142). Can be seen here that the political dynamics in Japan background is religious motivation.

In the midst of poverty in Srinlanka and conflict between the government and Tamil (LTTE), Yapa (2006) through his writing expressed confidence that Buddhist spirituality is the only one real solution. To change the structure of society as a whole, it takes more personal changes in advance through radical Buddhist spiritual life. Starting from the personal unconscious (*puroshodaya*), and will rise a community or village (*gramodaya*), so it can also change the country's situation (*deshodaya*), and finally to a new world awakening (*vishovadaya*). So, all the social changes improve people welfare and the first key of all is the spiritual life of the personal agent who lives the spirituality well in everyday life.

Based on all the above study, it appears that the spiritual values lived in society everyday have a large impact on the arising of economy, political life, and improving people's welfare. However, there are not many people who study at the link between spiritual values that became the spiritual capital and development community. This paper would like to offer spiritual capital that exists in traditional kinship can form a development community.

III. THE TRADITIONAL KINSHIP TO SPIRITUAL CAPITAL

This paper departs from the research in a remote village named Mondo, located in East Manggarai. Although only a small village, the research findings of Kampung Mondo can be an inspiration for development in various places where its people still live in traditional kinship.

People of Mondo live in a traditional kinship since hereditary. Norms of living in traditional kinship gave birth to a style of leadership that is important in the formation of development community. This happens because of their norms in spiritual life respect their leaders. Leaders who are respected can be a driver for the entire community especially in sustainable development. In general, various community development activities occur as led by figures who hold leadership positions in the traditional kinship. Construction of water pipeline in 2011 become a clear example of how an elder in the traditional kinship become a driving force in development. Before 2011 people in Mondo didn't have any access to clean water so they live with dirty river water for years. The leadership style of kinship leader have shaped his

people into a development community and produce water pipeline.

Indeed, not all agree that the development community may occur. Friedman (1992 in Martinussen 1995) said that community-based development is something naive as to assume a conflict-free and homogeneous community. However, the real community institutions present in any situation (Soerjono Soekanto, 1992). This occurs because of the values and norms that lived together in kinship. Thus, the developer community can be formed at the time of development at the grassroots because of their similarity spiritual life, cultural, and ideological (Ife, 2002). In fact, firmly Smith (2015) says that the spiritual capital enables and motivates a community to realize their dreams, as well as a means to the renewal and social transformation.

People in Mondo can be regarded as a development community who live in kinship and brotherhood. Called as a development community as it has the character of the active participation of its citizens, has principles of justice, and conduct-based environment development. There are several phenomena that illustrate Mondo community as a development community, and all of the phenomena associated with spiritual life of people.

First, education of Mondo's people is relatively higher than other villages. This occurs because of the existence of a spiritual motivation centralized to the ancestors. An ancestral village of Mondo named Joseph Majung very stressed education to his children. With a centralized spiritual life to the ancestors, the Leader now is trying to realize this mandate. Later, many others also attempts to send their children to get higher education.

Second, the construction still can scroll independently through active community participation. Mondo ancestral belonged to the knight who served at the front in the battle field. The leader of kinship then as well lead the development with a knight spirit, not only at the level of coordination, but to the level of action. This is what has been engage the active participation of people living communally in Mondo.

Third, the economic behavior of the importance of investing for the future is quite visible in Mondo. Monika Setia who is also one ancestors of Mondo people often emphasized that all children and the offspring to be hard-working. Nggulung and Lupur, two ancestral Mondo citizens, willing to take risks to move somewhere to stay for the sake of a brighter economic outlook. Yoseph Majung, another ancestral boldly handing out land to many foreigners in order to make Mondo land more productive. The behavior of the ancestor characterizes the economic behavior of Mondo citizens who centered their spiritual life to the ancestors. The existence of two stalls at Mondo is something quite phenomenal because being the only village that has stalls throughout the village of Golo Kantar. Removing traditional ceremony *Penti* in Kampung Mondo is also a controversial decision, because the surrounding villages instead clutching traditional ceremony that has been held for generations. However, with the abolition of the ceremony means Mondo make savings of around 30 to 40 million per year. These savings contain spiritual motivation anyway. The kinship leader revealed he was not able to bring the whole village residents fall into sin by organizing *Penti*

making the call spirits and worship of ancestors. In other words, the economic behavior of citizens who are concerned Mondo future investment is quite visible, and these are all closely related to their spiritual life. In addition, their active involvement as a member of the Church in fact has poured any assistance that encourages the mobilization of the construction of the village. Thus, social capital in the traditional kinship of Mondo internally is *bonding*, in addition, Mondo also creating *bridging* social capital with the Church.

Fourth, in the political sphere, Mondo also has its own peculiarities. Since 1999, they've been doing demonstrations and resistance. When told of this, there appears to be little pride of family members of kinship leader. The ancestors of Mondo led the fight in the battlefield, the kinship leader now is leading the struggle in demonstrations and resistance. In this case, they are centered spiritual life to the ancestors that has influenced their attitudes and actions. Value knight who can not be seen by the eyes revealed in characteristics of civil society that can be seen clearly in the Mondo society. Thus, we can conclude that their inner identity as a knight seems to be a strong driver of the gesture. Until now, the attitude of Mondo citizens who want government accountability and transparency still not extinguished. It appears very often from their conversations. As for the internal political atmosphere tends democratic village but still in a hierarchical kinship so we can say they live in a democracy kinship.

Fifth, the advantages citizens of Mondo is pretty neat in their organization and administration. This gives good consequences for the environment anyway. In an interview, a family member of kinship leader said that none of their family members who understand why ancient ancestors emphasizes education, something that really does not make sense because at that time education has not been considered important by the local community. However, now they are very grateful to have received his education bench as it can be equipped to lead the village of Mondo. In this case felt their prophetic wisdom of ancestors who saw that the times are increasingly evolving so that the offspring should be educated in order to always be one step ahead so that they can organize and lead the village well. Examples of neatness organizing a positive impact on the environment, such as water taps joint scheduling, road maintenance that is done every week, and maintenance of the rocks found during excavation. Neatness of this organization is closely related to the principles of justice, such as in the distribution of agricultural lands, division of community service, the distribution of opportunity use of clean water, and so on.

All of the above phenomenon that prompted this paper to say that there is a significant development in Mondo, which is forming a community development. They can be referred as a development community for all poverty and limitations that exist relatively not handcuff them to freely improve the welfare for their needs (Sen 2000: 10-18). As a community, they have the ability to build in the village. In addition, they are considered as a good community based on perspective of development in Indonesia.

Development in Indonesia is growing in capitalism for economic field and democracy in politics field (Kompas, September 6 and 17 September 2010). In Mondo, they still

pre-capitalist Manggarai, agrarian, and hierarchical. However, Mondo actually appear with some of the characteristics of the capitalist, for already thinking about investing in the future and democratic also, as mentioned above, though still communal and agriculture. However, this is where actually the specificity of Mondo. Although there capitalistic characteristics inherent in themselves, but they remain a communal community in an atmosphere traditional kinship. In it applies the values of love, brotherhood, the active participation of villagers, and the development that give attention to environmental sake. Capitalistic traits do not diminish the nature of their social development as a community. All of this is closely related to the value of the knights of the leader who tend to defend the interests of the people or of the weak and communal values embedded in Mondo society.

In other words, the spiritual capital of Mondo is an integration of the knights spirit of the kinship leader and active participation of the people. Initiative to lead the development with the value of communal society is revealed through development community in Mondo. Therefore, the development in Mondo strongly colored by knights and communal values. This is the local wisdom of Mondo implanted within their kinship.

IV. CONCLUSIONS

People living far from the central government are often in a situation of under developed and therefore need a touch of development. With their spiritual capital, development is no longer something that is far away, but something that can be rolled out through the presence of a development community builder. The development community can be formed by the spiritual capital behind traditional kinship. Therefore, learn the values or local wisdom that exist in a traditional kinship becomes important, because those local wisdom potentially become a spiritual capital that can form a development community, and eventually rolling development.

This development does not merely mean the development of infrastructure, but it can also be an economic local development and political life that can further improve the welfare of its people. Thus, it is understandable that local wisdom in the traditional kinship system is an important aspect in the spiritual capital.

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MANAGING HUMAN RESOURCE MANAGEMENT IN BUSINESS ENVIRONMENT IN THE ERA OF THE ASEAN ECONOMIC COMMUNITY IN WEST NUSA TENGGARA REGION

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Abstract, The era of globalization is sweeping the world brings a multidimensional impact of change (change) for companies laden with challenges, opportunities, and fierce competition. Change is a natural phenomenon which is a dynamic situational activity or force that runs continuously sustained so that something turns into another. The reality shows that many of the companies that run their business succeed in achieving effective and efficient manner in accordance with the plans that have been projected, and so did not a few there are cases of mismanagement (miss management) that are destabilizing the viability of the company. With the arrival of the 21st century marked by globalization, the government's readiness to deal with it should be supported by business people and academics. Human resource strategies need to be carefully prepared especially by several manufacturers to be able to produce output that is able to compete at world level. formulation of the issues raised in the article is how the process towards the management of human resource management in the era of MEA in the new paradigm as the organization's management system can successfully achieve the goals effectively and efficiently. The method used in this study is a qualitative research method. Qualitative research methods is a research procedure that produces descriptive data in the form of words written and spoken of people or behavior that can be observed. In this study the authors produce research data in the form of human resources development strategy in West Nusa Tenggara as well as a description of human resource management in the face of the ASEAN Economic Community (AEC). Human resources West Nusa Tenggara province should be able to face the ASEAN Economic Community. Therefore, attention to improving the quality of human resources into something urgent to do. Through business development programs are primarily carried out by the business with the help of the network and connections of various parties such as academics and entrepreneurs are expected to produce a qualified workforce and able to compete in the era of MEA.

Keywords: Human Resources, Business Environment, MEA

I. INTRODUCTION

The era of globalization is sweeping the world brings a multidimensional impact of change (change) laden with challenges, opportunities, and fierce competition. Change is a natural phenomenon which is a dynamic situational activity or force that runs continuously sustained so that something turns into another. There is a change from the old state (status quo) has become the new (reformist). The condition affects the value of the order of life in various sectors, including the impact on the company's life. Therefore, the need to evolve to changes by creating planned changes and further reforms in all fields so that the company becomes a dynamic, reformist, and always in the newest condition (the new).

The reality shows that many of the companies that run their business succeed in achieving effective and efficient manner in accordance with the plans that have been

projected, and so did not a few there are cases of mismanagement (miss management) that are destabilizing the viability of the company. Companies that successfully achieved the goal of course is managed with the new paradigm of management systems, and vice versa companies that do not succeed in achieving usually engaged by management problems. The basic pattern of the new paradigm of management is the process of using the resources 6M, namely Men, Money, Materials, Machines, Methods, and Markets, and the development and improvement (improving) constantly to make it better.

With the arrival of the 21st century marked by globalization, the government's readiness to deal with it should be supported by business people and academics. HR strategy needs to be carefully prepared especially by several manufacturers to be able to produce output that is able to compete at world level. Free trade is not confined to ASEAN, but between the countries in the world. In

accordance with the main pillars of the MEA, will create a single market in the ASEAN region. The single market will come up with the flow of trade in goods, services, capital and invest freely. Indonesia as ASEAN members that have a population of at most this would potentially be a strong market for the trade of goods and services produced by the countries in ASEAN.

NTB started a new business in many emerging, neither of which is an investment in the country and which is the foreign capital investment. Facts show that lately the West Nusa Tenggara "flooded" foreign goods such as from China, Taiwan and Korea which are relatively inexpensive. Thus, the retail company in Nusa Tenggara Barat not only compete with the company within the country but they would not want to compete with multinational companies and companies from other countries.

Based on the background, the formulation of the issues raised in the article is how the process towards the management of human resource management in the era of MEA in the new paradigm as the organization's management system can successfully achieve the goals effectively and efficiently. This study aims to determine the new paradigm of management models and the extent of effectiveness as the organization's management system. The results are expected to be useful for all stakeholders and as a contribution to the progress of the development of management science.

II. METHOD

The method used in this study is a qualitative research method. Qualitative research methods is a research procedure that produces descriptive data in the form of words written and spoken of people or behavior that can be observed. In this study the authors produce research data in the form of human resource development strategy in NTB as well as a description of human resource management in the face of the ASEAN Economic Community (AEC).

III. RESULT AND DISCUSSION

Industrial activities in NTB businesses experienced growth from year to year. The development is inseparable from the existence of human resources that drive the business industry. Environmental factors such as uncertainty, technological innovation, demographic changes, the organization becomes more flat and flexible, as well as increased collaboration and multinational competition affect the human resources strategy. Thus the need for compatibility between business strategy to human resource strategy because both the suitability of the strategy will support the successful implementation of the strategy and the achievement of competitive advantage (competitive) companies or organizations.

One activity important in the Human Resource Management (HRM) is the activity of Human Resources Development. Human Resources Development is an effort to improve technical skills, theoretical and moral employees in accordance with the needs of job or position through education and training, "in the context of human resource development, education and training is an effort to develop intellectual and human personality".

AEC is a form of economic integration of countries in the Southeast Asian region into a single market and production base. Implementation of the ASEAN Economic Community is the embodiment of the ASEAN Vision 2020 which aims to make ASEAN into a region that is stable, prosperous and highly competitive with equitable economic development and poverty reduction as well as economic and social inequalities.

The history of the MEA beginning of a meeting of ASEAN heads of state in 1997. As of December 15, 1997, the Heads of State of ASEAN Vision 2020 ASEAN agreed to establish an ASEAN Community to be achieved by 2020. Furthermore, in 2003, the ASEAN Leaders declared the establishment of 3 (three) pillars of the ASEAN Community, namely the Political-Security Pillar, Pillar Economic, Social and Cultural pillar. At the meeting of the 12th ASEAN Summit in 2007, the Leaders of ASEAN countries agreed to accelerate the establishment of the ASEAN Community, including Pillar Economics from 2020 to 2015.

MEA implementation in 2015, referring to the blueprint AEC or AEC blueprint that has been set in 2007. The AEC blueprint contains four main pillars of the implementation of the MEA are:

1. The first pillar that is the single market and production base that consists of several elements: a) the free flow of goods, b) the free flow of services, c) the free flow of investment, d) freer capital flows, e) the current free skilled labor, priority integration sectors, f) the development of the food sector, agriculture and forestry.
2. The second pillar is the highly competitive economic region characterized by: a) the competition policy / competition, b) consumer protection, c) intellectual property rights, d) infrastructure development, e) tax, f) e-commerce.
3. The third pillar is more equitable economic development characterized by: a) development of SMEs b) reducing the internal development of ASEAN GAP.
4. The fourth pillar is the integration with the global economy which is characterized by: a) approach to external economic relations and b) increasing participation in global supply networks. (Www.aec center)

ASEAN Economic Community (AEC), which had begun in 2015, demanding the Indonesian people have extraordinary mental, because dealing with people from outside Indonesia. One of the efforts to establish a community-minded Indonesia extraordinary through business activities.

Essentially MEA positive aims, namely to integrate the power of economics, management, marketing, business and human resources in the region to be able to compete on a global level with other economic powers. In an agreement MEA, which is four (4) pillars on the blueprint;

1. Towards a single market and production based, which trade flows freely to the goods, services, investment, skilled labor, and capital.
2. Towards the creation of regional economies with high competitiveness (regional competition policy, IPRs

action plan, infrastructure development, ICT, energy cooperation, taxation, and the development of SMEs).

3. Towards a region with equitable economic development (region of equitable economic development) through SME development and programs of the Initiative for ASEAN Integration (IAI).
4. Towards the full integration of the global economy (a coherent approach in external economic relations and to encourage participation in the global supply network).

As for managing a wide range of human resources in the business environment in the era of MEA now is through the various stages. Stages of Human Resource development such as the opinion by Simamora are:

1. Identification of development needs.

In this stage of the development process explored what is most suitable for a particular individual to make an assessment of the strengths and areas for development of each individual (employee). Assessment can be done through a pattern of assessment center or also through observation and evaluation of their respective superiors (in this way is more practical than having to use the assessment center).

2. Formulate a suitable development program for the employees concerned.

In the formulation of development programs result of the assessment is not only based on the weakness of the employees, but it should be more reliant on the strength of which is owned by the employee (this kind of approach is referred to as strength based development). Program type or structured development process that also does not necessarily have to be training in the classroom. There are plenty of alternative development programs, such as: 1) Mentoring (employees who are considered senior and has particular expertise becomes a mentor to a number of other employees, 2) Project / special assignment (special assignment to increase job exposure), 3) Job enrichment (enriching weight work), 4) On-the-job training.

3. Monitoring and evaluation of development programs that have been compiled.

In this phase, any progress in the implementation of program effectiveness is monitored and then at the end of the program evaluated the impact on employee performance improvement is concerned, and also on the business performance.

Impact and Challenges Faced Indonesia With the presence of MEA

According to [1] MEA which has started will certainly give positive and negative impacts for Indonesia. The positive effect that will spur growth both from outside and within the country so that it will create new job opportunities. In addition, Indonesia will be able to find employment in other ASEAN countries with relative rules will be easier with this MEA. Thus, the presence of MEA is expected to reduce unemployment because it will create new jobs and absorb the existing labor force at this time to enter into the job market. An Asian Development Bank (ADB) and the International Labour Organization (ILO),

MEA can create 14 million additional jobs, or an increase of 41 percent in 2016 because of the free movement of skilled labor. Regional economic growth can be boosted to 7 percent.

Principally, in the perspective of this MEA explained that in order to achieve a competitive advantage in human resources management and management consultancy, the human resources management strategy for managing the environment bisns determined to be in accordance with its business strategy or organization. Typology of human resource management strategy is the approach used in formulating human resource management strategy in accordance with its business strategy or organization. This typology is described in the form of a matrix comprising four quadrants, namely: development, expansion, productivity, and redirection. In supporting the success and effectiveness of competitive strategy has been determined, it should be noted that the role of behavior needed to support the implementation of alternative competitive strategy that has been determined for each of the alternative strategies require different behaviors role in its implementation.

IV. CONCLUSION

Human resources in West Nusa Tenggara province should be able to face the ASEAN Economic Community. Therefore, attention to improving the quality of human resources into something urgent to do. Through business development programs are primarily carried out by the business with the help of the network and connections of various parties such as academics and entrepreneurs are expected to produce a qualified workforce and able to compete in the era of MEA. The global competition in recent times has created opportunities and challenges for companies or organizations who wish to contribute to a strong position.

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OUTSOURCING MODEL IN PERSPECTIVE LEGAL PROTECTION AND LABOR RIGHTS

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Abstract. Problems about *outsourced* workers is quite varied. A company got benefited enormously from the use of *outsourced* workers, *outsourced* workers can have very disadvantaged of their rights, while the existing regulations have not been too inadequate to regulate *outsourcing*. This study attempts to seek legal issues associated with outsourcing are as follows. (1) How is the company doing the main job classifications (*core business*) and supporting the work of companies (*non-core business*) which is the basis of the implementation of *outsourcing*? (2) How is the implementation of *outsourced* work in the industry in Indonesia? (3) How does the model implementation *outsourced* employees in workers' welfare perspective? The study found that although the rules of support as a precondition demanding job outsourcing, but the determination of the type of work it is left entirely to the company. In fact, many companies hire *outsourced* workers in the production process (*core business*). While between the kind of work done was inversely with the income derived workers *outsourced*. Therefore, this study argues that the strict rules against *outsourcing* is absolutely necessary to protect the rights of workers.

Keywords: Outsourcing, employment agreements, workers' rights, industrial laws

I. INTRODUCTION

As a competitive climate business sector intensifies, companies are trying to reduce their costs of production (cost of production). [1](#) One solution is by *outsourcing* system in which the system can save a company in the financing of human resources (HR) working in the company concerned. [2](#)

Presidential Decree No. 3 of 2006 on Investment Climate Policy package mentioned that outsourcing (*outsourcing*) as one of the factors that must be considered seriously in pulling investment climate to Indonesia. [3](#)

According to Article 1601 of the Civil Code b, *outsourcing* is equated with the agreement of contract of work, according to Article 65 of the Labor Law Article 1. *outsourcing* is the process of transfer of responsibility for labor from the parent company to other companies outside the parent company. Companies outside the parent company could be a vendor, cooperatives or other institutions that are regulated in a specific deal. *Outsourcing* in the regulation of labor can only cover workers in the supporting processes (*non - core business unit*) or practically all lines of work can be transferred as *outsourcing* unit. [4](#)

Some experts and practitioners *outsourcing* of Indonesia also provide a definition of *outsourcing*, among others states that *outsourcing* in the Indonesian language known as outsourcing, the delegation of the daily operation and management of a business process to outside parties (*outsourcing services company*). [5](#)

Outsourcing is a viable alternative to do the job themselves. But *outsourcing* is not just contracting as usual, but far beyond it. Maurice F. Greaver II provides a definition of *outsourcing* as follows: [6](#)

"Outsourcing is the act of transferring some of a company's recurring internal activities and decision rights to outside providers, as set forth in a contract. Because the activities are recurring and a contract is used, outsourcing goes beyond the use of consultants. As a matter of practice model, not only are the activities transferred, but the factor of production and decision Often rights are, too. Factors of production are the resources that the make the activities occur and include people, facilities, equipment, technology, and the other assets. Decision rights are the responsibility for making decisions over Certain elements of the activities transferred "

According Shreeveport Management Consultancy, *outsourcing* is *"The transfer to a third party of the continuous management responsibility for the provision of a service governed by a service level agreement"*. [7](#)

There are several reasons of industrial *outsourcing*, first : efficiency of work in which the production company may delegate operational work to *the outsourcing* company. Second, operational risks of the company may be delegated to other parties. So that the utilization of factors of production can be maximized to reduce the risk as small as possible. Third, the company's existing resources can be used for other needs to focus more on increasing production. Fourth, reduce the cost of expenditure (*capex*) for the previous funds for investment can be used for operational expenses. The fifth company can employ a skilled workforce and cheap. Sixth, mechanisms of labor control for the better.

In the process of *outsourcing* should be tied with employment agreement company. This is important because recent years many done intentionally to reduce the cost of (*labor cost*) and work requirements far below than it should be given. such can lead to unrest and often followed the

strike action, so that the company becomes disturbed in the process of production of goods and services.

Both firms and should always be able to live together without any conflict of interest / Therefore, it is necessary *outsourcing* implementation in accordance with the legislation in force, as a guideline to behave formally.

Problematic about *outsourcing* is quite varied. This is because the use of *outsourcing* in Indonesia is increasingly widespread and has become a necessity that can not be put off by businesses, while the existing regulations have not been too inadequate to regulate the *outsourcing* that has been underway. Broadly speaking, legal issues associated with the implementation of *outsourcing* in Indonesia as follows:

1. How is the company doing the main job classifications (*core business*) and supporting the work of companies (*non-core business*) which is the basis of the implementation of *outsourcing*?
2. How is the implementation of *outsourcing* jobs in the industry in Indonesia, as a labor system that denies workers' rights. Will be seen how labor relations and the status of workers in the system?
3. How does the model implementation of *outsourced* employees in the perspective of workers' welfare?

II. METHODS

Researchers conduct empirical juridical approach models / sociological with qualitative research. "Research sociological law called the study of law in the action / action (*law in action*). So called because the research involves a reciprocal relationship between law and other social institutions, so it is a non-doctrinal social studies, empirical, meaning that based on the data that occur in the field ". [8](#) Furthermore, researchers will examine and analyze the practice of *outsourcing* and the legal system surrounding it to be concluded relating to the legal protection for workers / labor *outsourcing*. The type of data required in this study are primary data and secondary data. The primary data "means data obtained directly from the object" [9](#) , in this case employers, workers / laborers, Dinsosnakertrans Surakarta and parties associated with this research, as for the meaning of secondary data is data obtained from bahan- library materials.

III. DISCUSSION

1. How is the company doing the main job classifications (*core business*) and supporting the work of companies (*non-core business*) which is the basis of the implementation of *outsourcing*?

- a. *Outsourcing* Legal Basis

Outsourcing legal basis is Law No. 13 of 2003 on Labor:

Article 64

"Companies may subcontract part of the work to another company through an agreement contract of work or provision of services Workers / Labor made in writing".

Under the provisions of the above article, *outsourcing* is divided into two types:

1. Chartering a job

Namely the transfer of a work to the *outsourcing vendor*, where the *vendor* is fully responsible for the work transferred along with the things that are technical (oerasional setting) and the things that are non-technical (personnel administration). Works transferred is work that can be measured in volume, and the *fee* charged by the *vendor* is rupiah per work unit (USD / m², USD / kg, etc.). Example: The contract of work *cleaning service*, pest control services, catering services, etc.

2. Provision of services Workers / Labor

Namely the transfer of a position to the *outsourcing vendor*, where the *vendor* puts its employees to fill these positions. *Vendors* are only responsible for the management of the employee as well as things that are non-technical, while technical matters are the responsibility of companies as users of *vendor* employees.

For a further discussion, the term *outsourcing* will be adjusted to the second type, ie *outsourcing* in the form of the provision of worker / laborer.

- b. Work Transferable

Based on Law No.13 of 2003 on Employment: Article 65

- a. The delivery of some of its work to other companies held by agreement of contract of work made in writing.
 - b. The work that can be outsourced to other companies as referred to in paragraph (1) shall meet the following requirements:
 3. Done separately from the main activity;
 - a. Done with the command directly or indirectly from the employer;
 - b. An auxiliary activity of the enterprise; and
 - c. Does not inhibit the production process.
 - d. Other companies referred to in subsection (1) must be a legal entity.
 - e. Employment protection and working conditions for employees / workers in other companies referred to in paragraph (2) at least equal to employment protection and working conditions in the company or the employer in accordance with the legislation in force.
 - f. Changes and / or additions to the requirements referred to in paragraph (2) shall be established by decree of the Minister.
 - g. Labor relations in the implementation of the work referred to in paragraph (1) shall be stipulated in a written employment agreement between other companies and employees / workers it employs.
 - h. Employment relationship as referred to in paragraph (6) may be based on a work agreement for an unspecified time or a certain time work agreement if it meets the requirements referred to in Article 59.
 - i. In terms of the provisions referred to in paragraph (2), and paragraph (3), are not met, then by law the status of labor relations employees / workers with the company receiving the chartering turned into a

working relationship employees / workers employed by the job".

The working relationship the company switched to the employer as referred to in paragraph (8), then the employment relationship workers / laborers by the employer in accordance with the employment relationship as referred to in paragraph (7).

R.Djokopranoto in the material of the seminar said that, "In the text of the Law No. 13/2003 are called and distinguished between businesses or main activities and support activities. There are fundamental similarities between the sounds of the law with industry practice, namely that the *outsourced* generally (but not all) is supporting activities (*non-core*), while the main activities (*core business*) are generally (but not all) is still being done by the company itself. However, there are potential problems that arise.

Potential problem that arises is whether makers and law enforcement on the one hand and the businessmen and industrialists on the other hand have the same understanding and interpretation on those terms. "The similarity of this interpretation is important because it is based on labor laws, *outsourcing* is only allowed if it is not related to *the core business*. In the explanation of article 66 of Law No.13 of 2003, stated that, "The definition of support activities or activities that are not directly related to the production process, such as: business cleaning services (*cleaning service*), business security personnel (*security / security forces*), business support services in the mining and oil, as well as the transportation business worker / laborer. "The interpretation given law is still very limited compared to the needs of today's business world where the increasingly widespread use of *outsourcing* to various lines of activity of the company. The concept and understanding of core business or *core business* and support activities or *non-core business* is the concept that changes and evolves dynamically.

Alexander and Young (1996) says that there are four senses connected with the *core activity* or *core business*. The fourth definition is this:

1. Activities that are traditionally carried out within the company.
2. Activities that are critical to business performance.
3. Activities that create a competitive advantage now and in the future.
4. Activities that will encourage development in the future, innovation, or rejuvenation.

Interpretation support activities listed in the explanation of Law No. 13 of 2003 leaning on the definition of the first, in which *outsourcing* is exemplified by activities such as regular contracting to facilitate the work and avoid labor problems. *Core business* definitions need to be equalized again interpretation by various circles. Further arrangements for such things have not been accommodated by labor law in Indonesia. Companies need to plan to *outsource* the work force, classifies the main job and support job into a written document and then report to the local employment agency. Making a written document is

important for the implementation of *the outsourcing* company, for the reasons as follows:

1. As part of the company's compliance with the provisions on employment reporting to the Department of Manpower;
As a guideline for management in implementing *outsourcing* certain parts in the company;
2. As a means of socialization to the workers about the parts anywhere in companies that do *outsourcing* to workers;
Article 66
 1. Workers / Workers of service providers / Labour Union should not be used by the employer to carry out basic activities or activities related directly to the production process, except for auxiliary service activities or activities that are not directly related to the production process.
 2. Provision of services Workers / Labor for auxiliary service activities or activities that are not directly related to the production process must meet the following requirements:
 - c. Their working relationship between employees / workers and service providers employees / workers;
 2. Labor agreement that applies in the employment relationship as referred to in paragraph (a) is a work agreement for a specified time meeting the requirements referred to in Article 59 and / or employment agreement for an unspecified time in writing and signed by both parties;
 3. Protection of wages and benefits, working conditions, as well as disputes arising in the responsibility of the service provider company employees / workers; and
 4. The agreement between the service user company employees / workers and other companies that act as service providers / Labour Union made in writing and shall include provisions referred to in this law.
 3. The service provider employees / workers is a form of a legal entity and have the permission of the government agency responsible for the field of employment.
 4. In terms of the provisions referred to in paragraph (1), paragraph (2) (a), (b) and letter (d) and subsection (3) is not fulfilled, then by law the status of the employment relationship between the employees / workers and companies service provider employees / workers switch into the working relationship between employees / workers and companies giving workers.

Under the terms of Article 65 paragraph 2 and article 66 paragraph 1, a job that can be transferred is work that is supporting and not directly related to the production process, or in business terms is referred to as "*non-core*".

Important: The company must ensure that the work being diverted to meet the requirements as stated in article 65 and article 66 to avoid changes in the status of the employment relationship between the worker / labor and services provider company workers / laborers turned

into a working relationship between the worker / labor and company giver workers.

c. How to Determine *Core Non-core* or a Job

Based on the Decree of the Minister of Manpower and Transmigration Republic of Indonesia Number: KEP.220/MEN/X/2004 About Conditions of Delivery Part of Work Implementation To Other Companies:

Article 6

1. Work that can be submitted to the company contractor work referred to in Article 2 paragraph (1) shall meet the following requirements:
2. Done separately from the main activities of both management and execution of work activities;
3. Done with the command directly or indirectly from the employer intended to give an explanation of how to carry out the work to match the standard set by the company employer;
4. Is supporting activities of the company as a whole, meaning that these activities are activities that support and facilitate the execution of work in accordance with the flow of work activities of the employer company.
5. Does not inhibit the production process means that the activity is an additional activity which, if not performed by the company of the employer, the process of implementation of the work is still running as usual.
6. Company employers who will give up some conduct of the work to the contractor companies work required to make the flow of activities implementation process of work.
7. Based on the implementation process of work flow of activities referred to in paragraph (2) companies employer to determine the types of work that the main and supplementary under the provisions of paragraph (1) and report to the government agency responsible for manpower affairs.

Under the terms of Article 6 above, a job classified as core or *non-core* is entirely determined by the company.

The company makes the overall process flow of activities and assign activity / employment are categorized as *core* or *non-core*. Flow activity is then reported to the local labor offices as the cornerstone of the delivery of some of its work to the *outsourcing vendor*.

2. How is the implementation of *outsourcing* jobs in the industry in Indonesia, as a labor system that denies workers' rights. Will be seen how labor relations and the status of workers in the system?

Ratification of the Employment Act No. 13 of 2003 is considered as the legal basis for the legalized system of *outsourcing* that benefit the ruling party capital and otherwise detrimental to workers. In the perspective of workers, *outsourcing* becomes a stumbling block to the improvement of life for their eligibility. Low wages, lack of social security and so forth is indicative of a mechanism that harm the rights of workers. The mechanisms to reinforce the following description of the position of labor relations and labor in the working model of *outsourcing*:

1. Labour relations

Industrial relations in Indonesia along the way often put workers as production factors are constructed like Karl

Marx. *Outsourcing* is defined as a working model which adds an element of 'executive job' in relations between labor and capital. ¹⁰ These conditions make labor relations more blurred and weakened the *position bargaining* workers against the owners of capital. In the model of *outsourcing* work there is a shift in the scope of industrial relations. Originally known as the tripartite or the relationship between workers, employers and governments. ¹¹ Model *outsourcing* divided into four circles namely labor relations, intermediary or *broker* (*outsourcing*), the core company (owners of capital) and the government. *Outsourcing* as a new labor models, through several stages in the recruitment. High availability of labor in the labor market caused a decline in the price of labor.

According to Marx, the availability of labor surplus lots resulted in the suppression of labor rights. Exploitation, layoffs and so decided unilaterally by the owners of capital. Industrial relations in the model of *outsourcing* tend to weaken the position of the workers. Workers are required to meet the requirements in *outsourcing*, solid work hours, wages are not balanced, not the opportunity to join a labor organization, as time runs out in the employment contract. Violation of the agreement will directly result in pemberhentian directly by the company management *outsourcing*, and replaced by other *outsourced* personnel. This condition frees the user industries of obligations to its workers but only give workers the wages of labor. According Komang Priambada, ¹² employers found "Where the workers are recruited, how the arrival and others is not our business as consumers". This is a condition that shows that workers are merchandise and *outsourcing* is nothing but legalized *triffiking*. The relationship between labor and *outsourcing* company and enterprise users (owners of capital), is a relationship of dependency. Of course, the type of dependence (dependency) that occur are disproportionate dependence. Eggi Sudjana ¹³ explains that the power will accumulate in the hands of the groups for wage or bourgeois manage and control of resources are limited. So in practice this dependency relationship goes biased, because the principle of maximizing profits emphasis on efficiency and productivity so that workers are often exploited.

Peruburuhan relationships in *outsourcing* system is very detrimental to workers. Rejection and the labor conflict is a legal product failure in accommodating and issuing policies that favor them. There was an unhealthy relationship on the one hand and employers on the other hand benefited disadvantaged workers. That is a failure in the system of *outsourcing*.

2. Labor Positions

Labor is a means or factors of production after the capital. The significant role of labor so that his absence will not be created resulting in the accumulation of capital (*capital*). Ideally placed with decent labor and rewarded with high scores, because they merakalah who participated directly create products. In fact, workers are always subordinated and movements are always attenuated.

Outsourcing is a working model which has damaged the meaning of human rights and democracy. Celia Mather, ¹⁴ revealed that *outsourcing* resulted in three main problems: *first*, the exclusion of workers from the table or a negotiated settlement. *Second*, the absence of legal liability the

company against the workers. *Third* reduction in permanent workers so that all workers get into *outsourcing*, labor conditions in uncertainty. According to Celia Mather, [15](#) core enterprise through contractor services provider wages are much lower than permanent workers, they avoid providing benefits such as pensions, health insurance, death or accident, sickness pay, paid leave, maternity allowance.

The existence of *outsourced* workers in turn would weaken the collective struggle of the workers through the unions, as an element of coercion for the fulfillment of the rights of workers. Therefore, *outsourcing* labor to move as individuals who hold employment relationships through *outsourcing* agencies (labor recruitment agencies), to the company. The parties involved in the agreement in this case is a labor recruitment agencies and companies, while labor *outsourcing* itself is under the control of recruitment agencies.

3. Indications denial Labor Rights System In *Outsourcing*

The denial of workers' rights in the working model of *outsourcing* can be seen from the non-profit organization "*Global Alliance for Workers and Communities*" on working conditions in nine NIKE Company. The report results from interviews with 4,450 workers revealed there had been torture and improper treatment by the contract workers (*outsourcing*). Some 30 percent of workers claimed to have seen or experienced abuse or torture either verbally or physically, including sexual harassment. [16](#) The report is a small part of the picture of how the labor conditions in the *outsourcing* system.

4. Alienation Labor System In *Outsourcing*

Humans are creatures who are able to use a set of productive capacity to work. Humans have kemampuan to organize, initiate and control the material reactions between himself and nature. The development of capitalism as well as devices supporting the exploitation of labor *outsourcing* reinforce both structurally and functionally alienated. *Outsourcing* system involving a broker as an intermediary provider of workers, and the company also utilizes core labor has been practicing alienation which can not be tolerated. practice This real-like "buying and selling human beings" (*human trafficking*) that was authorized by the state. Some indicators of alienation of labor in the system of *outsourcing*, namely, first; workers lose the opportunity to channel and control his own result. In the language of Marx, alienated labor from productive activity, in the sense that the workers do not work to meet their needs, but they work for the capitalist [17](#) Labour molded and shaped like a machine, so that the loss of creativity and the ability to basically as being productive self-sufficient. They have lost the rights to create products in accordance with the wishes and needs of their own. [18](#)

Second, workers alienated from the product of their work. Workers do not have the right to have their produce products. This assumption remains in a series with the first type of alienasi. Labour is positioned as a factor of production that produce goods for the benefit of investors who will sell them on the market. For example, *outsourcing* of labor in the Nike company, it can not necessarily be able to have the results of his labor. They can memiliknnya when

they bought the product on the market at a price that may not be affordable.

Third, workers alienated from their fellow workers. The workers became an actor to be loyal because they have agreed an *outsourcing* agreement. Structures built really become the hegemonic kekuatan workers to always work. So that they can not interact with the other workers. There was also a tendency *outsourced* workers can not enter into the unions since the time the contract is limited, and there barriers to recruit workers into trade unions will memperjaungkan their basic rights.

Fourth, workers alienated from their own humanity, this is due to the work of an obstacle to the fulfillment of human nature. This condition also occurs in the system of *outsourcing*, the regulations are quite strong grip and made labor workers are not fully independent. Workers only receive the minimum salary by dredging energy and maximum effort. *Outsourcing* or contract work position of workers in very difficult circumstances, do not have sufficient bargaining position, so that the suppression of labor rights be an integral part in the system.

5. Surplus value in *outsourcing* system

Outsourced workers are vulnerable to exploitation on a large scale by the owners of capital or capitalism. Labor *outsourcing* system resulted Bena really is on the culmination point, unable to do anything as well as to defend their rights. Implementation of *outsourcing* legalized by the law-shrimp provide a legal basis allowing for the practice of denial of labor rights by the state. Of labor should be assessed with the price and pay the balance. Because idealism is not reached, the demands for the fulfillment of the basic rights of workers be the main agenda in any trade union action. Nevertheless, the demand has not materialized to date.

Marx's surplus value is expressed, assumes that workers are in a position that is extracted and exploited to the maximum by the capitalist. Labour denied the right, made a machine that works abiding by the time limit is not specified. For example, within six hours of a worker has been completed and is capable of implementing the basic obligations of their work, but over time they squeezed by capitalism to their advantage, this is the form of surplus value. Marx calls the ratio between the work needed and work surplus as the level or rate of surplus value extortion. [19](#)

In an interview with an informant who became supervisor in a company, according to the workers to work under pressure, in which the target must be achieved to the fullest. When the target has not been achieved within 24 hours then they should be working overtime to produce the goods ditergetkan, liburpun day they remain logged in. When orders are to penjualan in the market increases, the target is getting narrowed down in the sense that they should be accomplishing a target within a period of a little more, then over time it drained again to work on the next target. This is a description of many cases involving workers. They are in powerlessness, work under pressure and compliance extraordinary that class consciousness is difficult to grow, it is because they do not have enough time to interact with their fellow workers especially trade unions. Systems engineering

model of *outsourcing* is the most profitable working capitalist parties.

3. How does the model implementation of *outsourced* employees in the perspective of workers' welfare?

1. Project Failure Causes of *outsourcing*

a. Lack of commitment, support and involvement in the implementation of the project management *outsourcing*

Without the involvement of the management in Achieving short-term goals and long-term project *outsourcing*, project *outsourcing* will run without a clear direction and even deviate from the strategy and the company's initial goal.

b. Lack of knowledge about the cycle *outsourcing* fully and properly

Lack of knowledge will be *outsourced* fully and Correctly can result in project *outsourcing* fail to meet targets and even detrimental to the company. This happens Because The companies failed to choose a *vendor* that is Appropriate to the needs of the company.

c. Lack of good ways of communicating the plan of *outsourcing* to all employees

Communication should be done Effectively and targeted so as not to Appear the rumors and resistance from employees who may Disrupt the smooth running of the project *outsourcing*. This resistance arises Because:

1. Concerns employees of the company will be the layoffs.
2. Opposition from employees or unions.
3. Concerns *outsourcing* could damage the existing culture.
4. Concerns about the loss of control of the jobs being transferred.
5. Concerns that the performance of *the vendor* in doing work that shifted was not as good as when done alone by the company.

d. Hurry in taking decisions *outsourcing*.

The decision process for *outsourcing* must be done carefully, planned and have a clear methodology and orderly. If not, it actually makes *outsourcing* as a risky decision.

For example if the company does not Evaluate the bids and contracts carefully, the result is a dispute arose between the company and *vendors* related to the implementation of *outsourcing*.

2. *Outsourcing* Began without a clear vision and strong foundation.

Without a clear vision and a strong foundation, the purpose of the project *outsourcing* will not be Achieved due to:

- a. The company's expectations of the *vendor* is not clear.
- b. Companies are not prepared for the change process.
- c. The Company does not create performance benchmarks prior to the transfer of work to the *vendor*.
- d. Roles and responsibilities between the client and the *vendor* is not clear.
- e. The absence of internal support.

f. Weak internal communication or management.

g. Weak project management, decision left entirely to *the vendor*.

3. effectiveness of *Outsourcing*

By looking at the reasons to use *outsourcing*, factors of election services provider *outsourcing*, as well as the satisfaction of the energy companies *outsourcing*, as many as 68.2% stated that the employment of *outsourced* is Considered effective and will continue to use *outsourcing* in its operations, To be more effective encouragement was given:

a. Two-way communication between the company and the service provider to *outsourcing* (Service Level Agreement) will be co-operation, changes or problems that occur.

b. Power *outsourcing* has been in training in advance in order to have the ability / skill.

c. Noting the rights and obligations of both the *outsourcing* and labor are written in detail and mengingformasikan what Became of Reviews their rights.

While that led to *outsourcing* Becomes ineffective due to lack of *knowledge*, *skill* and *attitude* (KSA) on power *outsourced*.

4. Legal protection

Setting the conduct of *outsourcing* when Viewed in terms of employment law as what is Mentioned above is to provide legal certainty implementation of *outsourcing* and at the same time providing protection to workers / laborers, so the notion that employment relationships in *outsourcing* always use the Employment Agreement specific Time / Contract Tus blurring the industrial relations is not true. Implementation of the employment relationship at *outsourcing* has Expressly Provided in Article 65 paragraph (6) and (7) and Article 66 paragraph (2) and (4) Labor Law.

Indeed, in Certain circumstances is very difficult, to define or Determine the type of work that is Categorized investigation. This can occur due to differences in perception and sometimes Also dilator background by interests that are represented to benefit from Reviews These conditions. Besides, forms of business *pengolaan* very varied and some multi-national companies in the era of globalization is bringing new forms of partnership pattern of business, adds to the growing complexity of the confusion.

Therefore, through the decision of the Minister Referred to in Article 65 paragraph (5) Labour Law No. 13 Year 2003 is expected to a accommodate / clarify and answer everything that create confusion with input from all the actors of the production process of goods and services.

Apart from Reviews These Efforts, to reduce the incidence of confusion, you can simply create and define a process scheme of production of goods and services that can be specified principal or the main job (*core business*); beyond the means of supporting employment. In this case to identify perceptions need to be communicated to the workers / laborers and SP / SB and related institutions to later be included in the PP / PKB.

IV. CONCLUSION

1. Knot

Based on the results of research and discussion, we can conclude the following matters:

- a. The classification of the company to the main job (*core business*) and supporting the work of companies (*non-core business*) the which is the basis of the implementation *Outsourcing* (Outsourcing)
 1. The main work is the basis of implementation *Outsourcing* be classified into: Activities that are Directly related to the production process. This is in accordance with Article 66 paragraph (1) of Law No. 13 of 2003 on Manpower.
 2. Work supporting companies that are the basis of the implementation of the *Outsourcing* be classified into: Activities that are not Directly related to the production process. This is in accordance with Article 66 paragraph (1) of Law No. 13 of 2003 on Manpower.
 3. However, the authority to classify the type of work Depending on the company's labor services.

- b. Implementation of the work *o outsourcing* in the industry in Indonesia, as a labor system that denies workers' rights.

Construction employment relationship between the employee *outsourcing* , company *outsourcing* by the company are:

1. Between workers *outsourced* by companies *outsourcing (vendor)* , Occurs in the form of employment relationship agreement employment agreement for a specified time and / or employment agreement for an unspecified time in writing and signed by both parties. This is in accordance with Article 66 paragraph (2) a and b of Law No. 13 of 2003 on Manpower.
2. Among *the vendors* with the company , going on agreements made in writing and must include provisions that includes about protection of wages and benefits, working conditions, as well as Disputes Arising in the responsibility of the service provider company employees / workers. This is in accordance with Article Article 66 paragraph (2) a, b and c of Law No. 13 of 2003 on Employment and Article 3 (1) Minister of Manpower and Transmigration Republic of Indonesia Number: KEP.220 / MEN / X / 2004,
3. Between workers *Outsourcing* the company will occur employment agreement if the terms of the employment relationship between workers *Outsourcing* company *Outsourcing* is not met. This is in accordance with Article 66 paragraph (4) of Law No. 13 of 2003 on Manpower.
4. When the rights and obligations that occur between the parties can not be implemented as promised then prevailing labor relations is the working relationship between outsourced workers with the outsourcing company. Thus Spake there is a legal protection of the outsourced workers in this case in accordance with Article 66 paragraph (2) and (4) of Law No. 13 of 2003 on Manpower. But in practice such article implications for the uncertainty of the position of

workers *on outsourced* before the law in the work, Because The workers *outsourcing* melakukan employment contract with the provider of the workforce, while they work on the company's labor services.

- c. Model implementation of employee *Outsourcing* in the perspective of workers' welfare
 - a. The elements of workers' welfare perspective:
 1. Fulfillment of labor rights.
 2. The fulfillment of human rights principles.
 - b. Industrial relations in the working models of *outsourcing* has been made labor do not have clarity in employment relationships, the impact on the unclear position of the workers in demanding Reviews their rights. Workers are required to meet the requirements in *outsourcing* , solid work hours, wages are not balanced, not the opportunity to join a labor organization as time runs out in the employment contract.
 - c. The process of *outsourcing* the ideal is the creation of a shared understanding of Among all parties about Reviews their job classifications and related agencies active role in monitoring the process of *outsourcing* in order to guarantee the rights of workers.
2. Suggestion
 - a. In Determining the classification of the major work (*core business*) and supporting the work of companies (*non-core business*) must be clear, especially the placement of workers who must be tailored to the needs, and in the placement of workers are not allowed in a strategic place eg teller or a job that plays a central role.
 - b. It should be reiterated rules on *Outsourcing* in Indonesia.
 - c. The models should be used mustinya guarantee workers' rights.

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POTENTIALS OF SUBAK TO DEVELOP AGRO-TOURISM IN BALI PROVINCE

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Abstract. Management of rice field in Bali is taken by the traditional irrigation system; called *subak*. Since 2012, *subak* has been awarded as the World Cultural Heritage by UNESCO due to its specific culture. The existence of *subak* has become one of the alternatives to be agro-tourism object as new tourism destination. The objective of this study is to describe the potential of *subak* to be an agro-tourism destination. The potentials of *subak* to develop agro-tourism in supporting rural economic development are: (i) the existence of natural landscape; (ii) culture within *subak* system; (iii) social values within *subak* system; and (iv) innovativeness of *subak*'s members. *Subak* as farmers' organization on rice farming activities could have alternative economic work in the relation to tourism. Potentials owned by *subak* have possibility to implement the agro-tourism. Basen on the experiences of some *subaks* in Bali (Jatiluwih and Tampaksiring areas as World Cultural Heritage), the agro-tourism implemented could provide social and economic benefits for farmers as individual and group.

Keywords: *Subak*, agro-tourism, culture, economic

I. INTRODUCTION

Indonesia is one of the big agricultural countries in the world, consisting of food crop, plantation crop, fishery, livestock/animal husbandry and forestry. Currently, the agricultural sector has played an important role in contributing to the economic development of the Indonesia which is likely in other developing countries (Thuvachote, 2007; Sarma and Vyas, 2014). In another side, the rapid growth of non-agricultural development within the past few decades, the contribution of agricultural sector has been gradually decreased toward the economic development.

In case of Bali province, the growth of non-agricultural development, such as tourism, is very high compared to other sector. Tourism development brings about the improved domestic income of the province and several regencies, as well. The local government tends to seek financial resources to increase revenue by more intensively explore tourism development. In fact, the tourism industry in Bali province has already become the main source of revenue for government. Even, this "threatens" another sector, agriculture. The existence of tourism development is needed for the government and the relevant private companies investing to some facilities for the visitors. Land conversion is one of the main problems happened in Bali due to the construction of physical infrastructures have been increased to support the development of tourism sector with urban areas and rural areas as well. Rice fields cultivated by smallholder farmers were converted to other functions, such as housing, road for transportation, building for industries. Its consequence is the areas of rice field have become smaller.

Management of rice field in Bali is taken by the traditional irrigation system, called *subak*. *Subak* has specific culture regarding the irrigation and rice farming activities that is based on *Tri Hita Karana* as its philosophy. *Tri Hita Karana* is the harmony concept for *subak*'s members consisting of *Parhyangan* (the harmony of relationship between the members with the God); *Pawongan* (the

harmony of relationship among the members and also members with the other people); and *Palemahan* (the harmony of relationship between the members with the physical environment).

Since 2012, *subak* has been awarded as the World Cultural Heritage by UNESCO due to its specific culture (Roth and Sedana, 2015; Sedana, *et al.*, 2014). Regarding Bali's tourism development with its cultural tourism basis, the existence of *subak* has become one of the alternatives to be agro-tourism object as new tourism destination or object as a product and service for the tourists. Tanupol *et al.* (2000) argued the ideas to combine the agriculture and tourism development, called agro-tourism should be developed to improve rural development. The objective of this study is to describe the potential of *subak* to be an agro-tourism destination.

II. POTENTIALS OF SUBAK TO BE AGRO-TOURISM DESTINATION

Subak as a traditional irrigation system in Bali with social, economic and religious nature has been established since thousands ago. *Subak* has potentials to develop agro-tourism in supporting rural economic development. The potentials of *subak* are: (i) the existence of natural landscape; (ii) culture within *subak* system; (iii) social values within *subak* system; and (iv) innovativeness of *subak*'s members. In term of agro-tourism development, these four potentials cited are integrated and have inter-related among each other.

Natural landscape of *subak* with terrace is one of the fantastic views for the visitors. The rice field terraces as natural landscapes could be managed by *subak* based on the irrigation water availability. Irrigation water would influence the cropping pattern and cropping schedule of rice farming. Traditional irrigation system owned by *subak* ensures the farmers to cultivate the rice field under the internal regulations and consensus among the members of *subak*. Rice growing on the terrace is very attractive for the tourists

to involve in the farming activities aside from its beautiful view. Some experts mention that agro-tourism has various functions such as allowing the tourists to get knowledge of agriculture and give appreciation of unique rural landscapes, being a place of rural tourism or farm tourism (Hall and Jenkins, 1998; Fleischer and Tchetchik, 2006). Having nice view of landscapes, the *subaks* within world cultural heritage have constructed the jogging track and bicycle track for the visitors. *Subak* could earn additional income by providing the tracking services.

Cultural aspects of *subak* have been well known by the people including the UNESCO which awarded the world cultural heritage to *subak*. Farming culture of *subak* system relates to the interaction among farmers for land preparation, transplanting, maintaining of crop and harvesting, and the other activities of *subak*. Social interaction of *subak*'s members also supports the Bali's culture for the tourism development, particularly on the ritual activities. The performance of ritual ceremonies in *subak* system makes it different with other irrigation system in other islands in Indonesia. The activities of ritual are conducted at the three level, individual, *subak* and among *subak* (Sutawan, 2005; Windia, 2006). Individual farmer perform ritual activities in the small temple located at his water inlet. Meanwhile temples owned by *subak* called Bedugul, Ulun Empelan and Ulun Suwi. The all members of *subak* would together conduct ritual activities in these temples. They always contribute cash money for the materials of offerings and other things needed for ritual activities. Farmers as member of *subak* have strong belief to the ritual activities as a part of implementation of Tri Hita Karana (*Parhyangan*).

Social values within *subak* system relate to social capital as features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit (Harriss dan Renzio, 1997). Social capital is the cumulative capacity of social groups to cooperate and work together for the common good (Montgomery, 1998).

Trust as one of the social capital becomes a significant value for the interaction among the farmers and management board. Regarding agro-tourism based on *subak*, the management board transparently inform the action plan that would be implemented. Trust of *subak* is equipped and strengthened by the social norm of *subak*, called *awig-awig*. For *subak*, the existence of *awig-awig* is being a glue of members to act based on their consensus and harmony. *Awig-awig* of *subak* contains what must be and must not be. Therefore, the respectful social values within *subak* system could support the activities of agro-tourism implemented in order to improve the quality of life of farmers, quality of environment and make sustainability of culture.

Innovativeness of *subak* has been found since the government firstly introduced new technology in farming activities. The introduction of high yielding varieties changing local variety got good response from the farmers. In term of agro-tourism is also positively responded by *subak*. *Subak* under the coordination of management board has thought that agro-tourism development might bring about the changes of farming activities. *Subak* has made plan about what should be developed in line with the natural resources and human resources within *subak*. One of the

plans implemented is making a clinic for agricultural demonstration.

Long experiences of *subak* in farming practices with its culture should be more attractive for the tourists who would know and learn how to conduct traditional farming. There are many values of *subak* which might be inform to visitors in the relation to traditional dates for ploughing land, making nursery, transplanting and other sequences of rice farming activities. As a clinic, the capabilities of *subak*'s management board should be improved, especially in the way how to presenting the information. Publication of traditional information is a part of the important things to be available in the clinic. Performing farming activities on the rice field should be interesting in order that the visitor might directly involve in the activities, such as land preparation by using cattle. The direct involvement of visitors into farming activities is becoming attractive event for them due to this is primarily core of agro-tourism. In developing agro-tourism, the farmers and local people could have attraction centres like dams, festivals/exhibitions, farm sites, and the others (Nnadi., and Akwiwu, 2005).

For the local people including farmers as *subak*'s members, agro-tourism development should bring additional income from the good or services offered to visitors. Czapiewska (2010) cites that one of the ways to increase rural areas and assist farmers including local people to earn extra income is establishment of agro-tourism. The more tourists visit *subak* area as agro-tourism, the more income gained by farmers due to the food and other agricultural provided to tourist (Sznajder, *et al.* 2009). Agro-tourism as a part of mass tourism is often referred to as a new kind of sugar which is attractive to people to involve in the relevant activities and being an invisible export and non-polluting industry, and so on (Pitana and Diarta, 2009).

III. BENEFITS OF AGRO-TOURISM

Subak as farmers' organization on rice farming activities could have alternative economic work in the relation to tourism. Potentials owned by *subak* have possibility to implement the agro-tourism. Experiences of some *subaks* in Bali (Jatiluwih and Tampaksiring areas as World Cultural Heritage), the agro-tourism implemented could provide social and economic benefits for farmers as individual and group. The benefits gained by *subak* and farmers are as follows: (i) enhancing farm activities; (ii) producing various processed products that are demanded by the visitors with local product material; (iii) increasing revenue of *subak*; (iv) raising innovation to respond the visitors' needs, such as food and drink services, souvenir, rental of bicycle, etc.; (v) improving awareness of farmers to keep clean the environment of *subak*; (vi) awareness of farmers to have safety, cleanliness, orderliness, comfort, beauty, hospitality to attract the visitors; (vii) having entrepreneurial spirit; (viii) having opportunity for recreation.

Agro-tourism based on *subak* that has been just introduced and implemented in Bali still needs improvement on the capacities of the *subak*'s management board. The capacities improvement relates to tourism development in the small-scale unit (at the *subak* level). Within the areas of world cultural heritage mentioned above, the management board got limited training on how to have good skill for the

tourism management. The *subaks* only rely on their experiences in welcoming visitors and provide services (food and drink) with simple technology. It looks different with the private company which is established in the surrounding of *subaks* area, in which the performance and services using modern technology.

IV. CONCLUSIONS

Presently, management of rice field in Bali is fully taken by the traditional irrigation system; called *subak*. Since 2012, *subak* has been awarded as the World Cultural Heritage by UNESCO due to its specific culture. Therefore, the existence of *subak* has become well known and one of the alternatives to be agro-tourism object as new tourism destination. There are some potentials of *subak* relate to develop agro-tourism in supporting rural economic development are: (i) the existence of natural landscape; (ii) culture within *subak* system; (iii) social values within *subak* system; and (iv) innovativeness of *subak*'s members. *Subak* as farmers' organization on rice farming activities could have alternative economic work in the relation to tourism. Relying on the long experiences in farming activities, some *subaks* in Bali (Jatiluwih and Tampaksiring areas as World Cultural Heritage), could implemented agro-tourism activity in order to provide social and economic benefits for farmers as individual and group.

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IMPLEMENTATION OF ARTIFICIAL INSEMINATION SNAPPING LUST (GBIB) IN CATTLE IN THE DISTRICT CITY WEST K. CENTRAL KALIMANTAN PROVINCE

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Abstract. The government has launched a program of self-sufficiency in meat as an effort to overcome the shortage of beef supply to meet the needs of the community, especially when the day of religious festivities. The government policy is expressed in the Minister of Agriculture No. 19 / Permentan / OT.140 / 2/2010. This program is a common commitment and became one of the main program of the Ministry of Agriculture concerning the efforts to achieve food security animal cattle origin-based domestic resources, especially cattle, and followed up by the Director General of Animal Husbandry and Health No. 209 / KPTS / OT. 160 / F / 03/2015 on the Establishment of the Steering Committee and Project Implementation Acceleration Increased Population Through snarl / sync Lust and Optimaslisasi Artificial Insemination (GBIB). GBIB Program Implementation is expected to meet the needs of the community will be beef, as demand for beef is always soaring demand every year, especially ahead of religious festivals. To discuss and review the implementation of the program stretcher author uses the theory EDWARDS III to determine the success or failure of the implementation of the program in the district of Kota Waringin GBIB West Central Kalimantan province. Issues to be examined are 1) the quality and quantity of resources, 2) communication and dissemination program, 3) Attitude 4) Bureaucracy. This will be the focus to see the successful implementation of the program of snapping / sync Lust and Optimaslisasi Artificial Insemination (GBIB) in the district of Kota Waringin West Central Kalimantan province. This study uses the concept of a qualitative descriptive approach with the aim of providing an overview of how the implementation of the field program and then analyzed using the theory of Edwards III. The results of this study show that: 1) Aspects of Resource (HR, Information, Privileges and amenities), some support as the support means the production of drugs / vitamins and breeding stock (straw) superior adequate and well as the authority and the information available is quite good, while some aspects that do not support such as: HR, execution time, geographical conditions, transport facilities support, 2) aspect Communications (Transmission, Clarity, Consistency and Coordination) strongly supports the implementation of the program GBIB is 3) aspects of attitude (attitude implementer, Support Leader , Incentives for implementing and Transparency), relatively supportive in this program, and 4) Structural Aspects of Bureaucracy (SOP and Fragmentation) still do not support the implementation of the Program snapping Sexual arousal and this Artificial Insemination

Keywords: Implementation Program GBIB

I. INTRODUCTION

General policy of agricultural development is to create added value and competitiveness of agriculture by enhancing the role and participation of the agricultural community and the implementation of good organizational management based on the application of science and technology. Of public policy are translated into a technical policy where implementation is organized on the principle of economic unity, so that all elements of the powers that be in synergy with one another.

Law No. 7 of 1996 concerning food security, the fulfillment of food for households which is reflected in the availability of adequate food, both in number and quality,

safe, equiTABLE and affordable. Food security can be simplified by focusing on three dimensions of different but interrelated namely food availability (production), access to food by households (distribution), and utilization of food by individuals (consumption).

The situation of national consumption of animal food is still dominated by a relatively high consumption of meat, where meat is a basic requirement of the most important and is considered by the government, either the stock / reserves and its market price. Then to secure food situation should be supported by the population of livestock enough, one of the steps taken by the government, namely the implementation of artificial insemination programs in order to stimulate the birth rate of cattle in order to meet the food needs of the community.

Directorate General of Livestock and Animal Health is a government agency that has the task of formulating and implementing policies and technical standardization in the field of animal husbandry and animal health functions include breeding, feed, livestock farming, animal health and veterinary public health. Challenges in implementing the tasks and functions is not easy in the midst of challenges faced include:

- 1) The population growth and the increasing need of the productive age group of animal-based food supply that is safe, healthy, whole and kosher (FOSTER) becomes larger;
- 2) The transformation of the use of agricultural land to non-agricultural become a limiting factor in increasing production and productivity of the agricultural sector, including livestock;
- 3) Competition not only for the use of food commodities (food), feed (feed) and energy (fuel), for example maize;
- 4) Sentra producer and consumer centers are located far apart in need of transportation facilities and adequate logistics ;
- 5) Synchronization central policy areas as the impact of regional autonomy;
- 6) The liberalization of world trade pose a threat of imported products; and
- 7) The global climate change.

In the midst of the challenges faced, the Directorate General of Livestock and Animal Health has been and will carry out various activities in order to support the duties and functions of which are: Development of Livestock Breeding, Aquaculture Development Cattle Artificial Insemination (AI). In an effort to increase the population and productivity of cattle and buffaloes that lead to self-sufficiency in beef and buffalo.

Government through the Directorate General of Livestock and Animal Health Ministry of Agriculture in 2015 launched a program through bullying Lust Optimization Birth of Artificial Insemination (GBIB). Central Kalimantan province into one of the working area of the program with technical companion Livestock Breeding Center for Excellence (BPTU) Pleihari as Technical Implementation Unit (UPT) of the Directorate General of Livestock and Animal Health. Benefits of Artificial Insemination efficiency is more time, where to marry the cattle ranchers no longer need to look for bulls (bull), simply contact inseminator breeders in their area and determine the desired seed.

Acceleration of Population Increased activity by snapping Lust and Artificial Insemination (GBIB) in Central Kalimantan Province Regional TA.2015 will be made with a target of 5000 for snapping tail oestrus in 14 Districts / Municipalities. For West Kotawaringin target for GBIB many as 800 animals or 16% of the target provinces, (Evaluation Report Activity deploy GBIB, BPTU-HMT Pelaihari, 2015)

Sexual arousal bullying programs and Insminasi Artificial (GBIB) is a program for increasing the population increase through estrus synchronization and optimization of Artificial Inseminasi. GBIB program which is one of the

government programs in order to fulfill the needs of meat adequacy society. Sexual arousal bullying program and Artificial Insemination (GBIB) very well be applied in order to help farmers / ranchers in an attempt to create a pregnancy cows simultaneously. GBIB is one right way to further increase the lust of cows and buffaloes to ease the process of mating. That way, potential pregnancy cows to be faster to produce new off spring.

At first in West Kotawaringin livestock population improvement program carried out through a process of natural mating. Animal mating process is done by cows are married males / natural. However, it is felt less than optimal because it was feared happened inbreeding (inbreeding), so the program is necessary to prevent GBIB descended from the male parent and incest (in breeding) because it can produce offspring that are less good his performance.

Artificial Insemination Program (IB) alone in West Kotawaringin have dilaksanan since the period of 1990 but lack of government financial support. Artificial Insemination (AI) has aggressively implemented around the period of 2010 until now. The problems studied were: 1) How to program implementation snapping Sexual arousal and Artificial Insemination (GBIB) in Central Kalimantan Barat Kotawaringin ?. 2) How is the target and the realization of snapping Sexual arousal and Artificial Insemination (GBIB) in Kotawaringin West Central Kalimantan Province ?. The benefits of this research are expected to provide feedback / input to the Regional Government of West Kota waringin especially Agriculture and Livestock Kota waringin West towards the implementation of the Program snapping Sexual arousal and Artificial Insemination and can make a positive contribution in order to achieve food needs in West Kotawaringin and follow-up of GBIB program in the future.

II. METHOD

This study used a qualitative approach, where data shown generally shaped descriptions and sentences is a description of the factual and accurate, as well as the relationships among the issues examined in a qualitative approach, the researchers went to the field to examine the object of its studies and hold a direct interaction with society aims to get in-depth information about the professionalism including obstacles faced and the efforts made to overcome them. This is based on qualitative research purposes to generate descriptive data in the form of words written or spoken of people and behaviors that can be observed (Bogdan and Taylor, 2002).

The data collection is done by observation, interview (Interview) and documentation. The analysis began to formulate and explain the problem, before plunging into the field, and continue until the writing of the research results. The data have been collected later clarified to be analyzed using inductive analysis approach. Furthermore, using data analysis developed by Miles and Huberman, with three types of activities, namely; data reduction, data presentation, and conclusion / verification

III. RESULT

The number of cattle population in Central Kalimantan is still far from sufficient to meet the needs of people of Central Kalimantan meat. Overview cattle population in Central Kalimantan can be seen from TABLE I below.

TABLE I

Cattle Population development and buffalo. Fixed figures (ATAP) in 2015 and a Preliminary figures (ASEM) in 2016 in the province of Central Kalimantan

No	Kabupaten/ Kota	Populasi		Sapi	
		ATAP 2015	ASEM 2015		
1	Kotawaringin Barat	Sapi	Kerbau	0	
		14.397	16.933		0
2	Kotawaringin Timur	7.140	7.203	211	7.414
		3.200	3.076	14	3.090
4	Barito Selatan	1.125	1.125	9.773	10.898
		1.150	10.202	11.352	
5	Barito Utara	3.080	3.080	135	3.215
		3.125	146	3.271	
6	Sukamara	2.794	2.794	0	2.794
		2.934	0	2.923	
7	Lamandau	3.816	3.816	0	3.816
		3.925	0	3.925	
8	Seruyan	7.767	7.767	6	7.773
		8.155	0	8.155	
9	Katingan	7.894	7.894	331	8.225
		8.829	368	8.657	
10	Pulang Pisau	8.825	8.825	15	8.840
		9.293	15	9.308	
11	Gunung Mas	4.034	4.034	141	4.175
		4.100	150	4.250	
12	Barito Timur	1.261	1.261	789	2.050
		1.324	1.093	2.417	
13	Murung Raya	1.729	1.729	1.721	8
		1.763	10	1.773	
14	Kota Palangka Raya	1.806	1.806	15	2.014
		68.531	68.531	11.417	79.948
	Kalteng	73.393	12.230	85.623	

Kota Waringin West is the region with the highest number of cattle population throughout Central Kalimantan. But the production and productivity of livestock still can not meet local demand. Various efforts and programs have been undertaken to stimulate the growth of birth rate among other cows Cows Integration Oil, Utilization ex. mine for cattle, cows integration with agricultural crops and Artificial Insemination program / GBIB, (Report Distanak Central Kalimantan Province, 2015).

Program snapping Sexual arousal and Artificial Insemination (GBIB) initiated by the central government through the Ministry of Agriculture in this case the Directorate General of Livestock and Animal Health intends to accelerate the increase in population through a snapping / synchronization of oestrus and optimization of Artificial Insemination (GBIB) as well as the prevention of reproductive disorders in cattle / buffalo. Sexual arousal bullying program and Artificial Insemination (GBIB) aims to: 1) Optimizing the implementation of the IB; 2). Penyerentakan lust in an effort to accelerate the birth; 3). Increased acceptor IB; 4). expand the range of services IB;

5). Settlement of the case of reproductive disorders 6) establishment of livestock, especially cattle population increase in the target areas of activity, 7) ensuring adequate support in the provision of livestock in the framework of the national meat self-sufficiency and 4) increasing prosperity and income of farmers / ranchers with additional births superior cattle. To support the implementation of the program GBIB necessary target data as in the TABLE below

TABLE II

Program targets bullying Sexual arousal and Artificial Insemination by decree of the Head of Agriculture and Livestock of Central Kalimantan No. 313 / Kpts / Nak-400 / IV / 2015 dated April 16, 2015.

No	Kabupaten/Kota	Populasi (ekor)	Betina Produktif (ekor)		Target
			Reguler IB (ekor)		
1	Kotawaringin Barat	12.554	6.193	4.440	800
2	Barito Utara	2.592	1.189	350	300
3	Kapuas	3.635	947	400	350
4	Pulang Pisau	8.350	4.500	3.400	700
5	Barito Selatan	868	363	203	25
6	Katingan	8.081	2.257	1.750	500
7	Kotawaringin Timur	6.872	2.787	2.000	750
8	Palangka Raya	1.725	842	550	800
9	Sukamara	2.687	1.901	300	250
10	Seruyan	7.314	3.400	1.500	100
11	Lamandau	2.917	817	700	600
12	Gunung Mas	3.865	950	350	150
13	Murung Raya	1.039	411	350	250
14	Barito Timur	1.787	859	350	200
Jumlah	64.046	27.217	17.773	5.700	5.325

From the above TABLE it is known that out of the fourteen districts in the Province of Central Kalimantan West Kotawaringin received an allocation of snapping Lust IB 800 and IB Regular tail 600 tail. The allocation is distributed according to ability and absorption area per district. Six districts targeted GBIB program is Kumai, South Arut, North Arut, Pepper Base, Base Bull, and Kotawaringin. Regular IB Program is a program implemented regularly served by the clerk inseminator throughout the year ranging from the beginning of the year until the end of the year.

Sexual arousal snarled IB GBIB done for their program. GBIB program for 2015 has just been implemented pencanangannya beginning of September 2015 until the end of 2015 (4 months). GBIB program allocated to target farmers who are not served by regular IB activities. GBIB Program Results can be seen in the following TABLE

TABLE III.

Realization Results of Implementation Activities GBIB and Ganggrep 2015 in Kalimantan

No	Kabupaten/Kota	Target GBIB (ekor)			Jenis Kegiatan	
		Seleksi (ekor)	Penyuntikan hormon (ekor)	IB (ekor)	I	II
1	Kotawaringin Barat	800	560	560	560	74
		634	560			560
2	Barito Utara	350	179	179	37	
		216	176		176	
3	Kapuas	400	456	456	164	
		610	456		456	
4	Pulang Pisau	700	364	364	364	
		364	364		364	
5	Barito Selatan	50	50	50	12	
		62	13		48	
6	Katingan	750				
7	Kotawaringin Timur	750	283	283	283	176
		459	7			291
8	Palangka Raya	200	52	52	32	
		84	52		52	
9	Sukamara	100	46	46	46	
		46	46		46	

10	Seruyan	300	48	48	17	
	65	48	2		50	
11	Lamandau	200	273			
	273	271			271	
12	Gunung Mas	150	66	66		
	66	66			66	
13	Murung Raya	100	102	102	16	
	118	102			102	
14	Barito Timur	200	121	124		
	124	124			124	
Jumlah	5.000	2.808	2.811	518	0	3.392
	2.710	22	0	2.732		

GBIB target achievement in West Kotawaringin highest throughout Central Kalimantan although it can not reach 100% of the specified target. According to the TABLE 4.6 on the realization of the results of the implementation of the above in mind that the target GBIB GBIB of the province are set to Kota waringin West is 800 breeding. Target achievement during the period of 4 (four) months produce a pregnancy rate of 560 head or about 80%. If the program is implemented for a period of 1 (one) year results will be three times that of the achievements of current or tail $560 \times 3 = 1680$ tail pregnancy. If the tail is calculated from 1680, mean performance target of 800 animals of about 200%. So if the government program was implemented at the beginning of the year until the end of the outcomes are 1.680 tail mean exceeded the target set at 800 animals.

Economically if in view the realization of the achievement of the program as much as 560 tails GBIB calf's birth, if the selling price is calculated derivative / calf superior to average around Rp. 6,000,000 / tail then the impact of the economic value created from GBIB program in the community is about 560 tails \times Rp. 6,000,000 = Rp. 3.36 billion (three billion three hundred and sixty million). Comparing the results of IB derivatives with natural mating process, the selling price higher derivatives IB results because of a genetic child produced superior results than children. The average difference obtained difference Rp.2.000.000 field, - s / d 2.500.000, - / tail, higher selling prices calf IB results.

Sexual arousal bullying program and Artificial Insemination (GBIB) through decision of the Directorate General of Animal Husbandry and Health No. 209 / KPTS / OT.160 / F / 03/2015 ON Steering And Implementing Activity Team to Accelerate Improved snapping population through Birahi And Optimization of Artificial Insemination (GBIB) 2015 revised budget funds are expected to increase the population of hearts Frame Capable of supporting an increase in the Regional Food Security.

In the West Kotawaringin, cultivation Cattle Enough Operating long cultivated traditional, Livestock Just released dikebun OR dilahan And NOT require expensive Investment And labor, while cattle require intensive maintenance Patterns A More Attention From peternaknya. Thus requiring additional cost BETWEEN Others include power for feed, cages Management And Others.

• Analysis Model Program by Edwards III

The benefits of a program will be felt if the program can be implemented properly. Implementation of a program is a dynamic process that includes the interaction of many factors. Theoretically, according to Edwards III there are four variables that influence the implementation of the program, namely communication, resources, attitudes and bureaucratic structure.

a. Communications (Communications)

According to Edwards III, there are three important things that can be discussed in the communication process program, namely the transmission, clarity (clarity) and consistency.

1. Transmission

In connection with the Program snapping Birahi Artificial Insemination (GBIB) in West Kotawaringin and based on interviews with the Head of Development of Livestock Production Department of Agriculture and Animal Husbandry West Kotawaringin note that the implementation of the program in West Kotawaringin already know and understand what to do in connection with the implementation Sexual arousal snarled Artificial Insemination program (GBIB) this.

2. Clarity (Clarity)

Clarity of information about the aims and objectives snapping lust artificial insemination (GBIB), based on the observation of rules and regulations regarding the implementation of this program has been described in detail through the General Guidelines for the Implementation of bullying Sexual arousal and Artificial Insemination (GBIB), Technical Guidelines Program snapping Sexual arousal and Insemination artificial (GBIB) as well as the decision of the Directorate General of Animal Husbandry and Health No. 209 / KPTS / OT.160 / F / 03/2015 on the Steering Committee and Project Implementation Acceleration Population Increased by snapping Sexual arousal and Optimization of artificial Insemination (GBIB) 2015 revised budget funds. Agriculture and Livestock of Central Kalimantan Province, Permentan, GBIB General Guidelines and Technical Guidance has been submitted to the Department of Agriculture and Livestock District snapping Program recipients Sexual arousal and artificial insemination, it can be seen in the following TABLE / TABLE IV. Support Regulations / Legal Foundation Related Programs snapping lust program of artificial insemination (GBIB), 2015

TABLE IV Support Regulations / Legal Foundation Recipient Regulation

1	General Guidelines for the Implementation of bullying Sexual arousal and Optimization of Artificial Insemination (GBIB) 2015 Already
2	Technical Guide Budget Management Tasks Directorate General of Livestock and Animal Health had been
3	Technical Guidelines snapping Activity Sexual arousal and Optimization of Artificial Insemination (GBIB) 2015 Already
4	decision of the Directorate General of Animal Husbandry and Health No. 209 / KPTS / OT.160 / F / 03/2015 on the Steering Committee and Project Implementation Acceleration Population Increased by snapping Sexual arousal and Optimization of Artificial Insemination (GBIB) funds APBNP 2015 Already

Source: Dinas Pertanian dan Pertenakan Kabupaten Kota Waringin Barat.

b. Resource

1. Human Resources.

The resources in the implementation of programs in the district of Kota Waringin GBIB West still less support is the Human Resources (HR) in the Livestock Production Development Division amounted to 15 (fifteen) people and has included Head of Division and Head of Section. There should be additional staff, especially staff parts of the field as Agricultural Extension Officers (PPL). For inseminator officers have formed an independent and spontaneous inseminator no division perwilayah but due to spontaneous inseminator officer status, so as to coordinate official considerably less flexible. PPL's position is under the Office of Agricultural Extension and Food Security (KPPKP), when PPL entered into the Organization Department of Agriculture and Animal Husbandry then expected to add more strength to the Department of Agriculture and Animal Husbandry field.

2. facilities

Facilities provided include the provision of seeds / straw superior cows of different races / nations veal obtained from the national superior male sperm to adjust to the circumstances and demands of the farmers on the location of activities. it is absolutely necessary given the circumstances and the situation of livestock breeders who are expecting are married injection / IB with superior seedlings. The facilities provided in the form of the hormone prostaglandin 2 alpha, for the implementation of estrus synchronization in order to obtain some cows were estrus IB simultaneously and in unison. Provision of Medicines and vitamins are the initial stimulus for farmers who have become acceptors GBIB and applications performed by veterinarians and paramedics trained animal health.

c. attitude

The attitude of the public in this case farmers strongly supports the program GBIB, seen from the success made by the inseminator which has been designated by the Department of Agriculture and Animal Husbandry West Kotawaringin, although implementation in just four (4) months showed a pretty good result, 800 tail which is targeted to achieve the realization of as many as 560 cows pregnant. The involvement of various parties, especially from the Agriculture and Livestock West Kotawaringin show a good attitude in the implementation of bullying / lust Insemination (GBIB).

d. The bureaucratic structure

Bureaucratic structure which is owned not enough to support the implementation of the Program snapping Sexual arousal and Artificial Insemination (GBIB) is in terms of the SOP and fragmentation factor. In the conduct of the Program snapping Sexual arousal and Artificial Insemination (GBIB) The SOP and the section that deals specifically with this program yet, which resulted in the duties and authorities of each section is less clear and this program is less able to run with the maximum because the workload is greater

submitted the Head of Development of Livestock Production.

IV. CONCLUSIONS

1. Implementation Program GBIB implemented in the district of Kota Waringin Barat has been executed, communication goes well, sosialisasi implemented so understanding of the technical and operational guidelines to understand the program's implementation GBIB inseminator who have ditujuk by the Agriculture and Livestock District Municipality K. West, Resources limited human does not hinder the implementation of the program, support the availability of adequate facilities with medicines and other facilities. Bureaucracy is limited because the implementing specialized field of structural deal is not yet available.
2. Despite the achievements did not meet the target of 800 (eight hundred) cows for the Fiscal Year 2015, but when seen from the results sebanyak 560 (five hundred sixty) tail which eventuated in a period of four (4) months showed remarkable success, because it will bring social and economic impact for the community, and will have an impact on government policy in fulfilling the needs / stock of meat, especially the need for the feast.

SUGGESTION

1. The successful implementation of the program GBIB already carried out by the City District Government of West Waringin should proceed, the local government should support the policies of the central government, to create an advanced form of Perbub policy or legislation as a follow-up of Policy Forms that have been made by the central government.
2. The City District Government Waringin Barat through the Agriculture and Livestock should improve services to farmers, especially in the implementation of the program implementation unit GBIB there should be special handling in order to avoid overlapping execution of tasks. Power inseminator should be increased in order to reach the waitress to farmers in the district of Kota Waringin Barat can be evenly distributed, not only in certain regions.

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RAISING PUBLIC AWARENESS OF RUBBISH RECYCLING; THE EXPERIENCE OF PONTIANAK CITY, WEST KALIMANTAN

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Abstract. This research looks at the role of the Government of Pontianak City in raising public awareness in rubbish recycling. The aim of this research is to gain an understanding of how the Government of Pontianak City in this case the Cleansing and Landscaping Department of Pontianak raises and develops an individual's awareness of recycling in the area of Pontianak. The role of the Cleansing and Landscaping Department of Pontianak in waste management is already quite good. It can be seen from some work-related activities undertaken as education about waste management, collection, reducing and recycling waste, and also transporting the waste into polling stations to the final landfill of Batulayang. The methodology used here is mainly interviewing, observation and data analysis through all material about recycling that is distributed by the Government of Pontianak City. Methods of promotion recycling in the Pontianak city include; promotion via website, schools, media, and community consultation. All of the promotion methods of recycling awareness are very simple, easy to understand, and directly target the whole community in this area. Eventually, the Government of Pontianak City still has to be more active in order to manage the waste problem, particularly the recycling issue.

Key words: waste management, awareness, recycling, government

I. INTRODUCTION

Recycling involves a set of activities that includes collecting recyclable materials, sorting and processing recyclables into raw materials so that it can be used again as a new product (U.S. EPA, 2005). In some cases it can be done more than once, eliminating the need to use new raw material. There are many benefits associated with recycling, but mainly it reduces the pollution level and it saves the natural resources and energy that would otherwise be used in the production of new goods. Recycling also creates new jobs and increases income generation, particularly in the developing countries. Indonesia has ratified The Kyoto Protocol and must participate actively in reducing the green house gas emission including landfill gas emission. The rising number of Clean Development Mechanism (CDM) projects in waste sector approved by the international board of CDM and proposed by private/public sectors can be the indicator that the waste management in Indonesia becomes an important priority in national policy (Hilman, 2005). CDM project in waste sector is one of some ways to reduce the GHG emission. Therefore, the Government of Indonesia (GoI) should courage it more by providing better planning and implementation in waste management to improve the involvement of the public and privat sector in CDM Project for waste sector. However, the current condition of the solid waste management is far from the adequate Level of Service (LoS). Inadequate waste policy in national and local level, low awareness of the community, shortage of budget and low private participation become main reasons for the low level of

service in Municipal Waste Management (MWM) (Hilman, 2005).

Wibowo and Djajawinata (2002) state that an increase in population added with a growing urbanization are the major causes of high volumes of waste that have to be managed by the local government.

Temporary garbage disposal, waste transportation, and final disposal of garbage is driven by formal institutions such as government. Neighborhood residents have a role on the stage of garbage collection, that waste management is carried from the source. At this stage the citizens of sorting between wet and dry garbage, while the informal sector are scavengers and collectors simply collecting and trading worth selling dry garbage in the can from the citizens.

Strategic efforts undertaken by city government in addressing waste problem is to encourage community participation in the management waste by doing waste reduction at source (households). In order to implement the policy, city government formed based waste management pilot project community. Interest pilot community-based waste management project is to get input how household garbage can independently managed by the community in the level of resources, so as to reduce total volume of waste that must be managed at TPA (Cleansing and Landscaping Department of Pontianak, 2010).

Pontianak, the capital city of West Kalimantan has a population of 653,030 people. The area covers of 107, 82 square kilometers, with 6 local authorities (Statistic Indonesia, 2016). However, the fast rate of population growth has presented Pontianak's local government with the increasing problem of disposing of its rubbish. Everyday around 1,688 tones of rubbish is generated by the

community. Data obtained in 2015 from the Pontianak's Cleansing and Landscaping Department stated that Pontianak has one landfill of about 19, 6 hectares, which will be expanded by the municipal government by an additional 30 hectares.

The role of the community in waste management in the city of Pontianak in general can be seen in the process of garbage collection from the house to the temporary dump site (TPS) coordinated by RT / RW. However, the garbage collected in general has not been sorted. Community's effort in waste management has yet to be maximized, because basically public awareness is still lacking. In addition, most people today do not have the correct knowledge about proper waste management. The role of society in the new garbage collection is currently visible in the area of high population density of the city. As for the area where the population is sparse generally people are managing waste individually based on the perceptions and habits of each.

The research focus will be on how Pontianak City raises the public's awareness in recycling their rubbish particularly the households rubbish. The findings of this research will provide A baseline data to identify the strategies that may be applicable to the community of Pontianak City.

To find the strategies used by the Pontianak Government to raise people's awareness of recycling household waste. To evaluate the strategies used by the Pontianak Government to raise people's awareness of recycling household waste.

II. METHOD AND MATERIAL

A qualitative approach to research was employed in this study. Specific methods such as participant in depth interviews were utilized in the course of gathering the data. A selective interview was conducted to generate empirical data about waste management in the Pontianak City particularly in rubbish recycling activities.

In conducting the interview, a specific participant was selected as the interviewee. An interview will be defined as a face-face verbal interchange in which one person, interviewer, attempts to elicit information or expression of opinion or belief from another person or persons (Maccoby and Maccoby in Dunn, 2000). The interview session was done with approximately 45 minutes. The interview was a semi structured interview with two of the key staff in the Cleansing and Landscaping Department of Pontianak. The participant in this research were Ms. Tinorma Butar Butar, SH as the head of operational cleansing in Cleansing and Landscaping Department of Pontianak city and Mr. Didik Haryanto, ST as the chief of Technical Implementation Unit Area of Final Landfill of Batulayang (Ka. UPTD TPA Batulayang).

In this research, the researcher explored the Cleansing and Landscaping Department of Pontianak, local newspaper, leaflet and brochures that are used to promote rubbish management and recycling also the material that can be found on the internet.

III. RESULTS AND DISCUSSION

The government in this case the cleansing and landscaping department has given a high awareness to the rubbish recycling towards Pontianak city. It has many programs and support to the community in order to give the attention and awareness of rubbish recycling to the people of Pontianak city.

From interviews conducted on the two people above it produced things such as the following:

1. The office has issued some leaflets and brochure regarding on the promotion of the rubbish recycling awareness (as shown in figure 1)

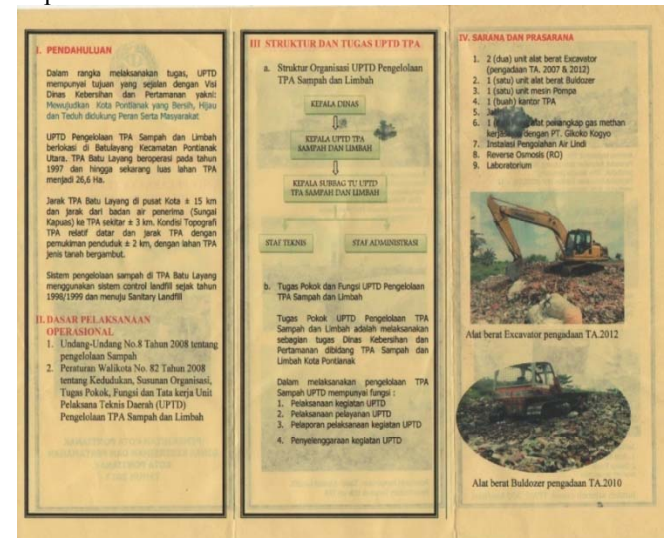
Figure 1. A leaflet showing the promotion of rubbish recycling by the Cleansing and Landscaping Department



Data source : Cleansing and landscaping Department of Pontianak

Furthermore, the office also produced another brochure as you can see in figure 2 below regarding to what they have been done to the solid waste in the final landfill in Batulayang. The aim of this kind of promotion is to find the awareness of the people of Pontianak about how the government manages their solid waste.

Figure 2. A brochure produced by the Cleansing Department



Data source : UPTD Batulayang, Pontianak

In Article 28 paragraph (1) of the Constitution of the Republic of Indonesia Number 18 In 2008 on the Protection and Waste Management, which reads: "The public can play a role in waste management held by the government and / or local government ". Management responsibility No garbage in the community as a producer of waste in line with it, society as a manufacturer of waste expected to be involved in total over the five sub system of waste management, which includes sub-systems institutional, technical and operational sub-systems, sub-systems of financial, sub-systems laws and regulations as well as sub-systems of public participation. According to (Syafrudin, 2004: 102), one of the alternatives that could be done is implementing a community-based waste management program, such as waste minimization and implement 5 R (Reuse, Recycling, Recovery, Replacing and refilling). Both of these programs can be started from the source of waste generation up to the location of the landfill.

2. The office also use the internet to promote recycling in Pontianak city

The Cleansing and Landscaping Department of Pontianak has put much information about the program, support and also some socialized activities throughout the community of Pontianak city. When the researcher asked about what strategies that the government uses to promote recycling activities in their area, the interviewee said “...the government has put much information though the internet, with links of the information where people can have more information about the rubbish recycling...”

A rubbish recycling program through website would be very effective, as many people in Pontianak city can easily access the internet from the internet services shop or from home, office and several schools. However, this still an exceptional way of promotion of recycling in Pontianak as there are many people who still do not know about the internet and how to use this technology. In addition, this office does have its own website that can be found in [http://www.dkp.pontianakkota.go id](http://www.dkp.pontianakkota.go.id). From this website, people can know much about what the department have been done to their solid waste also people of Pontianak can share their complain about the anything that has any relation to the cleansing and landscaping of Pontianak city (as you can see in Figure 3 below). Here in the website, people can find much information about the education, community services, activities, and what is the newest program from this department.

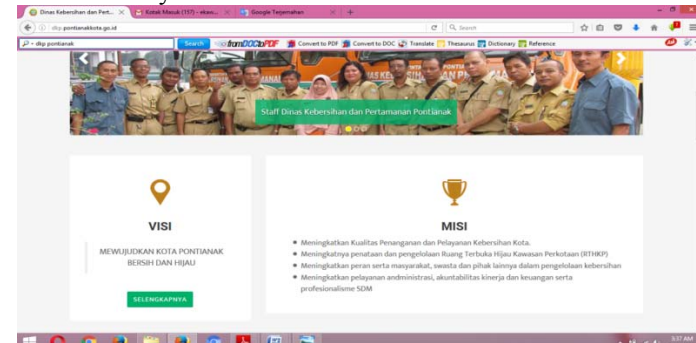
Positively, the existence of this website will give a better understanding and more knowledge for people who read through it. Therefore, it is very significant opportunity for the Cleansing and Landscaping Department of Pontianak City to put the issue of recycling in the website. Due to many people in Pontianak city who know and can access the internet better, so it is a good option for the government to put information about recycling in this office’s website.

Putting information on recycling activities, in particular about the meaning of recycling, what kinds of activities can be classified as recycling, what items should be recycled, and where people must put their recyclable materials is a

good suggestion. This kind of promotion may elicit a good response from educated people in Pontianak.

But, still the promotion of recycling via websites can only be read and understood by the educated people who access to the internet easily. It would not reach the entire layer of Pontianak’s people.

Figure 3 Cleansing and Landscaping Department of Pontianak City Website



Data source: dkp.pontianakkota.go.id

3. The use of schools to promote recycling in Pontianak city

As has been done in many cities in Indonesia, promoting the recycling through schools would be very effective in Pontianak City. Today, there are many promotion programs that come to schools and make a discussion forum within schools especially in high schools. According to the Chief of the Knowledge of the existence of recycling program and the knowledge required complying with the rules and regulations of this program are thought to be the basic issues that prevent individuals from participating. Salhofer and Isaac (2002) showed the importance of public relations in recycling strategies. They believed that public relations could be used as a tool to educate and motivate individuals into participating in recycling programs. As Salhofer and Isaac (2002) pointed out, public relations activities must aim at specific target groups in order to obtain promising results; therefore public relations projects must be planned carefully and professionally, and include an analysis of the target group and choice of media. In many cases there is plenty of government support and encouragement for recycling but limited public participation in recycling.

Boldero (1995) argues that recycling behaviour is likely to be influenced by situational factors such as the amount of effort involved, inconvenience, storage space and access to recycling schemes.

In a study on recycling problems in England, Smallbone (2003) considered recycling as the best form of waste management compared to methods involving landfill and incineration. She found that recycling was an important waste disposal alternative but there was still a lot of householders who remained non compliant.

Evison and Read (2001) reiterated the importance of local authority awareness and promotion campaigns; poorly designed and implemented campaigns will mean that participation rates will continue to remain low. Parfitt (2002) concluded that there are a number of factors that drive

increasing municipal waste arising. These include: demographics, increased consumer spending, behavioral changes and changes in waste management practice.

In addition, Pontianak city has already many public and private schools, these resources will give a better environment to the recycling program in Pontianak, as there are many schools that can be involved in the program. The main emphasis in the recycling program that the Pontianak's council has to develop is perhaps in how the program of the recycling can be familiar with all of the students in this city. This can only be reached from the way of the promotion itself, such as developing a recycling seminar through school.

4. Supporting the local based community in concerning the rubbish recycling program Empowering communities in waste management by Damanhuri and Padi (2005) is by changing the form of behavior based on the need for a clean environment that can eventually grow and develop participation in the field of hygiene. Changes shape people's behavior can be achieved if there is the business community raised by changing habits, attitudes and behavior towards cleanliness / trash is no longer based on the necessity or obligation, but rather based on the value needs. To change these habits, it is necessary to disseminate the role of the community is done thoroughly, namely government, private, and community colleges. It is a collaboration of all stakeholders to participate in waste management. The success of waste management greatly depends on the awareness and willingness to participate from stakeholders.

Cleansing and Landscaping Department of Pontianak city is very active in community empowerment programs such as participating in the drafting of the program using a participatory approach that promotes participation in accordance with the desire and willingness of communities RT / RW in Pontianak as the subject of community development. The model used is a model of community development. The technique used is the FGD with the community in order to design a community empowerment program prepared by the steps as follows: A). Discuss and determine the issues facing the community in accordance with the opinion of RT / RW. B). Provide knowledge to the community and make a choice of a variety of alternative waste management in accordance with the wishes of the people so that the drafting of the program.

To date there is an existing waste transportation services managed by the community in Pontianak. This services is fully supported by the government as you can see from this report

Figure 4. News from One of the media in Pontianak city

Aplikasi ANGKUTS, Solusi Persoalan Sampah Kota Pontianak
The Tanjungpura Times, 6 Februari 2016
Satu lagi karya membanggakan berhasil dibuat oleh salah satu mahasiswa Fakultas Teknik Universitas Tanjungpura Pontianak. Adalah Muhammad Hafiz Waliyuddin, mahasiswa semester akhir Fakultas Teknik Jurusan Teknik informatika Universitas Tanjungpura ini telah berhasil membuat sebuah aplikasi android bernama ANGKUTS yang digadang-gadang dapat menjadi sebuah solusi dalam

mengatasi persoalan sampah khususnya di kota Pontianak. Mahasiswa yang juga Ketua Badan Eksekutif Mahasiswa (BEM) teknik ini mengaku, sangat prihatin dengan permasalahan sampah di tempat pembuangan akhir (TPA) atau tempat pembuangan sementara (TPS) di Kota Pontianak yang bisa mencapai 300 ton perharinya. Untuk itulah dirinya tergerak untuk membuat aplikasi yang dinilainya dapat memberikan solusi untuk menangani permasalahan sampah ditengah masyarakat.

This application is expected to be one of the solutions for the community in the activities of waste sorting by themselves in their household. So it is strongly supported by the government through the Department of Hygiene for activities like this can continue in the community. And society itself will be familiar with these waste sorting activities.

Figure 5. The application of Angkuts Pontianak



In the figure 5 above, as we can see there is a new application that Pontianak's city has today, this kind of program should be strongly support by the government in order to educate people of Pontianak to have a better perception of their rubbish recycling awareness.

Finally, activity and community participation in the management of the waste is strongly supported by the government, especially in waste sorting. This can be seen in the following piece of news;

Figure 6. News from one of the media in Pontianak City

Pemkot Pontianak Libatkan Masyarakat Kelola Sampah
Rabu, 6 Maret 2013
Pontianak (Antara Kalbar) - Pemerintah Kota Pontianak melibatkan kelompok swadaya masyarakat (KSM) dalam mengelola sampah sehingga tercipta lingkungan yang bersih dan sehat, kata Wali Kota Pontianak Sutarmidji. "Persoalan sampah, bukan hanya urusan pemerintah, melainkan tugas bersama dan seluruh lapisan masyarakat," kata Sutarmidji se usai menyerahkan secara simbolis pengolahan sampah sistem terpadu kepada KSM di Pontianak, Rabu. Ia menjelaskan, pengolahan sampah melalui program yang digulirkan Satuan Kerja Pengembangan Penyehatan Lingkungan Pemukiman (Satker PPLP) Kalimantan Barat dengan penyediaan bangunan prasarana dan sarana pengolahan sampah sistem

terpadu sistem 3 R (reduce, recycle, reuse) di Kelurahan Siantan Tengah dan Sanitasi Berbasis Masyarakat (Sanimas) berupa WC Umum dan tempat wudhu di Kelurahan Siantan Hulu Kecamatan Pontianak Utara patut digulirkan terus. "Kami melibatkan pengolahan sampah kepada masyarakat yang tergabung dalam KSM di Kelurahan Siantan Tengah, Kecamatan Pontianak Utara," ungkap Sutarmidji. Pemkot Pontianak, menurut Sutarmidji sangat mendukung program tersebut sebagai upaya menjaga kebersihan lingkungan dengan melibatkan peran serta masyarakat baik dalam mengelola sampah menjadi sesuatu yang berguna maupun penggunaan sanitasi yang bersih.

- (8) Oktaviani, Q, M. 2013, *Kinerja Dinas Kebersihan dan Pertamanan Kota Pontianak Dalam Pengelolaan Sampah di Kelurahan Saigon Kecamatan Pontianak Timur*, Jurnal S-1 Ilmu Administrasi Negara, Vol 2 No 2.
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IV. CONCLUSION

Significantly, all of the methods that the Cleansing and Landscaping Department of Pontianak City use are good and simple ways of raising the public's awareness. The methods including promotion via leaflet and brochure, website, schools, media and also community programs. Since all of these methods are easy to understand, have simple approaches, and target the entire layer of the community in the Pontianak City.

Furthermore, there are some weakness in government's effort such as; lack of technical personnel who participated in the training to organize communities in waste management. This is why the activities undertaken by the Cleansing and Landscaping Department were relying on technology. The community has not driven in waste management. Waste management assistance will be given to the government if people already implementing waste management independently beforehand. Another factor would be the lack of initiative and perhaps even knowledge within the Cleansing and Landscaping Department, therefore the education of the government officials in every government department in recycling methods may be a fundamental alternative while also undertaking public education programs.

For that reason, it is significant for the government of Pontianak City to gain the public's awareness of recycling by giving them the step by step information and knowledge, as well as distribution to all of the householders.

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RECONSTRUCTION OF LEGAL PROTECTION THE TENURE RIGHTS OF LAND AND BUILDING ON THE RIPARIAN ZONE BASED ON VALUES OF

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Abstract. This study intend to find and analyze the tenure rights of land and buildings in the riparian zone, describe and analyze the weaknesses of its legal protection as well as recommending the recontruction of legal protection that must be done by the government to citizens based on values of justice. This study using the constructivism paradigm, the approach chosen in this study is a socio-legal, and analysis models performed interactively. The result of this study concluded: (i) The tenure of land and buildings in the riparian zone not yet to get justice until now and in the status quo unlimited time. (ii) Weaknesses in the legal protection of the tenure of land and buildings who live in the riparian zone was collide by some of the riparian zone regulation, officials authorized agency obey to the provisions of the laws in force, legal culture of society who revere tradition of living on the riparian zone. (iii) Recontruction of the ideal value of the legal protection of the tenure rights of land and buildings in the riparian zone based on the value of justice is to strengthen the functions of government to protect the owners of land and buildings in order to increase economic growth and welfare of the people. Recontruction of legal protection the tenure rights of land property and buildings citizens who are living in the riparian zone, it is necessary to provide legal protection to the unclear legal status of the tenure rights to land and buildings owned by resident. Accordingly, it is necessary government policies that citizens who control the tenure rights of land and buildings in the riparian zone get protection of the law that is based on values of justice.

Keywords: Riparian zone, legal protection, justice values.

I. INTRODUCTION

In the preamble to the constitution of the state of the Republic of Indonesia the year 1945, mentioned that the purpose of establishing the unitary state of the Republic of Indonesia is to protect all the people of Indonesia and the entire motherland Indonesia, promote public welfare, educate the life of the nation and contribute to the pursuit of a world order based on freedom, lasting peace and social justice. Indonesia as the country of the law who adhered to understand the state law of prosperity, function and the task is not merely to maintain and implement the law optimally to the realization of public life that orderly and secure, but the most important thing is how with the legal basis for the general welfare of all layers of the citizens can be achieved.

Article 33 paragraph (3) of the constitution of the state of the Republic of Indonesia in the constitution as a constitutional basis for state governance requires them to the earth and the water and the natural wealth that is contained in it is used for the great prosperity of the people. In relation to this, in accordance with the provisions of article 33 paragraph (3) of the state of the Republic of Indonesia in 1945 and then elaborated in article 2 paragraph (1) of Act No. 5 Year 1960 about Basic Rules Compare Keys Common Agrarian shortened as UUPA, then the earth, water and the natural wealth that is contained in it are controlled by the state.

The existence of the city of Pontianak as the provincial capital of West Kalimantan Province nicknamed “thousand

river” and have typical as the city of waters, epithet is aligned with the geographical conditions of the West Kalimantan has many rivers both large and small, while the city of Pontianak itself is one of the cities that stood along the edge of the river, namely Kapuas river is the longest river in Indonesia. The existence of the city of Pontianak also cannot be separated from the history of the establishment of the Sultaned/kingdom of Pontianak on the year 1771 M and as the center of government is on the brink of the river on the past for some of the people of the city of Pontianak built settlements along the edge of the Kapuas river is the tradition of generation until today. Many settlement which grow in the area of the edge Kapuas river because for the citizens of the city of Pontianak, the existence of the Kapuas river is not only a source of water but merely as his jugular that cannot be separated by the activity of the life of the society.

Remember the existence of settlement most of the community along the edge of the Kapuas river in the city of Pontianak is underway in a long time, so that in the case of control over the land and building which they have also has been going on for a very long time. But control over the land and building which is owned by the society is just limited in the status quo in that period of time is not determined by the issue of some products of the law as Act No. 11 the year 1974 about Irrigation, Government Regulation No. 38 the year 2011 about The River, The Rule of The Minister of Public Works and Housing No. 28/PRT/2015 about The Announcement of the line of the Riparian Zone and Lake, Pontianak Mayor Regulation No. 95 the year 2005 about The

Boundary Line of The River In The Region of The City of Pontianak. Therefore, the society feel not obtain legal protection that ensures the certainty of ownership over the land and buildings they had seized in a long time until today.

Based on the exposure of the background of the problems above, problems in this research is as follows:

1. How is the protection of the law against the control over land rights and the building that is located in the area of the riparian zone of Kapuas today ?
2. How do these weaknesses legal protection against the control over land rights and the building that is located in the area of the riparian zone of Kapuas today ?
3. How reconstruction legal protection against the control over land rights and the building that is located in the area of the riparian zone of Kapuas based on the values of justice ?

II. METHOD

The paradigm used in this study is constructivism with constructivism paradigm, the law that is understood as a social construction, the truth is relative, applies to space and time. The approach used in this study is a socio legal approach. Specifications of this research is descriptive analysis. The type of data in this study is qualitative data that consists of primary and secondary data. Sources Primary data in this study is the citizens who live along the banks of the Kapuas river demarcation line, the Head of Legal Pontianak City Government, legislators legislature Pontianak city, and academia. while the source of secondary data consists of primary legal materials, namely Act No. 11 of 1974 about Irrigation, Government Regulation No.38 of 2011 about river, The Regulation of the Ministry of Public Works and Public Housing No.28 / PRT / 2015 about the Announcement of the line of the Riparian Zone and Lake, The Regulation of Mayor Regulation Pontianak Number 95 Year 2005 on establishment Riparian Zone In Pontianak City Region, secondary law, such as the materials available literature as literature legal and non-legal, journal / newsletter scientific, magazines, newspapers, the results of research related to the research dissertation this, and tertiary legal materials, which consist of a legal dictionary and encyclopedia of law. The collection of primary data taken through literature / documentation study, observation, in-depth interviews.

III. RESULT AND DISCUSSION

A. *Legal Protection Against mastery of Rights to Land and Buildings That Was in Riparian Zone of Kapuas River.*

The existence of the Kapuas river is the longest river in Indonesia, located in West Kalimantan. The existence of this sprawling Kapuas river divides the city of Pontianak, Pontianak so that many city dwellers who live around the Kapuas river banks. therefore in its development, all activities pontianak urban life depends a lot on the river, good for the building as a residence or business economy of the community.

River border region which is a local protected area on the spatial pattern plan Pontianak city, is also part of the plan of

urban green open space pontianak, particularly public green open space.

Noting plan pontianak pedestrian paths, as it has been contained in the regulation area of the city of Pontianak Number 2 in 2013, it is known that the river banks which is a protected area will be built as a pedestrian space.

Based on the presentation, it was found that the acquisition of land and buildings by citizens who were along the line of demarcation the Kapuas river in the city of Pontianak not get legal protection. Protection perceived by the owners of land and buildings to date is limited to the status quo until the time limit is not specified.

B. *Weaknesses Legal Protection Against Tenure Land and buildings that are in the area Riparian Zone of the Kapuas river.*

Based on research, there are weaknesses in the legal protection of the tenure rights to land and buildings that are in the area of the Kapuas river demarcation line based on values of justice. It is caused by several factors, among others: hit by several regulations issued both at national and local levels on the demarcation line of the river. In addition, officials authorized agency glued to the provisions of the laws in force, namely Act Number 11 of 1974 about Irrigation, Government Regulation Number 38 of 2011 about River, The Regulation of the Minister of Public Works and Housing of the Republic of Indonesia Number 28 / PRT / 2015 about the Announcement of the line of the Riparian Zone and Lake, The Regulation of Pontianak Mayor Number 95 of 2005 about Establishment Riparian Zone In Pontianak City Region, Pontianak city Regional Regulation Number 2 of 2013 about city spatial plan pontianak years 2013-2033, as well as the legal culture of society city pontianak who honored hereditary tradition to settle on the banks of the Kapuas.

C. *Reconstruction of legal protection of tenure rights to land and buildings that are in the Riparian Zone of the Kapuas river which based on values of justice.*

Historically archaeological, rivers role in public life in particular and the city of Pontianak in West Kalimantan is generally an integral unity, and ongoing since prehistoric times. Society characterized by aquatic life will manifest the culture or civilization that is in accordance with the result of interaction between people and their environment. therefore, the aquatic environment is maintained to the extent possible in order to realize the culture in harmony with the natural environment. Similarly, if we change or especially damaging to the environment, it will change the cultural communities concerned. To that end, the role of the river and its utilization as possible be maintained and preserved. Finally the river culture is synonymous with popular culture Pontianak city would be able to preserve us anyway. Preservation of local wisdom in the city of Pontianak in the life aquatic environment need to be considered, especially to avoid the coming flood.

Reconstruction of the ideal value of legal protection of tenure rights to land and buildings that are in the area of riparian kapuas value-based justice is with the strengthening of the functions of government to protect the owners of land and buildings on the land along the river banks to boost

economic growth, independence and public welfare owners of land and buildings in riparian zone.

IV. CONCLUSIONS

Based on the proposed issues and then carried out the analysis and discussion of this study successfully concluded as follows :

1. That control over land rights and the building that are in the area Riparian Zone of the Kapuas river in the city of Pontianak is not get guarantee the protection of the law. The protection of the felt by the owner of land rights and the building until this time is limited to the status quo until the time is not defined.
2. The weakness of the legal protection against the control over land rights and the building that are in the area Riparian Zone of the Kapuas river in the city of Pontianak is stuck by some regulations issued in both central and regional levels of the riparian zone, namely Act Number 11 of 1974 about Irrigation, Government Regulation Number 38 of 2011 about River, The Regulation of the Minister of Public Works and Housing of the Republic of Indonesia Number 28 / PRT / 2015 about the Announcement of the line of the Riparian Zone and Lake, The Regulation of Pontianak Mayor Number 95 of 2005 about Establiment Riparian Zone In Pontianak City Region, Pontianak city Regional Regulation Number 2 of 2013 about city spatial plan pontianak years 2013-2033, as well as the legal culture of society city Pontianak who honored hereditary tradition to settle on the banks of the Kapuas.
3. Reconstruction the protection of the law control over land rights and the building that are in the area Riparian Zone of the Kapuas river in the city of Pontianak based on the values of justice is the strengthening of the functions of the government to protect the rights of local communities as the owner of the rights of the land and the building that are in the area Riparian Zone of the Kapuas river in the city of Pontianak to improve economic growth and the welfare based on the value of humanity and justice.

From the conclusions put forward as the above now the recommendations that can be submitted is as follows :

1. The government and the house of representative Republic of Indonesia to do improvement of Act No. 11 The year 1974 abot Irrigation especially Article 3 paragraph (3), while the improvement of government regulations No. 38 The year 2011 about River, especially Article 17 paragraph (1) given authority deserve to be done by the central government.
2. The Ministry of Public Works and Housing to improve the regulation of the Minister of Public Works and The Houses of The Republic of Indonesia No. 28/PRT/2015 about the Announcement of the line of the Riparian Zone and Lake, especially Article 26 Paragraph (c), and the Government of the City of Pontianak and Pontianak City Parliament to improve the Regulation of Mayor of Pontianak No. 95 The year 2005 about the boundary line of the River In the area of the City of Pontianak, especially Article 2 Paragraph (1), and Local Regulation

No. 2 The Year 2013 about Regional Exterior Plan the City of Pontianak the year 2013-2033.

3. In the effort to provide legal protection to the society that settled along the edge of the Kapuas River is included in the area of the river boundary line Against the control over land rights and the building should the security officers from the issuing authority is not only restricted to the products of applicable law, but more attention characteristic of culture aquatic that has been along time in progress in the City of Pontianak. It is expected that the Government of the City of Pontianak take a policy to acknowledge the mastery over land rights and the building the people who settled along the edge of the Kapuas river is included in the area of the river boundary line, from the original only the status of the status quo toward a more decisively to guarantee legal certainty with clear legal status of tenure rights to land and buildings owned by citizens.
4. The regional Government intensively involving the community that settled along the edge of the Kapuas River in the drafting of each regulation which relates to the styling settlements along the edge of the Kapuas River, so that will raise awareness and concern in maintaining the cleanliness and the preservation of the function of the river.

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SME'S CENTER: PUBLIC-PRIVATE PARTNERSHIP FOR ACCELERATING REGIONAL ECONOMIC

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Abstract. Infrastructure budget reached Rp 290 trillion in the revised budget (State Budget-Changes) 2015 is an opportunity for investors and government, this will lead to increased regional centers of SMEs. Indonesia Stock Exchange in 2014 recorded a market capitalization (market cap) for the property sector, real estate, and construction of buildings to reach Rp 360 trillion (BEI, 2014). Bank Indonesia survey showed a significant increase in the selling price of strata title unit in Greater Jakarta and Banten office segment, retail, condominiums and industrial land, as well as an increase in rental rates of commercial property and hotel rates 3, 4 and 5 (BI, 2014). Regional autonomy through Law No. 22/1999 and 34/2004 number sue provincial governments, counties and cities creative increase local revenue. APBD (local budget) in 2013 regional financial deficit reached Rp 54.217 trillion (Ministry of Finance, 2013). Development center for SMEs digital terrain can be either collaboration between the central government, local government, state, enterprises, and private enterprises.

Keywords: Center for SMEs digital area, the market capitalization, the regional autonomy

I. INTRODUCTION

Indonesia ranks second global investment by *the Economist Corporate Network Asia Business Outlook Survey 2014* (Economist, 2015), as well as the fourth ranked according to UNCTAD's *World Investment Prospect 2013- 2015* (UNCTAD, 2015). *Boston Consulting Group* for an increase in middle class population in Indonesia reached 74 million inhabitants (2013) and 141 million (2020) one of them pushed consumer spending in the form of ownership / investment property (Boston Consulting Group, 2013). The Investment Coordinating Board declared the realization of domestic investment (Domestic Investment) and PMA (Private Capital) construction sector, housing, industrial estates, offices, hotels and restaurants has increased significantly since 2010, which in 2014 reached Rp. 25.66 trillion (Investment Coordinating Board, 2014). Increased prospects for the business center (*central business district*) to encourage. Local governments to cooperate with the private sector in order to gain increased local revenue. Regional autonomy through Law No. 22/1999 and 34/2004 number sue provincial governments, counties and cities creative increase local revenue, it is seen in the local budget in 2013 with financial deficits region reached Rp 54.217 trillion (Ministry of Finance, 2013). Potential income districts should be able to cover the deficit when viewing the balance sheet of local governments in Indonesia in 2010 there were land assets governments of Rp 558.456 trillion, and assets of the building / building government Rp 228.343 trillion (Ministry of Finance, 2010). The development of the property business areas can be in the form of collaboration

between central government, local government, state, enterprises, and private enterprises. *Public-Private Partnership* be one solution to improving the economy of the area and has been proven in some neighboring countries, such as in Malaysia and Singapore. The infrastructure budget reached Rp 290 trillion in the revised budget (State Budget-Changes) in 2015 opportunities for business development properties, due to the development of infrastructure will lead to an increase in the real estate business in the region. ROE (Regional-Owned Enterprises) PT Pembangunan Jaya Ancol Tbk to be one model of local government-private partnership that successfully manages the property business in the form of regional business center (*Central Business District*) in Ancol, Jakarta (Indonesia Stock Exchange, 2013). The company's owner is the government of DKI Jakarta (72%), PT Pembangunan Jaya (18.01%) and public (9.99%). PT Pembangunan Jaya Ancol Tbk manage an area of 500 ha includes recreation zone (200 ha), the industrial zone and the zone of the property, PT Pembangunan Jaya Ancol Tbk has made a significant contribution not only for companies but also for the government of Jakarta as the owner of the majority *shareholders* in the form deposit PAD (Regional Income). Based on data from the Ministry of Interior on the budget of 2013, the contribution of non tax revenue and levies provincial government of Jakarta Rp. 3.252 trillion. With total revenue of Rp. 26670.45 trillion, the contribution of non-tax revenue and the levy of 12.19%, including *share profit* Regional Owned Enterprises PT Pembangunan Jaya Ancol Tbk. Government Regulation No. 6/2006 on the management of state property / area stated that the State Assets can be utilized by business entities, in this case including the country where the assets of business

entities doing business under a concession granted, or assets built by a business entity for the benefit government and then operated by the Business Entity. The appointment of a business entity to utilize the assets of the State must be made through a competitive bidding process. Forms of use of state property or the area in the form of rental, leasing, joint use, build-operate-transfer (BOT) and build-transfer-

II. METHODS

This study used qualitative methods such as case studies in BPWS (Agency for Regional Development of the Surabaya-Madura). The first phase of data collection secondary form of reports related to regional development Suramadu bridge, followed by the collection of primary data in the form of direct interviews of the stakeholders who will develop the region Suramadu the Surabaya side. The second phase feasibility analysis of business properties in the area Suramadu side of Surabaya, includes analysis of *the Net Present Value (NPV)*, *Payback Period* and *Internal Rate of Return (IRR)*. A third phase of policy analysis related to the Regional Government of cooperation with private parties in the property development side of the longest bridge in the area of Surabaya.

Mixes of public & private contributions	
Public:	Land, Low interest loan, Grant, Cash, Availability payment, Revenue guarantee
Private:	Equity, Debt/loan, Efficiency, new tech., know-hows
Due Diligence:	Revenue vs. Expense
PPP Structure:	DB, BOT, BOO, DBFOMT, etc.
Bankability:	IRR <u>culcation</u>
Risks:	Construction, O&M, E/D ratio, interest rate, environmental, etc.

Figure 1. Model Project Feasibility Analysis of PPP
Source: Santosa, Jatmiko, 2013

Net Present Value (NPV) were obtained from the total revenue earned during the life of the project reduced the total cost over the life of the project and is calculated based on the present value. As a basis for calculation will be used in certain base, with a particular interest rate. Cost analysis *NPV (Net Present Value)* is calculated by discounting the current annual costs and revenue separately, and then obtained the difference of these two amounts. This method is formulated as follows:

$$NPV = PV(\text{pendapatan} \times \text{faktor diskonto}) - PV(\text{biaya} \times \text{faktor diskonto})$$

- If the NPV is negative means that a development project does not make a profit on the economic life of the plan.
- If the NPV is positive means of development projects can be implemented for making a profit on the economic life of the plan.

operate (BTO). Government Regulation No. 50 of 2007 on the Implementation of Regional Cooperation stated that the cooperation between local government and business entities must be approved by the regional council, if such cooperation resulted in the use of assets of local government.

- If the NPV equal to zero means that development projects can be carried out but not making a profit on the economic life of the plan.

the payback period is the length of time required to return the investment made by the total present value of the cash flows generated. *Internal rate of Return (IRR)* expressed as an interest rate or discount rate where the present value of the benefit is equal to the present value of the costs incurred on interest rates generated. In other words IRR is an interest rate or discount where $NPV = 0$ or $BCR = 1.0$. This method is formulated as follows:

$$IRR = DfP + \frac{NPVP \times (DFN - DfP)}{NPVp - NPVn}$$

where,

IRR = Return on average

DfP = Df is used to generate a Net Present Value Positive

DFN = Df is used to generate a Net Present Value Negative

NPV p = NPV at a discount the average positive

NPV n = NPV at a discount average negative

If the $IRR >$ applicable interest rate is feasible project

III. RESULTS AND DISCUSSION

Central Business District generally consists of two parts, namely: (1) the very core of the so-called *RBD (Retail Business District)*. The dominance of the activities in this section are *department stores, smart shops, office buildings, clubs, bank buildings, theaters and hotels headquarters of economic, social space, civic and political life.* (2) in the outer part, called *WBD (Wholesale Business District)*. This area was occupied buildings used for economic activity in large quantities such as markets, warehousing (*warehouse*), storage building goods (*storage building*) (Zaw Lin, Shwe, Theingi & Hlaing, Maung, 2014). As the area of trade and services in the city of Surabaya, Surabaya side Suramadu Bridge area is designed such that it will be a beautiful and comfortable area. Where based design planning Aada then the region has four districts. Where the four districts that have this type of building as follows:

1. District 1, a total of 6 buildings consisting of:
 - a. Office Tower by 2 buildings.
 - b. Commercial and Urban Housing as many as two buildings.
 - c. Urban Housing as many as one building.
 - d. The apartments in 1 building.
2. District 2, total 2 building consisting of:
 - a. Commercial by 2 buildings.
3. District 3 of 4 buildings consisting of:

- a. Urban Housing as many as three buildings.
 - b. Community center as much as 1 building.
4. District 4, as many as 11 buildings consisting of:
- a. Urban Housing as many as six buildings.
 - b. Commercial by 5 building.

Based on this plan that makes the planning area into four districts, the amount of investment will land varies from one district to another district that is due to differences in the value of land to be built. This difference occurs because the location of the land is different though in one area lead to differences in the selling price of land. In this regard, it is based on market prices estimated price of land planning can be distinguished as follows:

1. District 1, there are six buildings have an estimated price of land each building are as follows:

Codes	Building	Land (M2)	Price / M2 (Rupiah)	Total (Rupiah)
A1	Office Tower	45 423	750 000	34.06725 billion
A2	Office Tower	41 385	4,500,000	186 232 500 000
B1	Commercial and Urban Housing	66 610	2.625 million	174 851 250 000
B2	Commercial and Urban Housing	30 850	1,500,000	46.275 billion
B3	Urban Housing	48 348	1500.000	72.522 billion
C3	ApartmentandCommercial	42,500	750,000	31.875 billion

2. District 2, there are two buildings have an estimated price of land each building are as follows:

codes	building	land (M2)	Price / M2 (Rupiah)	Total (Rupiah)
C1	Commercial	45 005	2.125 million	89.260625 billion
C2	Commercial	43 250	500.000	21.625 billion

3. District 3, there are four buildings have an estimated price of land masing each building are as follows:

codes	building	land (M2)	Price / M2 (Rupiah)	Total (Rupiah)
D1	Urban Housing	39 404	2.125 million	83.7335 billion
D2	Urban Housing	15 951	750 000	11.96325 billion
D3	Urban Housing	22 910	4,500,000	103 095 000 000
E1	Commercial Center	18 165	2.125 million	38.600625 billion

4. District 4, there are 11 buildings have an estimated price of land each the buildings are as follows:

codes	building	Land (M2)	Price / M2 (Rupiah)	Total (Rupiah)
D4	Urban Housing	11147.59	2,500,000	27,868,975,000
D5	Urban Housing	9841.75	1,500,000	14,762,625,000
D6	Urban Housing	8225.99	3,500,000	28,790,965 billion
D7	Urban Housing	8543.62	2,500,000	21,359,05 billion
D8	Urban Housing	17350.14	2,500,000	43,37535 billion
D9	Urban Housing	22830.63	2,500,000	57,076525 billion
F1	Commercial	12065.58	4,500,000	54,29511 billion
F2	Commercial	11819.35	3,500,000	41,367,725,000
F3	Commercial	21573.07	1,500,000	32,359,605,000
F4	Commercial	17120.96	1,500,000	25,681,440,000
F5	Commercial	10968.71	2,500,000	27,396,775,000

based on existing planning for the cost of the physical construction of buildings in each district is different. The cost of building physical development vary due to

different functions, different floors and different architectural beauty. So that the estimated cost of each building area of planning. In this regard, it is based on the estimated cost of construction of the estimated cost of construction of each building as follows:

1. District 1, there are six buildings have an estimated cost of physical development are as follows:

Codes	Building	Building (M2)	Price / M2 (Rupiah)	Total (Rupiah)
A1	Office Tower	303 600	6,000,000	1.821.600.000.000
A2	Office Tower	292 100	6,000,000	1.752.600.000.000
B1	Commercial and Urban Housing	328 300	7,000,000	2.298.100.000.000
B2	Commercial and Urban Housing	136 400	7,000,000	954 800 000 000
B3	Urban Housing	259 350	4,500,000	1.167.075.000.000
C3	Apartment and Commercial	158,000	7,500,000	1.185.000.000.000

2. District 2, there are two buildings have physical construction cost estimates are as follows:

codes	building	building (M2)	Price / M2 (Rupiah)	Total (Rupiah)
C1	Commercial	284 200	8,000,000	2.2736 billion
C2	Commercial	182 634	8,000,000	1.461072 billion

3. District 3, there are four buildings have physical construction cost estimates are as follows:

codes	building	building (M2)	Price / M2 (Rupiah)	Total (Rupiah)
D1	Urban Housing	185,072.49	4,500,000	832 826 705 000
D2	Urban Housing	86 896	4,500,000	391 032 000 000
D3	Urban Housing	76816.5	4,500,000	345 674 250 000
E1	Commercial	31 761	8,000Center.000	254 088 000 000

4. District 4, there are 11 buildings have physical construction cost estimates are as follows:

codes	building	building (M2)	Price / M2 (Rupiah)	Total (Rupiah)
D4	Urban Housing	19992.29	4,500.0000	89.965305 billion
D5	UrbanHousing	19241.58	4,500.0000	86.58711 billion
D6	Urban Housing	10368.28	4,500.0000	46.65726 billion
D7	Urban Housing	17 920	4,500.0000	80.64 billion
D8	Urban Housing	35 915	4,500.0000	161 617 500 000
D9	Urban Housing	47 808	4,500.0000	215 136.000.000
F1	Commercial	14416.26	8,000,000	115 330 080 000
F2	Commercial	14120.13	8,000,000	112 961 040 000
F3	Commercial	31 921	8,000,000	255 368 000 000
F4	Commercial	116,082.51	8,000,000	928 660 080 000
F5	Commercial	38994.4	8000 .000	311 955 200 000

Based on the calculation of the cost of land and physical development, the estimated amount of investment that must be spent each building are as follows:

1. District 1, there are six buildings have an estimated value of the investment is as follows:

codes	building	cost of land	building cost	Total (Rupiah)
A1	Office Tower	34.06725 billion	1.821.600.000.000	1.855.667.250.000
A2	Office Tower	186 232 500 000	1.752.600.000.000	1.938.832.500.000
B1	Commercial & Urban Housing	174 851 250 000	2.298.100.000.000	2472951250 .000
B2	Commercial & Urban Housing	46.275 billion	954 800 000 000	1.001.075.000.000
B3	Urban Housing	72.522 billion	1.167.075.000.000	1.239.597.000.000
C3	Apartment and Commercial	31.875 billion	1.185.000.000.000	1.216.875.000.000
	TOTAL	545 823 000 000	9.179.175.000.000	9.724.998.000.000

2. District 2, there are two buildings have an estimated value of the investment is as follows:

codes	building	Cost of Land	building Cost	Total (Rupiah)
C1	Commercial	89.260625 billion	2.273.600.000.000	2362860625 .000
C2	Commercial	21.625 billion	1.461.072.000.000	1.482.697.000.000
	TOTAL	110 885 625 000	3.734.672.000.000	3.845.557.625.000

3. District 3, there are four buildings have an estimated value of the investment is as follows:

codes	building	Cost of Land	building Cost	Total (Rupiah)
D1	Urban Housing	83.7335 billion	832 623 705 000	916 357 205 000
D2	Urban Housing	11.96325 billion	391 032 000 000	402 995 250 000
D3	Urban Housing	103 095 000 000	345 674 250 000	448 769 250 000
E1	Commercial Center	38.600625 billion	254 088 000 000	292 688 625 000
	TOTAL	237 392 375 000	1.832.417.955.000	2.060.810.330.000

4. District 4, there are 11 buildings have an estimated value of the investment is as follows:

codes	building	Cost of Land	building Cost	Total(Rupiah)
D4	Urban Housing	27,868,975,000	89,965,305,000	117 834 280 000
D5	Urban Housing	14,762,625,000	86,587,110,000	101 349 735 000
D6	Urban Housing	28,790,965,000	46,657,260,000	75,448,225,000
D7	Urban Housing	21,359,050,000	80.64 billion	101 999 050 000
D8	Urban Housing	43.37535	161 617 500 000	204 992billion.850,000
D9	Urban Housing	57.076525 billion	215 136 000 000	272,212,525.000
F1	Commercial	54,295,110,000	115 330 080 000	169 625 190 000
F2	Commercial	41,367,725,000	112 961 040 000	154 328 765 000
F3	Commercial	32.359605 billion	255 368 000 000	287 727 605 000
F4	Commercial	25.68144 billion	928 660.080.000	954 341 520 000
F5	Commercial	27.396775 billion	311 955 200 000	339 351 975 000
	TOTAL	374 334 145 000	2.404.877.570.000	2.779.211,715.000

Based on the calculation, the total investment that can be offered to investors is Rp. 18.410.577.670.000,-

IV. CONCLUSIONS

Development *Central Business District* in the Suramadu leg side Surabaya as part of the supporting SMEs Sentra Digital Regions, referring to the development of PT. Pembangunan Jaya Ancol Tbk for PAD DKI Jakarta continues to increase, in 2012 the company contributed to the PAD Jakarta reached Rp. 129.2 billion or greater as compared to 2011 which reached Rp. 120.8 billion, Rp. Local Tax 77.37 billion is to be paid and the remaining Rp. 51.84 billion of dividends. Contributions PT. Pembangunan Jaya Ancol Jakarta for PAD in five (5) years continued to increase, in 2007 the contribution reached Rp. 90.25 billion and increased to Rp. 100.9 billion in 2008. For the year 2009 reached Rp. 100.7 billion, in the year 2010 amounted to Rp. 113.2 billion and in 2011 to Rp. 120.8 billion. So, with a total investment of Rp offered to investors. 18.410.577.670.0000,- would be very interesting.

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STRATEGIC MARKETING AND COMPETITIVE STRATEGY OF SMEs IN THE ERA OF ASEAN ECONOMIC COMMUNITY

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Abstract. Globalization and widespread integrations of regional economies (ASEAN) have created new challenges for SMEs (Small- and Medium-sized Enterprises) in their efforts to develop their businesses and in their struggle to compete in a more competitive market. External and internal obstacles and challenges as well as the limited capacities greatly influence the survival of SMEs. A balance approach is needed through planning and designing strategic measures to improve the competitiveness of SMEs by way of strategic marketing approach. The objective of this study is to design strategic marketing approach and build strategic competitiveness in dealing with the changing of business environment in order for SMEs to be able to develop their capacities and exploit their potentials to do their businesses in a highly competitive market.

Keywords: Globalization and Economic Integration, Strategic Marketing, Strategic Competitiveness.

I. INTRODUCTION

Trade liberalization within the framework of ASEAN Economic Community (AEC) opens a new chapter in the interrelationships between ASEAN countries both as a single market and a single production base that includes free trade area, elimination of tariffs on trade between ASEAN countries, free labor market and capital market, as well as the relaxing of import-export customs procedures between ASEAN countries.

In dealing with *ASEAN Economic Community (AEC)*, all kinds of enterprises both big enterprises and small-sized and medium-sized enterprises (SMEs) need to be able to compete effectively and strategically in order to meet the demands of both domestic and global markets.

Liberalization of ASEAN economic community will definitely intensify business competitions, including competitions faced by SMEs. SMEs need to be able to anticipate changes in their marketing environment and face their business challenges. SMEs developmental strategies should not only focus on production, but also need to orientate on marketing strategies.

As is in common with SMEs phenomenon in Indonesia, domestic business enterprises in South-east Asia are also dominated by SMEs operating in traditional sectors such as agricultural and service sectors. The majority of SMEs have no or little affiliation with multinational corporations.

II. LITERATURE REVIEWS

Strategy is a long-term organizational directions and lay-outs to attain advantages through resources configurations in an ever-changing environment to meet both the market demands and the expectations of its associated parties (Johnson & Scholes, 1997).

Meanwhile, Gary Hamel and C.K. Prahalad (1994) defined strategy as incremental and continual acts that are

performed based on the future expectations of its customers.

Kotler (1994) defined marketing strategy as a marketing logic and by using that logic business units are expected to be able to accomplish their marketing targets. The most important aspect in a marketing strategy is implementing the concepts of market segmentation, market targeting and market positioning.

A survey by Wai-Sum Siu, Wenchang Fang & Tingling Lin (2007) on Taiwanese SMEs showed that well-performed SMEs give higher priority to their marketing activities in their business planning. A high-performed SME realizes the importance of strategic planning tools. The enterprise's marketing principles does contribute to the success of Taiwanese SMEs.

Strategic marketing becomes the main entrepreneurial activity for a business unit in order to sustain its business survival as well as to gain profits. The accomplishment of this strategy by a business unit is highly dependent upon its capability and capacity in its marketing activity.

There are several important aspects that need to be incorporated in planning a good marketing strategy that includes product positioning activity, market segmentation, distributional and budgeting strategies, as well as implementing dispersal marketing strategy that incorporates strategies for pricing, distribution, products, promotions that are going to be executed. This strategic marketing plan will provide guidelines for the development of business enterprises as well as provide directions for all management functions.

According to Corey in Fandy Tjiptono (2008) a marketing strategy comprises of five interrelated elements. Those five elements are market selection, product planning, pricing, distributional system and marketing communication.

In essence, all business enterprises that are competing in an industrial environment have a desire to gain advantages and be superior over their competitors.

Significant ingredients that are needed to gain competitive advantages are superiorities in terms of resources, competencies and innovations.

Having those superiorities, a business enterprise can develop a competitive strategy that is more superior to its competitors. Porter (1990) explained that competitive advantages are the heart of marketing performance in dealing with competition.

Competitive advantage is defined as a beneficial strategy of a business enterprise that builds collaborations to create a more effective competitive advantage for its market. This strategy needs to be designed in such a way so that it can deliver continuous competitive advantages for a business enterprise to be able to dominate its current and new markets.

A number of indicators that can be used to measure competitive advantages are uniqueness, rarity, hard to imitate, irreplaceable, and competitive price. Product uniqueness is a product that has a unique and/or unparalleled quality that combines artful sense/value and customer taste. Competitive price is the capability of a business enterprise to adjust its product's price in accordance to the usual market price.

III. DISCUSSION

The methodology of the study is begun with the understandings of business environment factors that are faced by SMEs, and followed by formulating a marketing strategy to gain competitive advantages. The choice of a marketing strategy will determine the competitive strategy used by SME in dealing with competition.

The starting point for strategic planning must be put in the framework of dealing with the changing of business environment by considering the characteristics of their customers, competitors and business enterprises. The aim of a strategic planning is to help a business enterprise to be able to gain competitive advantages over its competitors.

In a competitive world, a business enterprise must be able to comprehend the characteristics of its customers, its close competitors that are also able to cater the same customers, and the capability of a business enterprise to deal with the competitions.

An appropriate strategic planning is performed by continually monitoring and adjusting marketing environment against an ever-changing business environment. This strategy is, in practice, an approach to exploit resources as an effort to deal with a variety of competitive challenges and ever-changing environment in order to attain the predetermined set of objectives (Hayden, 1986).

SMEs' successes in developing their strategic orientations are depended upon their capabilities to identify markets opportunities and challenges within a marketing environment. A marketing environment consists of external and internal organizational (SMEs) factors. The capability to understand marketing environment must be accompanied with an understanding over "what business are we in".

Both marketing and strategic orientations will help SMEs to understand their business operations, their

market demands, the advantages and disadvantages of their competitors, and their bargaining.

SWOT (*strength, weakness, opportunity, threat*) analysis is needed as part of a marketing environmental analysis. A marketing environmental analysis comprises of external and internal analyses. External analysis is needed to gain insight about factors that are outside of an organization and cannot be controlled by that organization. The purpose of external analysis is to identify both opportunities and threats against organizations.

External factors that need to be analyzed are, among others, political and governmental factors, laws and policies, socio-economic, cultural and technological factors, and so on.

Internal analysis is needed to gain insight about the whole internal aspects of an organization that can be controlled by the organization. Internal analysis is also needed to measure both the organizational advantages and disadvantages. The parameters for measuring both the organizational advantages and disadvantages are key result area, functional management, and balanced scorecards.

Meanwhile, industrial analysis is also needed to gain insight about the intensity of the competition in order for a business enterprise to be able to gain profitability. According to Porter (1990), a strategy will be useless unless it is focused on the capability of a business enterprise in dealing with competition. Business enterprises need to identify their competitive strategies effectively in order for them to gain competitive advantages.

Porter (2000) identifies five set of forces in an industrial competition, namely: threats from newcomers, competitions among the existing enterprises, threats from substitute/alternative products, buyer's bargaining power, and supplier's bargaining power.

A competitive strategy is an approach intensively used by a business enterprise to win business competitions. According to Porter (2000) a competitive strategy can be distinguished based on the existing competitive advantages and the target market, namely cost leadership, differentiation and focus.

Within the framework of Porter's generic competitive strategy, it is suggested that to be able to compete effectively a business enterprise need to focus on one of these aspects, either on all-in cost competitive strategy or on differentiation strategy. Meanwhile if the target market is relatively limited thus the strategy employed will become a focus strategy.

IV. CONSLUSIONS

SME marketing strategy to gain competitive advantages in dealing with AEC, based on SWOT and industrial analyses, is to implement efficiency strategy by developing and strengthening their existing internal factors that their competitors don't have.

SMEs need to implement developmental strategies and create market expansions via product developments and innovations as well as diversifying their product packages and product choices. And last but not least, SMEs also

need to develop their competitive advantages by way of distributional advantages to secure their existing market in order not to be seized by their existing and new competitors.

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STRATEGY OF THE TRADERS IN PASAR RAYA PADANG AGAINST ABOUT REHABILITATION AND RECONSTRUCTION POLICY AFTER EARTHQUAKE

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Abstract. The earthquake that was going in West Sumatera at September 30, 2009 ago, has affected the destruction, disadvantages and causing the economy activity is being low in Padang city. That situation need a policy that should have take attention by local government for rehabilitation and reconstruction, whereas that form should not interfere the rights of traders as earthquake victims, by engage the traders itself to make a policy together with local government. The fact is, the discussion process that will be held by local government to fix this problem is break off by local government with using force fences in the market buildings, whereas it is coincide with 1 Syawal 1432 H (Muslim calendar) and build up the emergency kiosk that incompatible by traders, because that buildings makes their income is being low, desolate. This paper background to review the Strategy desert highway market traders against the policies of the post-earthquake rehabilitation and reconstruction. This study uses a qualitative approach with descriptive type. The informant is determined by purposive. The data collection technique is through observation, collecting documents and in-depth interviews. That is make the traders to collect any supports from others to against the policy from local government by large demonstration from traders of Pasar Raya Padang to the representation of Padang council (DPRD Kota Padang). Beside that, they are also invite some of organization that concerned about that and giving a lawyer to PBHI (the association of Indonesian law assistance and human rights).

Keywords: Strategy, Traders, Rehabilitation, Reconstruction,

I. INTRODUCTION

Market is important for economy foundation. Beside that, market is also like a container for economy social activity, the function of market itself to unite or collect the economy agents. Market also have a function like an economy tools for the measure in increasing the income of one region.

The activity in Pasar Raya Padang has broken since the earthquake at September 30, 2009 ago. And effected the damage of Inpres buildings in Pasar Raya Padang, especially for Inpres I building. As a consequence, it need quickly handling by government to revitalization with build the emergency kiosk like small building in entire of the road in Pasar Raya Padang. And half of traders disagreed about that. They are demand to local government to dismantle kiosk with the reason their income is being low, desolate. The local government has closing Angkot (mini bus) track, whereas this area often using for buyers many long times ago. But, government still defends the emergency kiosk because it has spent out the billion Rupiah. This situation has changed to long conflict between traders of Pasar Raya Padang and local government of Padang along five years (2009 – 2014), but there is no agreement yet so far about it for both of side.

In technically, the process of handling disaster in reconstruction and rehabilitation, should have following the

valid laws No. 24 year 2007 about disaster reduction. The rehabilitation and reconstruction in Inpres market buildings of Pasar Raya Padang cannot separate from the civil rights of traders itself, accordance to the agreements between local government and traders. Processing of rehabilitation and reconstruction cannot abolish from the civil rights of traders as earthquake victims. Therefore, for the processing of rehabilitation and reconstruction, government should have to engage the traders as earthquake victim to make decision together.

The policy of local government to build force fences in Inpres II, III and IV buildings in Pasar Raya Padang by invoked the Army, Police and Satpol PP (guards of local government) which has end up create a victims in traders side, that is wrong step from local government. That step is one of the violation of the human rights. Beside that, that fence has building on August 31, 2011 and it is coincide with 1 Syawal 1432 H (Muslim calendar), whereas on that date is a holy day for Muslim (Idul Fitri) and it is hurts for Muslim peoples. Local government have a commitment to solve the problem about rehabilitation and reconstruction in the beginning of the August 2011 by organize a meeting with traders of Pasar Raya Padang which is they are getting earthquake victim, but government is not consistent with what they already decided, it is delayed until August 31, 2011.

It is been five years the conflict between local government and traders in Pasar Raya Padang (2009 – 2014),

but there is no agreement yet for both of side so far. The conflicts between them are open conflict, the effective way to solve this problem is outside of judicature. So, the background of this writings to review or analyzing the traders strategy to collect any supporting against the government policy, because there is no agreement yet so far.

According to Damsar in his book, Economy Sociology (2011), market is divided into 2 types, they are market as place and just market [2]. Market as place is a physical form which is the commodities and services has been brought up to the market and sell it (Damsar 2011) [2]. Meanwhile, the definition of market by sociology as a social institution, it means a social structure whose prepared some of goods or service as solves the problem of the requirements in economy basic within goods and service distribution. It is seems like a social relationship series which is structured in sale something valuable.

II. RESEARCH METHODE

The research has conducted by qualitative approach with descriptive research. The research has been taken in Pasar Raya Padang, West Sumatera. Pasar Raya Padang has been chosen because this market getting the serious effected from earthquake at 2009 ago, and the rehabilitation and reconstruction of Pasar Raya Padang after earthquake, that is causing the conflict between local government and traders.

There are also other informants whose engage in this conflict, they are the traders of Inpres I, II, III, IV, VII phase and Batu Bagonjong, local government (government of Padang city), IKAPI (the coalescence of Indonesian traders) and PBHI (the association of Indonesian law assistance and human rights). The processing of collecting the data is collect the document of conflict that happened during 6 years, from media, notes of a meeting, reports and journal. Beside that, it also collecting with the observation that related of the situation in Pasar Raya Padang after rehabilitation and reconstruction that cause by earthquake. To get a powerful and valid data, it also using an interview among them.

III. DISCUSSION

A. *The Chronology of Conflict in Pasar Raya*

The earthquake that was occurred in West Sumatera at September 30, 2009 ago makes Padang city has changed, especially in Pasar Raya Padang. Before earthquake, Pasar Raya is like normal market in general, selling, buying and money rotation. But after earthquake at September 30, 2009 the situation in Pasar Raya has changed because the traders have to divide their attention, that are keep an eye for the processing of buildings Pasar Raya trough rehabilitation and reconstruction policy of local government.

In implementation and planning of the rehabilitation and reconstruction, government never engages the traders as one of the earthquake victim. But, the government just conveying the notification from mayor of Padang to the traders No. 5111.2.72.1/ Ps-2011 dated on 2011, January 19 about the dissolution of market service in Inpres II, III and IV. In notification, the traders have to vacating the market

(Inpres II, III and IV) because that place would be dismantle and reconstruction. Besides that, the government is never to verification for how many percentage the building has damaged or proper to use and conveys to them.

Concerning about the government way to deliver that notification to the traders. The traders answer that notification trough organization like Petak Batu Bagonjong, Pasar Inpres II (KPB), the association of Inpres market II floor 1 (IPPI), the communication of Pasar Raya Inpres forum III floor 1 (FKP2-I) and the leader of small traders of the regional council (IPK) of Padang city. They are conveys to government just repair the buildings and facility of the market, the purposing is to make the market feel comfortable again and the fluency of trading activity. They have a reason that old buildings is still proper to use. Their reason is strong trough a letter from Gapeksindo Peduli Sumbar No. 55/Gapeksindo/2009 dated 2009, November 2 declare that the buildings in Inpres II, III, and IV are still proper to use.

Considering the dismantle and rebuild planning for Inpres, II, III dan IV, that is one of rehabilitation and reconstruction activity after earthquake September 30, 2009 ago, so that activity should have based on the valid laws in disaster reduction No. 21 year 2008 about the implementation of disaster reduction and the regulation of the leader of BNPB (the disaster reduction national corporation) No. 11 year 2008 about the instruction of disaster reduction implementation after disaster. But, the government is still ignore the valid laws in disaster reduction law to implementation the rehabilitation and reconstruction and threat the rights of traders in Inpres II, III and IV. In this case, the traders felt strongest to against the government policy because government is not comply to the disaster law.

The government effort to discharge and rebuild of Inpres II, III and IV that occurred by government of Padang with relocate the traders of Inpres II, III and IV to occupy the kiosk, but the traders denied that kiosk because they're think the building of kiosks is not match with they're amount.

According to the traders, there is a significant differentiation between the amount of emergency kiosks and from the amount of traders of Inpres II, III dan IV, whereas the emergency kiosks as many as 624 units, and the amount of traders for entire in Inpres II, III dan IV about 907 traders; 379 traders in Inpres II floor 1, 60 traders in front of Bagonjong market, 249 traders in Inpres III floor 1 and 219 traders in Inpres II floor 2.

Sometimes the conflict between them is not just demonstration, there is a physical conflict between traders and security official. It has been counted two times the physical conflict about it and end up with arresting the leaders of traders. First, the conflict that occurred on February 10, 2010 in front of mayor house service with end up throwing stone and the defacement in mayor house service. Second, the conflict that occurred on August 31, 2011 that related about the process of fence implementation in Pasar Raya Padang area that would be reconstruction.

B. *The Traders' Strategy to Get Support against the Local Government's Policy*

To gain support from many third parties, the traders make various strategies to oppose the government's policy

regarding on the market reconstruction and rehabilitation. Strategies which are applied are meant to build support from many groups and parties which have the same opinion as they do.

1) *Demonstration*

Demonstration which is done by the traders of Pasar raya is one of ways to oppose the government's policy which puts them in uncomfortable situation through the policy of doing reconstruction and rehabilitation of the market after the Earthquake. The demonstration is done due to government's less response which is seen not democratic regarding the traders' demand.

The demonstration which is done by the traders is begun as response for Market division Unit of government's letter of announcement No: 900.169.XI/PS-09 10 November 2009 which instructs the traders in market Inpres I, II, III and IV to empty their kiosk or store and move to temporary kiosk before November 13, 2009. On Wednesday, November 11, 2009, Grand Market Traders Alliance (APPR) makes peaceful protest by involving 2000 traders to the legislative (DPRD) of Padang.

In response to it, DPRD (legislative) of Padang city rereleased recommendation No: 175/057/DPRD-Pdg/2009 dated November 11, 2009 which is signed by vice chairman of legislative, Budiman. It requires the local Government of Padang to disassemble the shelter kiosks and arrange a meeting with legislative and representative of the traders in doing the recommendation. However, it turns out that the recommendation is not responded by Padang Local Government by not disassembling the emergency kiosks as suggested.

In the other hand, instruction to empty the Inpres Market I, II, III, and IV is kept run and even done by force to small numbers of traders in Inpres I by using force of Satpol PP Padang (local area law enforcement) and Brimob Polda Sumbar (Police) to make them move and occupy the emergency kiosks. Besides, the Major of Padang city himself declares that he is going to sue those who dare to disassemble the emergency kiosk. The enforcement to empty the old kiosks is followed up by stopping access to electricity in Inpres market I, II, III and IV by National Electricity Company (PLN) based on local government instruction (Firdaus, 2014) [4].

Afterwards, on Wednesday February 10, 2010, the traders of Pasar Raya (grand market) make an action to close their stores and stop trading activity all at once with Padang Citizen Forum (PWK) which involved 3.000 mass of people. The mass of people make their walk to the Major residence and set demonstration. Fail to meet the Major, the mass are provoked to make a riot and collision with Police. local government's policy in rebuilding Inpres Market I, II, III, and IV is seen by the traders do not match their need and out of context for overcoming disaster. Though the conflict is still on, local government keeps doing reconstruction of Inpres I. The early plan is to rebuild the market starting from Inpres I to Inpres IV by using IDR 237 billion of budget. The reconstruction of Inpres Market I also results in the rename of the market into Blok I.

The action is due to the size and layout of the new Blok I market is not appropriate to accommodate the traders' need.

The sizes of the kiosks which are built by the government are very small and narrow, and the tables for putting on trading goods are too high and small as well, which are not suitable for kinds of goods especially foods and vegetables. Furthermore, the price which is offered for a kiosk is also very expensive. Those things make great numbers of traders keep their trading activity outside of the Blok I.

Meanwhile, according to the department of market service, the kiosks in Blok I are currently appropriate and suitable to concept of modern market, so are the prices deemed to be relevant regarding their facilities. Conflict between the traders and the government is predicted to rise since the early building of emergency kiosks (October 23, 2009) till nowadays, which has been 6 years. The conflict involves many elements of people such as: PBHI, DPRD of Padang, and Komnas HAM (Human Rights Committee).

Then, on Thursday February 11, 2010, the traders alongside Forum Warga Kota/Citizen Forum (FWK) make their action to DPRD of Padang for the second time.

There have been many demonstrations done by the traders regarding local government's policy, but they bring no significant results, though the demonstrations are sometimes end up in collision and ruckus. It is reflected from the undergoing reconstruction and renovation after the Earthquake which is instructed by the government.

2) *Lobby*

Lobby is an effort to approach and influence other parties for some purposes. Its target is to open up possibilities for negotiation and influence any decision or policy which will be made. Lobby is done by the traders by following the scheme of demonstration and showing aspiration. Lobby is done to institutions which concern on issue they about to blow in demonstration and showing aspiration. The first lobby is done by the traders due to less response of local government regarding their demands in the previous demonstration to the Major's which demands disassembling of emergency kiosk. Lobby is not only done to DPRD in level of city but also to DPRD in level of province, and Governor (Firdaus, 2014) [4].

One of lobbies done by the traders is by coming to governor's office on Thursday, July 21. Their coming is to request local government of West Sumatera to make their move regarding the issue, since local government of Padang is not able to give a peaceful answer but it just makes them feel treated unfairly. Moreover, Padang local government has plan to close area of Pasar Raya and demolish its buildings on Monday, July 25.

However, red thread of meeting between representatives of traders with local government of west sumatera is led by assistance ii of economy and secretariat of province, drs. syafrial and the head of satpol pp, edi aradial, sh., in governor's office building. according to asisten ii, the numbers of traders who come to the governor's office building are about 100, and those are representatives of Inpres market I, II, III, and IV, Batu Bagonjong and sector VII. Their coming is escorted by their lawyers from Perhimpunan Bantuan Hukum dan Hak Asasi Manusia Indonesia (PBHI) Sumbar.

The traders from Inpres market I floor 1 and traders from Inpres II floor 2 complains about their misfortune after the

disassembling of emergency kiosks. Most of them are kiosk-less now. With no place to sell their trading goods, they just come to the market but cannot do anything. H. Sutan Kasim, a trader from Inpres market I, has occupied the place since 1958. He thinks that the Government does not concern about its people. They are likely oppressed. He said that most of them have bill to Bank, and now they are forced to buy kiosks with strangling price, IDR 27 Million per meter.

According to lawyers of the traders, PBHI Sumbar, Samaratul Fuad, said that as the victims of Earthquake, the traders have rights to get facilities for their kiosks repairmen from the local government, especially when the buildings are not recommended to be demolished. "We have had name for winner of Pasar raya reconstruction tender, PT Faiz Jaya. We do not want demolition and forcibly instruction to empty the kiosks. We have made claim to Padang Local Government and PT Faiz", he said.

Somehow, the traders still worry about violence acts in order to empty and demolish the Inpres market I, II, III, and IV. In accordance to it, they ask the governor of West Sumatera to coordinate with Polda Sumbar (Police) to protect the traders due to issue that there will be intimidation from group of people in order to empty and demolish the market structure. Syafrial says his deepest condolence for what happen to the traders. All of aspirations from the traders will be forwarded to the Governor of West Sumatera to be discussed with the local government of Padang (Haluan 22 Juli 2011).

Alongside doing lobby to the governor of west sumatera, the traders also do lobby to DPRD through channelization opinion. Based on PBHI's data, the activity has been done several times by the traders to the DPRD regarding the rehabilitation and reconstruction plan of the local government.

Even though the traders have tried to make lobby in form of sharing opinion, the local government of Padang still ignores the recommendations which have been released, one of them is recommendation from DPRD. Furthermore, the governor of West Sumatera cannot involve himself too much, since it is not his authority to take care of the grand market which is under care of local government. So that the governor cannot take over the problem (www.harianhaluan.com).

C. Entrusting Law Matter to PBHI

On Wednesday, Februari 16, 2010 at 23.00, there was arresting to 5 activist of traders and 1 official of FWK without procedure regarding crime accusation on vandalism to Padang Major's residence on Wednesday, February 10, 2010. This event makes the traders terrified and it tests their solidarity to stay by their arrested friends' side while under Police's interrogation.

In the other hand, pressure from the government to empty the Inpres market I, II, III and IV keeps going on. Then, in November 2010, Local Government reinstructs the traders to empty the Inpres markets due to demolition which will be done. Realizing their power, the traders have initiative to ask law assistance from PBHI of West Sumatera. Escorted by their lawyers from PBHI, the traders and also LBH Padang (Law Aid Organization) and some advocates make pre-

justice lawsuit. The traders win the claim based on verdict No.2/Pid.Pra/2010 PN. Padang. The arrested traders are finally released.

Since December 20, 2010, it is estimated that there have been 1100 traders entrust their problem to PBHI in order to make the government run the reconstruction and rehabilitation of September 30 Earthquake based on rules and acts which are valid.

Pattern and strategy which are used by the traders and PBHI are not in form of Demonstration. Every single trader who has rights in law entrusts its problem to PBHI and given strengthening about substance of its rights and obligation as the victim of disaster based on UU (acts), and given knowledge on law regarding overcoming disaster. The strengthening is done by PBHI with purpose to give the traders an understanding about their direction and purpose in their struggle. So those, with the strengthening, the traders are able to set strategy for their effort individually or collectively.

Protest which is done by the traders with PBHI is a law approach that is in line with valid UU (acts) especially about disaster. It is expected that the traders will never do demonstration again as their strategy. Strategy which is used by the traders with PBHI is more about strengthening their internal position in law. For external one, the traders make an approach to organizations in gaining support for their effort. By using law approach, strategy which is used by the traders is dominantly about correspondence with related organizations especially those which concern on overcoming disaster in Pasar Raya Padang.

Strategies done by the traders to gain support from any party through demonstration, lobby to governor of West Sumatera and DPRD, and handing over their law matter to PBHI and building alliance with Komnas HAM do not bring any success yet. It means that the strategies are not effective and efficient to stop the government's plan to reconstruct the market after the Earthquake. It is proven by the government's action which keeps the reconstruction undergoing, though many institution and parties of people oppose it.

IV. CONCLUSIONS

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Strategy which is shown by the traders to oppose the government's policy is an effort to struggle for their cause. It is triggered by different point of view between the traders and local government of Padang regarding reconstruction of Pasar Raya Padang (Grand Market). The government wants the damaged building and structures of Pasar raya to be rebuild from the base while the traders want the government to repair them only by obeying rules and valid acts. The difference point of view is believed to be the root of the conflict.

Having aspiration ignored by the government, the traders try to gain any support from any elements and parties by doing various strategies. Looking at them closely, the

strategies are not only done in form of social movement such as demonstration, but also involving dialogue with DPRD and governor of West Sumatera. Based on research, it is recommended for the policies maker, in this case Padang local government to build or rehabilitate Pasar Raya Padang (Grand Market) by referring to valid rules and acts especially rules in overcoming disaster.

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STUDY ISLAMIC CONSUMPTION THEORY: REVIEW OF PUBLIC CONSUMPTION PATTERNS IN SURABAYA

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Abstract. Surabaya that grows as a big city triggers behave consumptive society in order to fulfill the demands of life, especially in an effort to fulfilling living costs for everyday. Life in urban areas provide a variety of choice and convenience to the people according with the facilities and infrastructure available. Consequences are large expenses budget to get it. Thus the family living costs are also getting bigger. The perceived demands of life very hard for the family in the middle class and lower middle or commonly called "wong cilik". Phenomena of consumer spending patterns community in Surabaya has happened since a few years ago. Several previous studies proving their spending patterns consumptive society is mainly done by housewives who have an impact on the financial condition of the family. The pattern of economic adaptation families do in order to fulfill the necessities of life including a wife go works to supplement the family income, implementing a frugal life, trying to determine priority needs, even implementing debt management "gali lubang tutup lubang". Some families were hang up his cost of subsidies from the parents/family/relatives because their income is not sufficient. Islamic consumption theory according Imam Al-Ghazali is the use of goods and services in order to fulfill the needs, obtained through work activities, and shall be based on ethics law in order to achieve the benefit to the afterlife, so avoid subsistence groups and became very weak. Components of necessity of human life that can not be avoided and is a basic requirement is essentially in the form of food needs, housing needs, and the needs of clothing (Imam al-Ghazali, 2014). The size of consumption Islamic directed not to miserly or dissipate. The consumption pattern is also included in the category qana'ah directed consumption just to make ends meet and not excessive, bearing in mind that the ultimate goal of which is to fulfill the consumption of current consumption (present consumption) in the world and for the future (future consumption) in worship. The greater the consumption the greater worship toward falah.

Keywords: Islamic consumption Theory, consumption patterns, consumption needs

I. INTRODUCTION

Consumption patterns of Surabaya lately showed consumer behavior, which prefers the fulfillment of a lifestyle that is the trend without any definite priority. This phenomena is a result of the rapid development of the city of Surabaya as the second largest metropolitan city after DKI Jakarta.

Life in urban areas provide a variety of choice and convenience physically to the people according with the facilities and infrastructure available. The consequences of the availability of choice and convenience that served the greater expenses required anyway in order to meet the needs of family life. The perceived demands of life very hard for the family of the middle class and lower middle or commonly called the underprivileged. In addition to earning a little, they tend to be difficult to gain access out to earn additional income. On the other hand, they are required to be able to put themselves to the demands of life that is at once the demands of socio-cultural adaptation according urban community.

Research conducted by Eddy Herry Pryhantoro et al. (2014) on strategy adaptations made the wives of civil servants Class I and II in Surabaya in negotiating the demands of life, found that the adaptation pattern of economic family a wife among others go jump work in the public sector in order to supplement the family income

where possible, implementing a life-saving, determine the priority needs of the family, even implementing debt management "gali lubang tutup lubang".

Tri Ratnawati et al. (2012) in his research on models of financial quotient by reconstruction spending patterns of households in East Java with respondents working wives found that spending patterns housewife in East Java is still consumptive with the domination of the major on the cost to buy clothes, cosmetics, and debt repayments. Similarly, in a research by Vitria (2012) regarding the model financial planning based variabel differentiator financial quotient to the housewife in the city of Surabaya found that spending patterns housewife in the city of Surabaya is consumptive ie do debt and using credit facilities to meet the needs of life family.

Research on the analysis of spending patterns of households to financial quotient housewife with a husband as civil servants and private sector employees in Surabaya by the author (2011) found that the majority of housewives who became the wife of a civil servant and wife private employees classified as not intelligent financial, characterized by still the source of the family's income from subsidies parents/family/relatives other than the salary he received. Even debt also performed in urgent circumstances, in addition to the use of bank credit facilities. In 2009, Sudjoko and Anggraeni conduct research on spending patterns of households with

respondents workers in Surabaya. Similar results were also obtained in this study. Workers still prioritize household spending on meeting consumer needs, and require subsidies from relatives.

Research on the consumption patterns by respondents students who are studying in the city of Surabaya also get results similar studies. Riyan Ariadi et al. (2015) examined the spending patterns of students of Petra Christian University Faculty of Economics 2011 to 2013 on the allowance. More students choose not to use his pocket money to save and invest their allowance although more than enough. Only students with pocket money mediocre who spend their pocket money for basic needs. Students with more pocket money tend to be consumptive ie spend his pocket money for entertainment consumption in addition to the fulfillment of basic needs.

II. METHOD

This article describes the phenomena of people's consumption pattern that occurred recently in the city of Surabaya through a search of previous studies. Furthermore assessed based on the theory of consumption in the perspective of Islamic sharia that theory consumption so that it can be discussed and could be concluded relating to the study of the theory on phenomena.

III. RESULT AND DISCUSSION

Search on previous research on consumption patterns in Surabaya, as described above, the results obtained, as presented in Table 1 below.

Islamic Consumption Theory

Theory of consumption Islam by Imam Al-Ghazali (2014) is the use of goods and services in order to fulfill the needs, obtained through work (al-iktisab), and must be done (fard kifayah) based ethics law in order to achieve welfare to the afterlife, so spared from the class of subsistence and became very weak.

While conventional consumption theory (Manurung et al., 2008), namely the use of goods and services in the satisfaction of human wants.

Thus there are similarities between the concepts of conventional consumption theory and Islamic consumption theory by Imam Al-Ghazali is the utilization of goods and services to meet the needs. However, conventional consumption theory oriented to ego and rationality that is solely to satisfy the needs. While Islamic consumption theory oriented welfare (well-being).

The concept of household consumption include the Islamic perspective regarding the classification of human needs, how to obtain the fulfillment of human needs, the means to achieve the necessities of life, as well as the goal of human life to the welfare or well-being (Abdur Rohman, 2012).

Table 1. Consumption Patterns about Previous Research Society in Surabaya

Judul Penelitian	Responden	Hasil Penelitian
Sujoko dan Anggraeni Dwi Lestari (2009): Model <i>Financial Quotient</i> Yang Diterapkan Pada Penghasilan Buruh PT. Maspion Surabaya.	Labour men and women in PT. Maspion Surabaya	Labor spending patterns still puts spending consumer needs as a top priority, and still require subsidies from relatives.
Fatma Rohmasari. (2011): Analisis Pola Belanja Rumah Tangga Terhadap <i>Financial Quotient</i> Ibu Rumah Tangga di Surabaya (Studi Kasus Pada PNS dan Karyawan Swasta di Lingkungan Pemkot Surabaya).	Wife civil servants (PNS) and private sector employees in Surabaya wife pure as a housewife	Most wives of civil servants and private sector employees belong wife is not financially smart, marked by consumer spending patterns and is still the source of the income from subsidies parents / family / relatives other than the salary he received. Even owed in addition to the use of bank credit facilities.
Tri Ratnawati, Siti Mujanah, dan Erwin Dyah A. (2012): Model <i>Financial Quotient</i> (Kecerdasan Finansial) melalui Rekonstruksi Pola Belanja Rumah Tangga guna Meningkatkan Kesejahteraan Keluarga di Jawa Timur.	Housewife in East Java, both are working and which are not working	Spending patterns housewife in East Java is still consumptive with major dominance on the cost to buy clothes, cosmetics, and debt repayments.
Vitria Linawati B. (2012): Model <i>Financial Planning</i> Berdasarkan Variabel Pembeda <i>Financial Quotient</i> Bagi Ibu Rumah Tangga di Kota Surabaya.	Housewife in Surabaya who works and what does not work	Spending patterns housewife in the city of Surabaya is consumptive use is to do a debt or credit facilities to meet the needs of family life.
Edy Herry Pryhantoro, Muadib Aminan AR., dan Prasmadji Sulistyanto (2014): Strategi Adaptasi Sosial-Budaya Para Istri Pegawai Negeri Golongan I dan II Terhadap Tuntutan Kehidupan di Kota Besar.	Wife civil servants Class I and II in Surabaya	The pattern of economic adaptation families are among others the wife along plunge to work in the public sector in order to supplement the family income, if possible, apply the pattern of life-saving, determine the priority needs of the family, even implementing debt management "tutup lubang gali lubang".
Riyan Ariadi, Mariana Ing Malelak, & Dewi Astuti (2015): Analisa Hubungan <i>Financial Literacy</i> dan Demografi dengan Investasi, Saving, dan Konsumsi.	Students of Petra Christian University Faculty of Economics, 2011 to 2013	More students choose not to use their allowance to save and invest their allowance although more than enough. Only students with allowance barely enough who spend of their allowance for basic needs. Students with more allowance tends to be more consumptive using their allowance for entertainment consumption in addition to the fulfillment of basic needs.

Components of human needs as disclosed Imam Al-Ghazali in Ihya' 'Ulumuddin:

"The real men are busy on three needs are food, shelter (house), and apparel (clothing). Food to resist hunger and sustain life, clothing needs to resist heat and cold, as well as residence to resist heat and cold, as well as resisting damage".

How to obtain the fulfillment of human needs to achieve satisfaction, Imam Al-Ghazali expressed human beings should seek the maximum.

"If people remain at the level of subsistence and became very weak, then the death toll will rise, all the work and craft will be stopped, and the people will perish. Furthermore, religion will be destroyed, because this life is a preparation for the afterlife".

Means to achieve the needs of human life is to earn a living kosher, as well as through means that are based on the Shari'a in carrying out economic activity as revealed by Imam Al-Ghazali:

"Nobody is able to achieve iqtisad except in earning a living life constantly walking on the right path and straight (treasure-kosher). And nobody will succeed in making a living as a means of livelihood except akhiratnya accompanies its business (economic activity) with adab (ethics) in accordance with the Shari'a".

The purpose of human life according to Imam Al-Ghazali is to achieve the benefit or welfare of human life, as he declares:

"Referred to masalah goal is to maintain shara 'located on five principles, namely the maintenance of

maintaining religion, life, lineage, intellect, and possessions. Each containing an effort to maintain the five principles called *maslahah*. And each of which removes the principle is *mafsadat* "

Imam Al-Ghazali set boundaries or directives to consume, including in terms of quantity or size of consumption is directed not to apply miserly or dissipate. Consumption should behave appropriately, in accordance with the necessities of life. As for the consumption patterns, Imam Al-Ghazali emphasis on consumption patterns *qana'ah* category (*biqadri al-Hajjah*): consumption is merely to get their needs and not excessive. In effect the consumption by humans is earthly and worshipful. The final goal of worldly consumption is for the fulfillment of the current consumption during the life of the world (present consumption), and the final destination of consumption of worship is for the future (future consumption). The greater the consumption the greater worship toward *falah* (reward or blessing of Allah SWT).

Conventionally, the level of household consumption depends on factors income. If income increases, consumption also increased significantly (Manurung, 2008).

Based on the study of consumption theory put forward Imam Al-Ghazali, Monzer Kahf (1995) developed the idea of consumption in Islam, using the assumption that:

1. Islamic carried out by local
2. Zakat is obligatory
3. There is no *riba* in the economy
4. *Mudarabah* form in the economy
5. Economic actors behave rationally to maximize welfare.

So the instrument which affects the amount of money that should be allocated to consumption, namely:

1. Zakat (Z)
2. Infak and Alms
3. Rate of Profit (revenue for the results)

Hadith Rasulullah said that "what you have is what you eat and what you have donation", the equation of consumption in the concept of Islamic is as follows:

$$Y=(C+I)+ S$$

where: Y = income
I = Infaq (donation)
C = consumption
S = saving

Based on the above study of theory Islamic consumption, it is known that the consumption pattern recommended in Islamic, among others, does not apply miserly or dissipate, *qana'ah* ie consumption just to make ends meet and not excessive, bearing in mind that the ultimate goal of consumption ie for the fulfillment of current consumption (present consumption) in the world and for the future (future consumption) in of worship. The greater the consumption the greater worship toward *falah*. Understanding of the concept of consumption theory of Islam to the community is needed to improve people's consumption patterns in Surabaya. This concept can be provided through the study of Islamic study groups, or counseling in environmental pillars of residents or neighborhood. Nurhalimah et al. (2014) in his research on

the study of family finances sharia-based economy in order to reduce consumer behavior housewife against imported products suggested that one solution could be to handle consumer behavior housewife is by empowering mosque through informal gatherings are usually followed by women. Informal gatherings are expected to be a means of socialization of the family financial management sharia-based economy so that housewives know how to manage the family finances carefully based on Islamic values and is able to avoid being excessive (*israf*) in spending family income including shopping product import.

IV. CONCLUSION

Phenomena of consumptive pattern of people in Surabaya when viewed from the study of the theory of actual consumption of Islamic will not happen, because in theory the consumption of Islamic has been directed not to apply miserly nor spending spree in family income. It also is *qana'ah* namely conducting consumption just to make ends meet and not excessive, bearing in mind that the ultimate goal of which is to fulfill the consumption of current consumption (present consumption) in the world and for the future (future consumption) in worship. The greater the consumption the greater of worship toward *falah* (reward or Rodho Allah).

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SUPPORTING COOPERATIVE THROUGH IMPROVEMENT OF ORGANIZATIONAL CAPACITIES

Lesson from Farmers' Cooperative in Bali

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Abstract. Agricultural development in Indonesia has still played great significant roles in the economic development. The AEC should be a factor to strengthen the capacity of business organization, such as farmer's cooperative. This study is aimed at understanding the organizational capacities of cooperative in the business activities, and to describe the efforts that should be done to strengthen the capacities of cooperative. Data collected from the secondary sources and is analysed by using descriptive method. The manager of Guama cooperative has strong leadership to take initiative and make good communication in managing cooperative development. The marketing skills owned by cooperative consist of branding; packaging; promotion; and pricing. Guama cooperative has good networking by making partnership with local bank and private companies. The efforts could be done for this improvement, such as extension and training on good agricultural practices and good post-harvest practices; management and administration on business management; value chain analysis; and support from government and other relevant stakeholders.

Keywords: Business, cooperative, marketing, and value chain

1. INTRODUCTION

In Indonesia, agricultural development has still played great significant roles in the economic development. Majority of population has worked on farming activities and the relevant to agricultural sector (agro-industry). The main roles of agricultural development are providing food, providing employment; supporting industries (upstream and downstream industries); and adding income for the country. The increase of population and consumption has force need the improvement of production technology on agriculture. The needs of diversified food have also been increased from the people living the cities and rural areas.

Presently, Asean Economic Community has been introduced and implemented in Indonesia. This has motivated to the countries involved to strengthen the capacities of economic/business institutions to have higher competitiveness than the other countries. There will be a single market and production base with the free flow of goods, services, educated labour and others. The market of agricultural products would be bigger. One of the economic/business units at the farmer level is cooperative. A farmer cooperative constitutes a business organization that is owned and controlled by its members for their mutual benefit. The cooperatives of farmers had been developed to respond the changes and demand of agri-food market (Bose *et al.* 2001; World Bank 2007; Shepherd 2007). In addition, some international NGOs and donors institutions seem that the cooperatives are very importance for rural development, especially to be able to have better access to markets and information. Experiences in some countries, development of cooperatives is faced by several general problems such as horizon problem, free rider problem, portfolio problem, control problem and influence on cost problems (Cook 1995; Zeuli, 1999; Baldwin 2001; Egerstrom 2004).

In case of Bali province, the existence of farmer cooperatives is significantly important to support economic development, especially in rural areas. Most of the farmers supporting the cooperative could get share profits from the cooperatives after the business activities conducted, such as in Guama cooperative in Tabanan regency. This study is aimed at understanding the organizational capacities of cooperative in the business activities, and to describe the efforts that should be done to strengthen the capacities of cooperative. Data collected from the secondary sources and is analysed by using descriptive method.

2. SUBAK AND FARMERS' COOPERATIVE, SUBAK OF GUAMA

Subak is an traditional irrigation system in Bali which has social, agrarian, and religious nature in managing the irrigation and farming activities. Roth and Sedana (2015) cited that the philosophy of *subak* is *Tri Hita Karana* which refers to harmonious relationships among the three components. The components are related to harmonious relationship between farmer and the God with the religious activities (*parhyangan*), between farmers and social environment (*pawongan*), and between farmers and environmental-territorial (*palemahan*).

In responding the market demand, *subak* s in Bali have potential to conduct economic activities based on its social capital or local wisdom (Sedana, et.al, 2014). Sutawan (2005) mentioned that one of the potential economic activities in *subak* system is providing agro-inputs for farmers as members which are similar to other developing countries. *Subak* has experiences in managing fund collected from the members after harvesting, in which this could be used for money lending and other expenses for *subak*'s needs. This small-scale of economic activities might be an embryo for *subak* to run bigger-scale of economic activity,

such as establishment of farmers' cooperative. One of the farmers' cooperative established in Bali is Cooperative of Guama *subak* which has run business activities since 2003. *Subak* of Guama is located in Marga subdistrict, Tabanan regency, Bali Province which is spread over three villages, namely Selanbawak, Batannyuh, and Belayu. The source of irrigation water is from Canggi weir built by the government on the River of Yeh Sungai. The size area of Guama *subak* is 179 ha wherein its topographical is relatively flat.

3. MAKING IMPROVED CAPACITIES OF FARMERS' COOPERATIVE

Availability of resources within the organization is not enough to reach its goal or objective due there are some relevant factors influencing its goal attainment. As traditional organization, *subak* should be improved its management to response the dynamic market relating to agricultural inputs and products. One of the relevant factors is capacities of management board of cooperative. In this study, the capacities consist of management skill, financing skill, marketing skill, and networking skill.

Management skill of management board of cooperative is very important to have smooth management among the management board and farmers as members. In term of this, the leader or chairman of cooperative should have skill on how to conduct the management principles in running business under *subak* system. In case of Guama cooperative, there is clear organizational structure of cooperatives which guide the management carried out in the cooperative (see Figure 1). This structure should be well informed to other management staff and members since it very important to make cooperative successful (Chaddad & Cook 2004). Bird (2001) also mentions that the good organizational structure would make better relationships between the management board and members of cooperative. This structure is also equipped with the clear roles of its position, so that they take role professionally and still have good coordination among the positions.

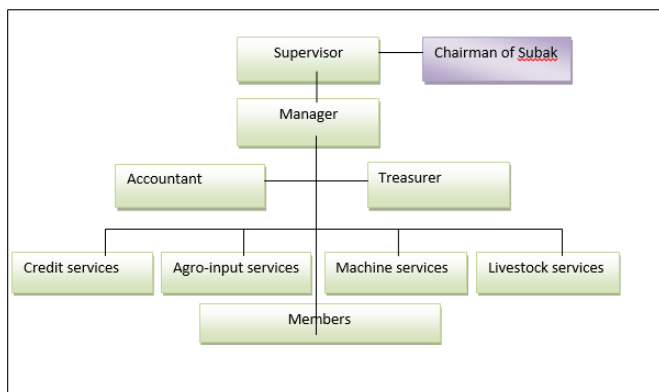


Figure 1 Organizational structure of Guama cooperative

Good management performed by the management board of Guama cooperative is indicated by good line communication and line coordination among the positions, especially in implementing business activities. The cooperative has internal regulation to arrange the line communication and coordination processes including the functions of each position and their rights, too. The

accountant and treasurer have direct communication with the manager in term of the report of financial aspects. In addition, all departments (credit, agro-inpput, machine and livestock) have interrelated in making good business under control of manager. It is noteworthy that the supervisor of this cooperative is the chairman of *subak*, too. It means that the activities of cooperative is still conducted under the the *subak* system. Some regulations in *subak* system are employed in the cooperatives.

The strong leadership of manager has significant roles in managing the other management staff to work on the track. He has good innovation and initiative and communication skill to attain the success of cooperative. Roles of manager as initiator and innovator are key factors to make cooperative successful (Banaszak, 2008). Zhang and Yuan (2010) also found that the leaders of cooperative had a big influence on the success of cooperative development.

Financing skill is one of the significant important to every business organization, including Guama cooperative. In this study, the financial aspects are become responsibility of accountant and treasurer who have well educated. In Guama cooperative, they are from the outsiders (not members of *subak*) who have capability in the accounting work. According to manager, the capability of accounting and treasurer has influenced the good trust of members to cooperative due to they support transparent accountability of cooperative. The accounting and treasurer should accomplish the daily report of financial aspects, such as expenditures and revenue of cooperative. Those who have responsibility on the services (credit, agri-inputs, machine and livestock) should have good coordination and communication with the accountant and treasurer. The success of cooperative is strongly influenced by the good management of financial aspects aside from the increased income, capability on marketing of farmer cooperative (Bruynis et al. 2001; Fulton 2004). The cooperatives in some developing countries are unsuccessful due to no institutional transparency and weak management on financial aspect (Chambo, 2009; Chibanda, Ortmann, & Lyne, 2009).

Marketing skill

In some cases, cooperatives usually have limited skill on marketing that contributes to failure of the successful goals. In this study, Guama cooperative could play good role in marketing the product of farmers. One of the products is qualified and certified seeds of rice which has good market. Farmers under the coordination and control of cooperative plant rice to produce qualified and certified seeds that would be packed and marketed to the other farmers in Bali. The demand of qualified and certified seeds has increased every year. Guama cooperative produces about 200 ton of seeds every year. In producing qualified and certified seeds, cooperatives has been frequently supervised and controlled by the government (The Agriculture Agency, at the provincial level).

Management board of cooperative has good skill in marketing of seeds to other farmers. The skills owned by cooperative are branding (Guama production); packaging (nice symbol and color); promotion; and pricing (based on the market price). Aside from marketing seeds, the cooperative also provide the other agri-inputs (such as

fertilizer, pesticide, agricultural machines) to farmers as members and non-member. Cooperative is becoming a retailer by constructing the small shop situated in the strategic location.

Networking skill

For the business institution/organization, the networking skill is needed for expanding the scope of services. Guama cooperative has good networking by having partnership with local bank and private companies aside from the other individual clients. Partnership with local bank is conducted for getting additional working capital on the business activities. The local bank has good trust on the performance of Guama cooperative, which is shown from the regular credit provided to cooperative. Guama cooperative also established long-term contract with private companies to sell the qualified and certified seeds. Information of seeds demand is coming from this company aside from the government at the district and provincial levels as well. The manager of cooperative could play good role in building networking for making sustainability of business work with the other parties.

The capacities of cooperatives should be improved in order to have better business activities and extend the consumers of cooperative products. Several efforts could be done for this improvement, such as: (i) extension and training on good agricultural practices and good post-harvest practices; (ii) training on management and administration on business management; (iii) training on value chain analysis; (iv) support from government and other relevant stakeholders.

Good agricultural practices and good post-harvest practices on the commodities planted by farmers should be improved their productivity and quality in order to fulfilled the demand of market. Demonstration plot should be more intensively conducted to enhance the knowledge and know-how of farmers in the production and post-harvest activities. Another technique which might be carried out is establishing the farmers' field school involving more farmers to understand and apply the technologies recommended.

Management and administration aspect are the important component in making good performance of cooperative. Trust building is being contained in the good management and administration. Training on management and administrative should be conducted to make information, report, record management well done by management board. In the modernization era, the cooperative should be introduced the new program that would help the system of administration, especially financial aspect. In this aspect, it should be continually to strengthen the leadership of management board relating to the business vision of cooperative, and their honesty in managing the cooperative.

Value chain analysis is very important for the cooperative in line with the fast growing of marketing system. Through the good understanding of value chain analysis, the cooperatives should be addressed to have good business plan including the marketing strategies for having value added on the product produced. The cooperative should learn the dynamic of market and actors involved in the market system. This training is also aimed at

encouraging cooperative to have inclusive business with the private sector with the contract. For this, the cooperative should be also trained the business law relating to contract between cooperative and private sector. This understanding is very important to avoid the loss of cooperative whenever there is something happened on the contract.

Government support is needed by cooperative to enlarge the scale of business capacities and scale of services. The regulation and policies of government should make cooperative becomes strengthened and motivated to run business activities. Credit mechanism, for instance, should be easier and low interest for cooperative that would be provided to members for increasing the working capital in agricultural activities. Similarly, the cooperatives in China are really need supports from government in making policy, regulations and other influences for making cooperatives well-operated (Fock & Zachernuk 2005).

4. CLOSING REMARKS

Asean Economic Community has motivated to the countries to strengthen the capacities of economic/business institutions to have higher competitiveness than the other countries. One of the economic/business units at the farmer level is cooperative which should have improved capacities on business activities. The capacities of cooperatives consist of management, financing, marketing, and networking skill. The strong leadership of manager who has good initiative and communication skill has significant roles in managing the other management staff to work on the track. Marketing skills owned by cooperative are branding (Guama production); packaging (nice symbol and color); promotion; and pricing (based on the market price). Guama cooperative has good networking by having partnership with local bank and private companies aside from the other individual clients.

The efforts could be done for this improvement, such as: (i) extension and training on good agricultural practices and good post-harvest practices; (ii) training on management and administration on business management; (iii) training on value chain analysis; (iv) support from government and other relevant stakeholders.

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A STUDY OF FISH NURSERY AROUND PEOPLE'S HOME IN THE SUBDISTRICT OF BENGKAYANG

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Abstract. Fish nursery around people's home in subdistrict of Bengkayang is a local wisdom. It's a local wisdom to people's understanding on how to use hibernate lands around their homes as families recreation and to provide their needs of protein for the whole family nutrition and also this activity can be part of fish conservation. This article is meant to describe the benefit of having fish nursery around people's home in the subdistrict of Bengkayang, and the most significant benefit is a simple and low cost recreation for the family recreation and besides it can be as an additional income for the family.

Keywords : fish nursery, low cost recreation

I. INTRODUCTION

When somebody told me why he does not need to work as the nature can provide what he needs, I was amazed. He mentioned that if you go to rivers, you can find and get various fishes. If you go to forests you can take many edible plants and fruits. But then it is a fact that many people nowadays have changed that old habit to a new one. People think about the easiest way to provide their need for food because the rivers and the forests can not provide the needs as much as it used to be as the population has grown. There are more educated people who start to think about preserving the nature for today and for the next generations.

Kalimantan has been known its many rivers. It is an interesting thing that we can find many small artificial (man-made) lakes, ponds and little rivers arounds people's homes in Bengkayang which are not built naturally but they are the excess of gold mining activities some years ago, while the others were built purposely, i.e. to collect water, and to have fish nurseries around their homes.

It is a fact that the livelihood in Bengkayang has changed. From taking the fishes directly from the rivers to keeping the fishes in the small artificial (man-made) lakes or ponds around their homes or buying fishes directly from the wet market.

The main reason to have fish nurseries arounds their homes is not only for fulfilling the consumption of fish itself but also for recreation. It starts from fishing hobby and later become the need for recreation for the whole family members.

II. LITERATURE REVIEW

Recreation is one of the basic need of people. The activities of recreation are done for fun, pleasure, finding new interesting things, enriching knowledge and experience, enjoying the things we like, refreshing and even can have more friends whom have the same interest or hobbies.

Dillard and Bates (2011) have discovered four core values/motivations for leisure/recreation. These are: (1) escape; (2) enhancing relationships; (3) personal mastery; and (4) winning.

Recreation is not only for rich families who have money for relaxing but also for poor families, because there are lots of low cost and even free recreation. Recreation is needed by families who live in towns and in villages. Children also need recreation as well as senior citizen.

Singh and Kiran (2014) said that recreation plays a key role in the well being of older adults and enhancing their quality of life. Amerijckx and Humlet (2015) had examined

recreational activities in children’s free time, as a component of their wellbeing in a socio-ecological framework.

There are many options for indoor recreations as well as outdoor recreations. All of them can give good impact for people’s mental health. Having fish nursery arounds home can become outdoor recreation also.

III. METHOD

The aim of the present study is to describe the benefit of having fish nurseries around homes in the subdistrict of Bengkayang. This qualitative study is designed to gather information and to investigate the following questions : (a) What are the reasons for having fish nurseries? (b) What are the benefit for having fish nurseries arounds home in subdistrict of Bengkayang?

This study used a phenomenological study, to describe a "lived experience" of a phenomenon. (Waters, 2016). This study used in depth semi structured interview to gather the participants' descriptions of their experiences in fish nurseries around their homes.

IV. RESULTS AND DISCUSSIONS

A. Participants

Snowball sampling was used for this study. Snowball sampling is an approach for locating information-rich key participants with particular knowledge, skills or characteristics that are required for research study.

Participants were chosen based on this following criteria : family who currently have fish nurseries in their homes, living in the subdistrict of Bengkayang. Interviews were conducted in the participants’s homes.

Table 1. Participants Information

Participants	Work	Number of fish nursery	Types of fish
1	Farmer	3	2
2	Farmer	1	2
3	Farmer	5	4
4	Farmer	2	3
5	Entrepreneur	2	2
6	Farmer	4	5
7	Employee	3	4
8	Seller	2	2

B. Data Collection

Semi structured interview with open-ended questions were used to collect information about participants’s experiences including their thoughts, feelings, memories along with descriptions of the situations in which the experiences occurred in fish nurseries around their homes.

C. Data Analysis

Information from all interviews were discussed to find out their constant similarities in their answers, to identify key themes and issues which then can be aggregated and organised with the aid of a mind map or set of “post-it” notes and summarise them into sub themes (Lester, 1999). Table 2 summarises the themes and sub themes identified.

Table 2. Themes and Sub Themes

Themes	Sub Themes
Reason for having fish nursery	The used of hibernate land The need for fish consumption Easy to construct
Benefits for having fish nursery	Low cost recreation Additional income Low Maintenance

D. Findings and discussion

Two major themes were concluded from the experiences of the eight participants who have fish nurseries arounds their homes. They are the reasons for having fish nurseries and the benefits of it.

E. Reason for having fish nurseries

1) The used of hibernate lands

Most of the participants said that it is good to used the available hibernate lands which are the small artificial (man-made) lakes or ponds or little rivers arounds their homes to keep the fishes and get benefit from it.

2) The need for fish consumption

Most of the participants said that the reason why they have fish nurseries because they can easily get fish from it whenever they want it or need it. However, sometimes they still buy fish from wet markets because most of them have only few types of fish in their nurseries and when they want different kind of fish they will buy it from others.

3) Easy to construct

All participants said that it is easy to construct fish nursery. Just put the fish into the water, they will alive. But most of the participants face the same problems which is the level of the water when it is not constant, more water in the small artificial (man-made) lakes or ponds can make it flooded and the fish will be swept away by the stream, therefore they also construct fishing nets around them. It is quite easy to construct the fishing nets. Just put hard wooden poles in each corners of the fishing net and tight them together.

The other participants' objective was to have good permanent fish nurseries so they built ponds with good flows of fresh water. One participant said that it was easy to built it and only need few days to prepare the land. They digged the land about 1 meter deep and about 3-4 square-meter then layered them with cement and wait for few days to dry then fill it with continuous flowing fresh water.

4) Benefits for having fish nursery

The participants were aware that not only tangible benefits they got from having fish nurseries arounds their home but also intangible benefits from it. It is not only that they can eat the fish but also they feel happy and refresh them.

5) Low cost recreation

All the participants enjoy the time they spent when they feed the fish. They feel happy when they see the fishes come to them and eat the food they give to them. The various colors of the fish also refreshing when they see them. The sizes of the fish also fascinating to observe. There is a feeling of hope and satisfaction as well when they see the growing process of the fish. They said they enjoy it and they feel relax when they watch the movement of the fish.

Some of the participants are senior citizens and some of them have children and grandchildren who are also like to come to the fish nurseries to get the enjoyable experiences.

It is the lowest cost of recreation, because they do not have to go out as it is very close to their homes, so do not need to spend extra money to refresh themself. Just go to the backyard.

Some participants said that their fish nurseries are regularly visited by others for

fishing. So it also become a place for recreation for local fisherman.

6) Additional income

Some participants have opened their fish nurseries for fishing and dining eventhough it is not openly publicized. The fisherman who catch the fish must pay according to the weight of the fish and the type of the fish. So they can earn some extra income.

7) Low cost maintenance

Compare to others husbandry, fish nursery has low cost maintenance. Eventhough there are some fish that can easily get decease, others are strong and easily maintained, such as "nila" and "ikan mas".

There is a little maintenance cost for small artificial (man-made) lakes or ponds and little rivers, except if there are growing fast plants that covers the surface of the water so all they need to do is clean it up, to throw it away. So basically the maintenance cost for fish nursery is affordable.

F. Study limitation and implication for further research.

This study had small sample from one subdistrict area and short period of study, therefore the findings can not be applied to a wider population. However, the study did give good information about fish nursery arounds people's home, which could be explored with more participants and themes. Further investigation into the issues of fish illness, various fishes's challenging, the water quality and the fish market also recommended in order to determine the sustainability of fish nursery for business.

V. CONCLUSION

By taking an in-depth look at the meaning of fish nursery, this study has found that fish nursery around people's home in the subdistrict of Bengkayang can be a low cost recreation for the family.

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THE IMPACT OF HUMAN RESOURCES COMPETENCE, INFORMATION TECHNOLOGY UTILIZATION, FINANCIAL SUPERVISION AND ACCOUNTING INTERNAL CONTROL TO TIMELINESS OF FINANCIAL REPORTING IN JOMBANG PUBLIC HOSPITAL

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Abstract. This study uses multiple linear regression, this study intends to determine how the variable of human resources competence, information technology utilization, financial control, and accounting internal control, influence the timeliness of financial reporting at the public Hospital of Jombang. The data collection is using questionnaires with respondent's as many as 41 people consisting of 30 employees who work in financial part and 11 employees in accounting verification. The test results show that partially those can be seen from the Sig value that less than α 0,05. With the t-count value respectively 3,543; 3,871;6,212 and 4,381 that are greater than t-table it is 1,684. And simultaneously showing results that simultaneously the timeliness of financial reporting be affected by the variables of human resources competence, information technology utilization, financial supervision and internal control of accounting, with f-count value is greater than its f-table is 8,112>2,63.

Keywords: Human resource competence, information technology utilization, financial supervision, intern accounting control, timeliness of financial reporting.

I. INTRODUCTION

Financial reporting is another way of financial statement or report to convey information and measurement economically about its resources and performance to all parties who have an interest in that information. The main element in financial reporting is the financial statement. The financial statement is the end of the accounting process that is designed to provide information to investor candidates, creditor candidates, and the users of financial statements for business decision. For the management officer, financial statement may be used as consideration for the company's management in determining the company's action plan for the coming period.

If stated that information should be useful for the users it is similar to say that information must have value (Suwardjono, 2005). Information will be useful if the information interlock with the decisions that will be the target of information. Information will be useful if the information is understood and used by the user. Information would also be beneficial if users trust the information.

The value of the financial reporting timeliness is crucial to the usefulness of the report. In contrast, the benefits of financial report will be reduced when the report was not submitted in a

timely manner. Punctuality shows the time span between the desired presentation of information and the frequency of reporting. If the information is not delivered in time it could cause the information value is reduced in decision-making.

The company's financial reporting is considered by the primary users (investors and creditors) as good news and bad news. Good news means that the information is regarded as important and can be used as a credit decision making and investment decisions. And assume as bad news if the information presented cannot meet the key information, so that investors and creditors as primary users of financial reporting views that the financial reporting are still useful but need to be improved.

The Capital Market Supervisory Agency in the regulations require that the annual financial report that is reported by the go public company must be audited first by an accountant registered in the Capital Market Supervisory Agency and Financial Institution. The obligation of financial report must be audited encourages Public Accounting Firm (PAF) to improve the quality of the audit results. As stated by DeAngelo (1981) in Ali and Hilmi (2008) that bigger PAF means the audit result quality was better than the small PAF.

Financial report is an overview of the output generated from the process of an organization. From the financial report, it can be seen the

development of organization and can be used as a reference for taking a decision regarding the sustainability of an organization.

Another thing that may affect the timeliness of financial reporting at hospital is the utilization of information technology. As we know that the total volume of patients who visit the hospital from year to year showed remarkable improvement. From the accounting side it shows that the volume of financial transactions hospital also showed that the greater quantity and the more complicated and complex competencies. The increased transaction volumes that growing and increasingly complex must be followed by an increase in the government's financial management capability (Sugijanto, 2002). For that the manager obliged to develop and exploit the advances information technology to improve the ability to manage the finances.

Internal control is a process designed to provide reasonable assurance regarding the achievement of the objectives of a hospital that is reflected in the reliability of financial reporting, efficiency, and effectiveness of the implementation of programs, activities, and the compliance of laws and regulations. According to Triyuwono & Roekhudin (2000) there are three functions that can be seen from the definition, namely: (a) the reliability of financial reporting, (b) the efficiency, and effectiveness of operations, and (c) compliance with rules and regulations. The important components of the internal control related to the organization's accounting system, are: (a) the accounting systems and procedures, (b) authorization, (c) forms, documents, and records, and (d) duties segregation.

The research problems are as follow: (a) Do the human resources competence (X_1), the use of information technology (X_2), financial supervision (X_3) and accounting internal control (X_4), is partially affected the timeliness of financial reporting (Y)?, (b) Do the human resource competencies (X_1), the use of information technology (X_2), and financial supervision (X_3) and accounting internal control (X_4), simultaneously affect the timeliness of financial reporting (Y)?

II. LITERATURE REVIEW

Financial position report, the report shows the financial condition of a company at a certain date. Comprehensive reports. According to (A.J. Keown, et al, 2001), a comprehensive report is a report for a certain period consisting of net revenue expenses at that period. According Harahap (2006: 73) profit and loss describe the results obtained or received by the company for a specific period, and costs incurred to obtain these results. The result of minus by the costs is the profit or loss. If the result is greater than the cost it means profit. Conversely, if the result is less than the costs, it means a loss.

Equity changes report, the report show the causes of changes in equity of the amount at the beginning of the period into a number at end of the period. The cash flow report shows cash flows in and out, which divided into operating cash flow, cash flow investing, and financing cash flows.

Notes to the financial report, the qualitative characteristics, are the special characteristics that make information in financial statements useful to users. The qualitative characteristics of financial report with PSAK No. 24 of 2012 can be Understood, Relevance, Reliability, and can be compared.

A. Financial Reporting

One of ways used by an entity to describe the financial position is by present the financial report. According to Suwardjono (2005:18) financial reporting are: The structure and process of how financial information for all business units and the administration should be provided and reported in the country for the purpose of economic decision-making.

Financial reporting does not only consist of the financial statement, but all information related either directly or indirectly with the accounting system. Financial reporting in accordance with the SFAC (Statement of financial accounting concept) No. 01 consists of: (a) Basic financial statement, consist of financial statements and the notes to the financial statements, (b) Supplementary information, (c) Other reports the other of financial statements (others means of financial reporting).

SAFC (Statement of financial accounting concept No.1 in research of Siska Prahesty explicitly explains that the purpose of financial reporting is not something that is not affected (immutable). The purpose of financial reporting is influenced by the economic environment, politic, and social, where reporting is derived.

B. Timelines

Timely means that information must be submitted as early as possible to be used as the basis to assist in deciding economic decisions and to avoid any delay in the decision (Baridwan 1997, in Septiani 2005). Scott (in Anastasia and Mukhlisin, 2003) defines "information as evidence which has potential to affect an individual's decision" financial statements is an information that will be digested by investors to make decisions on investments. However, new information will be beneficial to the user when the information is timely.

The definition of timeliness (Chairiris and Ghozali 2001 in Ukago, 2005) timeliness is an information utilization by the return decision before the information is lost the capacity or ability to make decisions. Based on the Preparation and Presentation of Financial Statements of Financial Accounting Standards Framework, the financial

statements must meet four qualitative characteristics that are the traits that make financial reporting information useful for the users. The fourth characteristic that is understandable, relevant, reliable, and comparable. To obtain relevant information, there are several obstacles, one of which is constraint timeliness.

C. Some theories support timeliness

There are several theories relating to corporate compliance in reporting its financial statements in a timely manner, they are:

1) Agency theory

Agency theory explains the relationship between the agents (management of a business) with the principal (business owners). In an agency relationship to a contract in which one or more persons (the principal) govern another person (the agent) to perform a service on behalf of the principal and authorized agent to make the best decisions for the principal.

2) Theory of compliance

Compliance theory stresses the importance of socialization processes in influencing the behavior of an individual compliance. There are two basic perspectives in the sociology literature on compliance with a law called as instrument and normative.

D. Human Resource

On the micro level, Human Resources is a group of people who sufficient their live by working at a work unit/organization of certain public or private. Meanwhile, according to Yani (2012: 1) human resources is: as one element of the organization can be defined as people who work in an organization. Human resource can be called as the personnel, labor, workers, employees, human potential as a driving force in realizing the organization's existence.

E. The Indicators to Evaluate Human Resource Competence

According to Sedarmayanti (2007:286) human resource is Indicators assessing the competence of human resources. According Sedarmayanti (2007: 286) Human resources are:

- 1) Responsibility or liability can be seen from or contained in the job description. A description position is the basis to perform the task well. Without a clear job description, these resources cannot perform well the duties
- 2) Competence can be seen from the educational background, training and of skills in the state in the implementation of tasks. Competence is one of the characteristics of someone who has skills, knowledge, and capacity (ability) to carry out a job.

F. Information Technology Utilization

Information technology has become the primary choice in creating information systems are resilient and able to generate a competitive advantage in making financial reporting that sufficients the information characteristics, that is timely. Santika (2003) states that information technology is: Technologies that allow humans to record, store, process, retrieve, transmit, and receive information. According to the Information Technology Association of American (ITAA) in Sutarman (2009: 3): Information technology is a study, design, development, Implementation, support, or management of computer-based information systems, especially the computer software applications and hardware. Information technology utilize computer and software to convert, store, protect, process, transmit, and obtain information securely.

G. Information Technology Components

The information technology components by Mulyadi (2008: 13) consists of three components, namely: Computers and data storage outside, Telecommunications and Software.

H. Internal Control Accounting

Controlling is the implementation (direct action) from the planning and also gives feedback. Effective internal control can help companies provide reasonable assurance regarding the company's financial reporting information. Internal controls or internal supervision according to Zaki Baridwan (2000:47) defined by the AICPA as follows: Internal controls include the organizational structure and all the ways and tools are coordinated a used and used in company for the purpose of maintaining the security of company property, checking the accuracy and correctness of accounting data, promote efficiency in the business, and help to support the need for management policies defined first.

I. The purpose of internal control

Internal control objectives according to Mulyadi (2006: 163) are as follows: Keeping the wealth of organization, Checking the accuracy and reliability of accounting data, Encouraging efficiency, and Encouraging compliance with management policies Meanwhile, according to James M. Reeve in Dian Damayanti (2009: 390) the purpose of internal control are: Protection against company property from theft, fraud, abuse, or misplaced; the accurate information is essential to run the company successfully and Compliance with Laws and regulations that apply.

J. Internal Control Components

According to James A. Hall translated by Dewi Fitriarsari (2009: 28) Internal control components

are as follows: Control Environment, Risk Assessment, Information and Communication, Monitoring and Control Activities.

K. The basic principle of internal control

In order to achieve the objectives of internal control must have basic principles. Bambang Hartadi suggested six basic principles that must be possessed by internal control; these are Segregation of duties, authorization procedure, documentation procedure, procedures and accounting records, the physical supervision of assets and the accounting records and internal examination freely.

The conceptual framework are as follow.

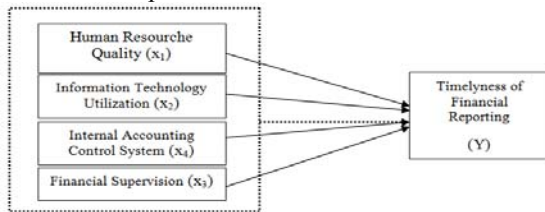


Fig. 1. Conceptual Framework

III. RESEARCH METHOD

This research is a quantitative research. And the population in this study will be 41 people consisting of 30 employees work in in financial section and 11 employees in accounting ferivication and all of them as the sampled in this reserach. The data used is quantitative, that is data in the form of numbers, and qualitative data obtained from questionnaire score given to respondents is numbered. The data sourche used in this study are primary data obtained directly from respondents through questionnaires containing statements from the independent variables and the dependent variable. This reserach use data collection method questioners. It is used closed and open questions with Likert scale by using the scoring method as follows: Strongly Disagree (SD) Value 1, Disagree (D) value 2, Agree Enough (AE) Value 3, Agree (A) Value 4 and Strongly Agree (SA) Value 5. And the data analysis method used in this research is Multiple Linear Regression. It is a regression explain the relationship between response modifier (the dependent variable) with the factors that affect more than one predictor (independent variable). Multiple linear regressions are similar to linear regression, only the multiple linear regression predictor variables (independent) more than one.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e$$

IV. RESULT AND DISCUSSION

Validity Test of human resources competencies (X1)

Table 1. Validity Test X1

Questions Item	Person Correlation	r Crisis	Sig	Explanation
X1.1	0,762	0,5	0,032	Valid
X1.2	0,790	0,5	0,030	Valid
X1.3	0,842	0,5	0,002	Valid
X1.4	0,823	0,5	0,001	Valid
X1.5	0,734	0,5	0,001	Valid

Source: data processed

Validity Test of the information technology utility (X2)

Table 2. Validity Test X2

Questions Item	Person Correlation	r Crisis	Sig	Explanation
X2.1	0,865	0,5	0,001	Valid
X2.2	0,612	0,5	0,032	Valid
X2.3	0,740	0,5	0,018	Valid
X2.4	0,814	0,5	0,023	Valid

Sources: data processed

Validity Test of financial supervision (X3)

Table 3. Validity test X3

Questions Item	Person Correlation	r Crisis	Sig	Explanation
X3.1	0,790	0,5	0,000	Valid
X3.2	0,653	0,5	0,011	Valid
X3.3	0,766	0,5	0,002	Valid
X3.4	0,811	0,5	0,006	Valid
X3.5	0,705	0,5	0,011	Valid

Source: data processed

Validity Test of accounting internal control system (X4)

Table 4. Validity Test X4

Questions Item	Person Correlation	r Crisis	Sig	Explanation
X4.1	0,933	0,5	0,000	Valid
X4.2	0,897	0,5	0,000	Valid
X4.3	0,741	0,5	0,006	Valid
X4.4	0,601	0,5	0,039	Valid

Source: data processed

Validity Test of financial reporting timeliness (Y)

Table 5. Validity Test Y

Questions Item	Person Correlation	r Crisis	Sig	Explanation
Y1	0,888	0,5	0,011	Valid
Y2	0,741	0,5	0,003	Valid
Y3	0,812	0,5	0,012	Valid
Y4	0,654	0,5	0,030	Valid

Source: data processed

Instruments Reliability Test

Table 6. Instruments Reliability Test

Variables	Alpha Cronbach	Criteria	Explanation
X1	0,871	Alpha Cronbach > 0,60 so it is reliable	Reliable
X2	0,704		Reliable
X3	0,924		Reliable
X4	0,773		Reliable
Y	0,891		Reliable

Source: data processed

Multicolinierity Test

Table 7. Coefficients (a)

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Human resource competencies	,871	1,321
	Information technology Utilization	,802	1,251
	Financial Supervision	,903	1,524
	accounting Internal control	,865	1,218

a. Dependent Variable: the timeliness of financial reporting
source: data processed

Autocorrelations Test

Table 8. Autocorrelation
Model Summary^b

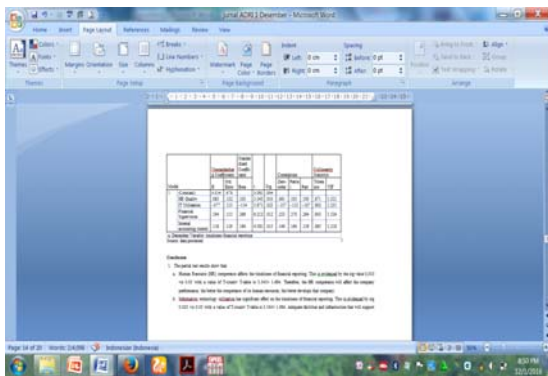
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,868 ^a	,753	,660	,68110	1,868

a. Predictors: (Constant), internal accounting control, HR Quality, IT utilization

b. Dependent Variable: timeliness of financial reporting

Source: Data processed

Table 9. Dependent Variable



V. CONCLUSIONS AND SUGGESTIONS

The conclusion of this research are as follow:
(a) The partial test results show that Human Resource (HR) competence affects the timeliness of financial reporting. This is evidenced by the sig value $0,010 < \alpha 0.05$ with a value of T-count $> T$ -table is $3.543 > 1.684$. Therefore, the HR competence will affect the company performance, the better the competence of its human resources, the better develops that company. (b) Information technology utilization has significant effect on the timeliness of financial reporting. This is evidenced by sig $0.023 < \alpha 0.05$ with a value of T-count $> T$ -table is $3.543 > 1.684$. Adequate facilities and infrastructure that will support the company's progress, and also the information technology used by the company, the more advanced the technology used will be good, because it can minimize the human error. (c) Financial supervision has significant effect on the timeliness of financial reporting. This is evidenced by the results sig $0.012 < \alpha 0.05$ with a value of T-count $> T$ -table is $6.212 > 1.684$. With good financial supervision, it can minimize errors or fraud that occurred. (d)

Accounting internal control has significant impact on the timeliness of financial reporting. This is evidenced by the results sig $0.015 < \alpha 0.05$ with a value of T-count $> T$ -table is $4.381 > 1.684$. With a good internal control, it can minimize errors or fraud that occurred. (e) The simultaneous testing results show that the HR competence (X1), the information technology utilization (X2), financial supervision (X3) and accounting internal control (X4) togetherly have a significant impact on the timeliness of financial reporting in Jombang hospitals. This is evidenced by the influence of the four independent variables to the timeliness of financial reporting 75.3%. while the remaining 24.7% is influenced by other variables not included in this research model.

The suggestions of this research are as follow:
(a) To the subsequent researchers. With the percentage results of 24.7% is influenced by other variables not included in this research model. It is necessary to conduct further research to determine the factors that could affect the timeliness of financial reporting in addition to the HR competence, information technology utilization, financial control, and internal accounting control in order to know more any factors that affect the financial reporting timeliness. (b) The results indicate that the variable of HR competence, information technology utilization, financial control, and accounting internal control is able to explain the factors that affect the financial reporting timeliness significantly. Thus, the management in order to maximize the financial reporting timeliness is expected to focus on these variables and can further optimize it again. And do not overlook other variables that also affect the financial reporting timeliness.

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THE NAROTAMA FUND MANAGEMENT BASED ON THE ACCREDITATION OF BAN-PT

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Abstract. Accreditation is done by BAN-PT to all universities in Indonesia. Evaluation of the quality the higher education institutions. Financing is a reference standard of excellence the quality of provision and management of funds, facilities, and infrastructure required for the implementation of programs in the realization of the vision, the organization's mission, and goal attainment college. The Narotama fund management have complete documents include receipts planning and funding allocation, reporting, auditing, monitoring and evaluation, accountability to stakeholders.

Keywords: higher education institutions, accountability, auditing

I. INTRODUCTION

Accreditation of higher education institutions is a process of assessment of the institution as a whole to determine the institution's commitment to the institutional capacity and effectiveness of education, which is based on accreditation standards that have been set. Accreditation is done by BAN-PT to all universities in Indonesia. Evaluation of the quality of the performance of higher education institutions is done through an assessment of the accreditation forms and self-evaluation report by the higher education institution assessor team consisting of a variety of related expertise of experienced and understand the nature of the organization of universities, both in the academic and management fields. Accreditation is a tool to collect and disclose data and information used to assess the feasibility and quality of higher education institutions. Self-evaluation an attempt by higher education institutions to find a picture of the performance and the state itself through assessment and analysis conducted by higher education institutions themselves. Assessment and analysis that can be implemented by utilizing peer expert from outside the university, so that selfevaluation can be carried out objectively. The results of self-evaluation was used to improve product performance and higher education institutions. All universities are accredited on a regular basis. In accordance with the quality assurance cycle, the accreditation activities begin with a self-evaluation by the institution itself. The team of assessors assess the adequacy of the accreditation forms and self-evaluation report compiled by a higher education institution, followed by a field assessment. Financing is a reference standard of excellence the quality of provision and management of funds, facilities, and infrastructure required for the implementation of programs in the realization of the vision, the organization's mission, and goal attainment college. Financing is the business of supplying, managing and upgrading an adequate budget to support the implementation of programs of academic quality in higher education as a nonprofit corporation. The fund management higher education institutions should be reflected in the document about the planning process, receiving, allocation, reporting, auditing, monitoring, and evaluation, as well as the accountability to stakeholders through a mechanism that is transparent and accountable. The process of managing funds higher education institutions ranging from

planning, receiving, allocation, reporting, auditing, monitoring and evaluation, and accountability to stakeholders. Document management of funds, include: (1) planning the reception and allocation of funds; (2) reporting; (3) audit; (4) Monitoring and Evaluation; (5) liability of stakeholders

II. METHODOLOGY AND ANALYSIS

The Narotama fund management have complete documents include receipts Planning and funding allocation, reporting, auditing, monitoring and evaluation, accountability to stakeholders. Revenues planning and funding allocation Narotama refers to: (1) Article 84 of the Statute Chapter XIII of 2012 on Financing Narotama; (2) RIP Narotama 2005, the period 2011-2015, Chapter VI of the Plan Fees; (3) The procedure refers to the quality of ISO 9001: 2008, by Global Group Cert Certification Body of Registration No. QS 327598WA March 2, 2016. The procedure is the quality of the financial unit Narotama published on 12 March 2012, the PM-KEU-01 Annual Budgetary Procedure, PM-KEU-02 Acceptance procedure, PM-KEU-03 Filing and Payment Procedures Routine Budget , PM-KEU-04 Procedure And Payroll, PMKEU-05 Procedure Financial Statements, PM-KEU-06 Procedure Costing Education; (4) SK Foundation No. 115 / KPTS / YPGP / xi1 / 2012, SK Foundation 135 / KPTS / YPGP / xi1 / 2013, SK Foundation No. 145 / K / YP / D3 / xi1 / 2014, on the Annual Budget Plan (RAT), which includes revenue plan and a plan for allocating funds to the period January 1 to December 31 for the years 2013, 2014 and 2015.

The planning process refers to the management of funds Narotama Procedure preparation of Annual Budget (PM-KEU-01), embodied in Plan Annual Budget (RAT) Narotama which includes Plan Students and Alumni, Plan Revenue, expenditure planning, the preparation process begins filing Faculties and Units, approved by the Rector and submitted Rector to Pawiyatan Gita Patria Foundation (Operator Law Firm Narotama).

Acceptance of the plan, based on the planning of education expenses, based on the study and analysis of the cost of private higher education in the city of Surabaya that has been carried out and proposed by the Rector for approval of Pawiyatan Gita Patria Foundation. Rates Education Costs include tuition fees,

initiation fees, enrollment fees, thesis / theses, SK about the cost of education published by Pawiyatan Gita Patria Foundation annually per January 1 applies to new students in the set. Rates of tuition fees became the basis for calculating revenue plan in preparation of the annual budget plan. SK Foundation No. 117 / KPTS / YPGP / 03 / XII / 2012 dated December 31, 2012, the SK Foundation No. 186 / KPTS / YPGP / 03 / XII / 2013 dated December 23, 2013, the SK Foundation No. 142 / KPTS / YPGP / 03XII / 2014 dated December 29, 2014, the SK Foundation No. 89 / K / YP / 03 / X / 2015 dated October 31, 2015 Concerning Determination Unit Cost of Education environment Narotama which includes Money Registration, Initial, Tuition, Money Heregistrasi, Money Exam, Money Thesis, Money Thesis (student of S-2), Practical money, money laboratories and delay penalties. With reference to the rates of financial planning is sourced receipt of payment. Financial community contributions and cooperation are calculated based on the planning of each unit in question, namely LPPM, RGU and foundation business units involved.

Planned expenditures refer to expenditures of each unit and faculty in the previous year and coupled with the plan of development programs on the period of the proposed charges and tariff adjustments prevailing in the market. The plan covers expenses Salaries and Wages Cost Plan, Operating Expenses Tri Dharma College, Campus Operational Costs, Costs Infrastructure Development, ICT Development Plan, Cost Installment Debt / credit.

Annual Budget Plan (RAT) Narotama arranged with the period 1 January to 31 December each year. Preparation of RAT starts of the proposal at the level of Prodi per October 30 through the process of study and analysis and dissemination at the Working Meeting Prodi then performed Faculty per 15 November and compiled and approved at the university level as of 30 November and decided at the level of the Foundation after a supervisory board per December 27 subsequently uploaded to the financial Information System (SIF) with the web address: <https://simnaro.narotama.ac.id/finansial/> as financial operational reference period of the current year, include: (1) SK Foundation No.115/KPTS/YPGP/XII/2012, the Annual Budget Plan (RAT) Period January 1, 2013 - 31 December, 2013 in Narotama; (2) SK Foundation No. 135/KPTS/YPGP/XII/2013, the Annual Budget Plan (RAT) Period January 1, 2014 - 31 December 2014 Narotama; (3) SK Foundation No 145/KPTS/YPGP/XII/2014, the Annual Budget Plan (RAT) Period January 1, 2015 - 31 December 2015

Financial Admission Process in Narotama refers to financial Acceptance Procedures (PM -KEU-02) which includes: (1) Payment of registration for new students consisting of the registration fee and admission fee. The registration fee is one of the requirements for the issuance of NIM in the academic; (2) Payment of education, tuition, money paper / thesis, graduated money, and money graduation; (3) Acceptance of the grant money, collaboration, business unit and help communities

Finance Acceptance of students to be non-cash through bank accounts in the name of Gita Patria Foundation at Bank BNI and Bank Syariah Mandiri through EDC and transfer. If students make a payment in cash in accordance with the financial cashier SK Foundation No. 89 / K / YP / 03 / X /

2015 it imposed a fine of Rp. 25.000, -. Payment system integrated student financial Narotama the Financial Information System (SIF) and the Academic Information Systems (SIKAD). Acceptance is based bill payment student cost of education according to the SK Foundation on Education Costs, published annually as of January 1. Student Tuition Fee Registration consists of Money, MOM, Initial, Transfer, Heregistrasi, Tuition, Practical, Exam, KKM, Thesis, Graduation. Based on the total bill, students pay tuition fees in two ways: through the checkout University cash deposit or pay via bank facilities ie cash deposits, Internet Banking or ATM. Cash Receipts deposited in the account on behalf of the Foundation Pawiyatan Gita Patria. Reception financial sources other than student is Higher Education Grants, Local Government, Community Support, Mini Market, Cafeteria, Studio Music, Copy, Narpress, Narotama language Center (NLC) deposited into the account specified by the Foundation Procedure and Payment Routine Budget PM-KEU -03, PM-KEU-04 Procedure and Payroll, PM-KEU-05 Procedure Financial Statements. The process of allocating funds Narotama designed based on quality procedures PM-KEU-01 Budgetary procedure Annual (RAT) which is based on the period beginning on January 1 and ends on December 31 each year. The funding allocation includes the cost of salaries and honoraria, fees of Tri Darma, operating costs and development of the university campus and the installment payments / credits. The processes of implementation and use of funds refer Procedure and Payment Routine Budget PM-KEU-03, which is implemented by the Information Systems Finance (SIF) which at Prodi, faculty and units in the University is set in the weekly period with reference to the ceiling Budget Plan the annual pre-set. Weekly budget submission of faculties and units made through the Financial Information System (SIF) in online system with the filing deadline on Saturday 1-week period and was decided at the meeting of the Rector Monday at 10.00 s / d 12:00. Faculty and units shall conduct SPJ within 1 week, prior to the filing period, if not SPJ then automatically block the filing of the financial system next week and submission can not be done. Meeting the rector Every Monday to decide on filing approved and paid during the period of the week. The results of the meeting proposed by the Rector made dropping into the Foundation's budget. Based on the weekly budget finance department did dropping to faculty and units within Narotama as UUDP (money to be accounted for). Furthermore, accountability must be done before the filing of the following week. The financial statements in University Narotama and Pawiyatan Gita Patria Foundation refers to the periodic system, monthly reports and annual reports, and audit reports by a certified public accounting firm by the Ministry of Finance of the Republic of Indonesia. Monthly And Annual Report, report periodically performed every month by the finance department Narotama covering the Cash Flow Statement and Statement of Financial Activities by reference to quality procedures, financial-KEU PM-05, Procedure Financial Statements. Internal reporting process starting from the SPJ report unit budget users, checking the validity of the documents by the head of the Financial Monitoring and Evaluation. Ka. Financial Money do SPJ received verification of the truth of the units, and if the report is correct then the document SPJ report data inputted to the Financial

Information System (SIF) by the accounting department Narotama at the web address: <https://simnaro.narotama.ac.id/financial/>. Once the data is entered by the SPJ accounting department and makes validation on input data, the SIF will display the internal financial reports in real-time, and can be used by officials in the Narotama accordance with access rights owned by each user. Unit Faculty can access the report on the budget, the Rector and the Foundation can access usage reports for budgeting, cash flow statement and statement of financial activities. Besides the financial system also provides reports daily payments, student tuition billing statement, report the use of the budget each unit in Narotama. Independent Auditor's Report by Public Accounting Firm (KAP), which received license finance department. The report by the public accounting firm starting from the signing of the audit were made in each financial year. After a labor contract agreed upon finance department prepares the purposes of data to support the audit process, and if the process is running all of the financial statements issued by public no later than 6 months after the year ends. The process of implementation of financial audits independently by Public Accounting Firm (KAP) registered conducted regularly every year. The audit report was done by following the calendar year period that begins on January 1 and ends on December 31. Examination of Public Accounting Firm (KAP) using the basic principles of accounting, especially for educational institutions and foundations. Purposes of data that needs to be prepared refers demand consultant's office as follows: (1) the Financial Statements period January 1- December 31; (2) changes in the last Deed (if any); (3) The Bank credit agreement; (4) Current Account bank January 1-December 31; (5) Book Bank January 1-December 31; (6) Cards student accounts, employee receivables, other receivables January 1-December 31; (7) Card and event news supplies January 1-December 31; (8) Proof of insurance premium January 1-December 31; (9) Proof of the lease agreement canteen January 1-December 31; (10) Any additional details a list of fixed assets January 1-December 31; (11) User fees must be paid January 1-December 31; (12) Short-term debt Card January 1-December 31; (13) Register Receipts January 1-December 31; (14) Book Spending January 1-December 31; (15) Book of income and expense outside the business January 1 s / d December 31; (16) The ledger January 1-December 31; (17) SPT period, SSP pph21 January 1- December 31; (18) SSP section 25, 23, 22, January 1-December 31

Monitoring and evaluation conducted by the Quality Assurance Agency (BPM) Finance. Monitoring and evaluation process based on the Financial Information System (SIF) that is integrated with Academic Systems, HR Systems and Quality Assurance System. Monitoring and evaluation processes refer to the Annual Budget Plan, whose value has been entered on the Financial Information Systems sub-system annual budget plan. The process of monitoring and evaluation done on the budget submission process, process payments on budget and reporting processes. The budget submission process is carried out conformity control budget items and the number of filings is already in line and has received approval of the leadership. Each officer has a unit of username, password, and Chart of Accounts (COA) that is setup for each user to access the Financial Information System (SIF). In the process of accessing the COA filing unit and the

system displays the budget ceiling, the amount of the budget that has been used and stuffing filing period filed. M & E (Monitoring and Evaluation) on the process of the budget payments made to amount paid is in conformity with the specifications of the goods ordered and paid at the appropriate company. Payments to providers of goods and services are done principle of non-cash payment by Internet Banking transactions to reduce the risk posed, such as street crime, transportation costs and other costs incurred. In the process of reporting done on the suitability money files a report done by the financial oversight. With this system it is expected that the process error can be identified as early as possible and does not result in financial losses for the Narotama. Results of budget realization reports and internal financial performance reports in real-time online can be accessed by the competent authority through the Financial Information System (SIF). Independent audit reports are presented annually published in April, and reported to the foundation as well as published on the website Narotama www.narotama.ac.id/index.php/laporan_keuangan/.

III. CONCLUSION

Document processes fund management institutions, is very complete and is based Realtime-Online System, includes five documents: (1) planning the reception and allocation of funds; (2) reporting; (3) audit; (4) monitoring and evaluation; (5) accountability to stakeholders

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THE POWER OF ARBITRIAN CLAUSE IN AN AGREEMENT AS A CHOICE OF LAW TO RESOLVE THE BUSINESS DISPUTE

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Abstract. In business relationship there is always any possibility that the dispute occurred between the parties. So, to anticipate that problem the parties can choose arbitration as the choice of law in their contract. This research type is normative juridical research, and the data used for this research are some legislations, documents and books relating arbitration. The result of this research revealed that Article 11 point 1 in Arbitration and Alternative Dispute Resolution Act., states, that the existence of an arbitration agreement in the contract can eliminate the right of the parties to submit the dispute or the difference of opinion about the agreement to the District Court. Based on that regulation for the contract, which is the parties has been declared the arbitration as a choice of law to resolve the problem between the parties has the legally enforcement, and the judge has not the jurisdiction to resolve that case

Keywords: Law, arbitrian clause, business

I. INTRODUCTION

In a business relationship, there is the possibility of disputes. The potential occurrence of a dispute of a relationship binis or the agreement, can be anticipated by determining if there is a dispute settlement. As for how penyelesaian disputes that occur in a business relationship or agreement can be reached through litigation (court) and to track non-litigation (court settlement).

One way of resolving disputes arising from a business relationship or agreement is using the arbitration settlement. In Article 1 paragraph 1 of Law No. 30 of 1999 on Arbitration and Alternative Dispute Resolution stated that arbitration is the way of the settlement of civil disputes outside the public courts based on the arbitration agreement made in writing by the parties to the dispute.

The parties to a business relationship or agreement may specify arbitrase as a means of settlement in case of disputes between them, which can be drawn as one of the clauses in the agreement that meeka agreed. However, it is possible just happened, at the time of execution of the agreement one party feels aggrieved by the other party and then prefer to file a lawsuit in district court.

Based on the above authors were interested in doing research in the form of a scientific paper titled "The Power Of Arbitration Clause In An Agreement As A Choice Of Law To Resolve The Business Dispute".

The research objective

The formulation of the problem in writing a scientific paper are: How is the power of an arbitration clause in a treaty as a legal option for dispute resolution business?

II. METHOD

This research is made using review some journal, article some literatures and analyzing data of quality assurance in higher educational institutions. Description of quality assurance of higher educational institutions have collected from some literature to defining quality assurance of higher educational institutions. Practical analyzing of Rasch model using raw sample data from 26 students to introduce analyzing evaluation of quality assurance and to introduce how to analyze data quality assurance from experiment using Rasch model.

This study is normative because it uses secondary data, or is often called the research literature. Normative legal research is the study of law that lays down the law as a system of building norms. Norm system in question is about the principles, norms, rules of legislation, court decisions, agreements and doctrines (teachings). Secondary data used in this study include legislation relating to bankruptcy, documents and writings relating to the cases studied.

Data analysis method used in this research is descriptive qualitative, which means that the author will present and explain the data obtained from the study of literature, which is manifested in a logical and systematic description. After the ingredients are necessary legal collected, the next step is making an analysis to clarify the settlement of the problem, then the conclusions are drawn deductively, from the general to the specific nature of things. At this stage, the legal materials are done and utilized in such a way to successfully conclude the truth of which can be used to address the issues raised in the study.

III. DISCUSSION

As has been described above are business disputes can be resolved through litigation or court, but as it is known in the dispute resolution process in court would lead to the assumption that only one party who feels the party won while others feel as losers. Those who feel lost tersebut can make an appeal, then if one of the parties to the dispute is not satisfied can do cassation and can proceed with legal actions reconsideration, so that the dispute settlement process would require a relatively long time.

Therefore, of course completion through the judiciary especially for traders less attractive, as well as put forward by Ridwan Khairandy that in its development, especially relating the transaction (cooperation) field of international trade, dispute resolution through the courts less desirable by the parties dispute. It is caused by the presence of several factors, among them :

1. The length of the proceedings in the trial of a civil case settlement;
2. The duration of dispute resolution can also be caused by the length of the stages of dispute resolution,
3. The long and lengthy process of dispute resolution through the courts would have disastrous consequences associated with high costs required;
4. The trial in the District Court conducted openly, whereas on the other hand secrecy is something that takes precedence in commercial activities;
5. often judge handling or resolving disputes in a less controlled substance trade dispute law in question or in other words the judge considered less professional, and their unfavorable image to the world of Indonesian justice.

For that reason the party experiencing the dispute in a business relationship or agreement, preferring to resolve disputes through non-litigation business, where one of the ways resolver can be selected through the dispute resolution business arbitrase method.

Arbitration is an arrangement for taking an abiding by the judgment of the selected persons in some disputed matter, instead of carrying it to establish Tribunals of justice, and is intended to avoid the formalities, the delay, the expense and vexation of ordinary litigation. The term arbitrage (arbitrage = arbitration) is derived from the Latin, which is arbitrary which means a settlement or termination of the dispute by a judge (arbitrator) or judges (arbitrators) based persetujuan that they abide and obey the decision given by the judge or judges them select or appoint them.

In the literature, found several arbitration limits put forward by legal experts, among which are :

1. Frank and Edna Elkoury Elkoury in his book "How Arbitration Works" stated that arbitration is a process that is easy or simple chosen by the parties voluntarily wants his case decided by the parties voluntarily wants his case decided by the arbitrator who neutral according to their choice where their decision based on the arguments in the case. The parties agreed from the outset to accept the decision as final and binding.
2. Gary Goodpaster, argued as follows: "Arbitration is the private adjudication of Disputes parties, anticipating possible Disputes or experiencing an actual dispute,

agree to submit Reviews their dispute to a decision maker in some fashion they select."

3. Subekti, said that arbitration is the completion or termination of the dispute by a judge or judges a person based on the agreement that the parties will be subject to or abide by the decision given by the judge or judges who they select or appoint them.
4. Priyatna Abdurrasid argued that arbitration is a process probes a dispute that is done in a judicial manner as desired by the parties to the dispute, and the solution will be based on the evidence submitted by the parties.
5. M.N. Purwosutjipto stated that refereeing is a justice of peace in which the parties agree that their dispute about their personal rights can be fully controlled, inspected and judged by an impartial judge, appointed by the parties themselves and the verdict is binding for both parties.

In general, arbitration institutions have advantages compared with the judiciary. Advantages include :

1. guarantee the confidentiality of the dispute of the parties;
2. unavoidable delays caused by procedural and administrative;
3. The parties may choose arbitrators who he believes have the knowledge, experience as well as sufficient background on the issues in dispute and fair;
4. The parties may determine the choice of law to resolve the problem as well as the process and place of the arbitration; and
5. The arbitrator's decision is a decision which is binding on the parties and through the procedure (procedure) simple games can be immediately implemented.

As for the dispute to be resolved through arbitration stipulated in Article 5 (1) of Law No. 30 of 1999 states that: "Disputes can be settled by arbitration only disputes in the field of trade and the rights under the laws and regulations fully occupied by the parties to the dispute.

Based on the advantages offered in the settlement of business disputes through arbitration, the parties are engaged in a business relationship or agreement, decided to choose the path of arbitration as a means of solving the event of a dispute between them as outlined in one of the clauses in the agreement that they agreed.

Article 3 of Law No. 30 of 1999 stipulates that the District Court was not authorized to adjudicate disputes that have bound the parties in the arbitration agreement. Furthermore, as for what is meant by the arbitration agreement is an agreement in the form of the arbitration clause contained in a written agreement made by the parties before a dispute arises, or a separate arbitration agreement made by the parties after a dispute arises.

Based on the above it can be known that the arbitration clause contained in an agreement that has been agreed upon as a means of solving business disputes, binding on the parties in the agreement, even courts do not have authority over business disputes which have been agreed to be settled by way of arbitration.

Furthermore, the judgment on the dispute penyelesaian of a business relationship or agreements settled through arbitration has the force of law is final and binding, as stipulated in Article 60 of Law No. 30 of 1999, namely:

"The award is final and has permanent legal force and binding on the parties".

IV. CONCLUSIONS

Based on the formulation of the problem in this research can be seen that the arbitration clause agreed to by the parties as a choice of law in the resolution of business disputes have binding legal force, even courts do not have kewenangan for dealing with cases of business disputes if the parties have previously agreed klausul arbitration agreement as choice of law in the resolution of business disputes among them as stipulated in Article 3 of law No. 30 of 1999 on Arbitration and Alternative dispute Resolution.

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THE SUCCESS OF HATCHING DUCK'S EGG IN PETIK MAS PROGRAM AT PADANG

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Abstract. Results of the public service in the Petik Mas Program in Padang was processed be a result of research, it is purposed to find out the successing of farmer groups in hatching our duck's eggs by using the hatched machine that made byself in improving well-being and become a system in prosperous of suburban society or poor community in a short time (1-3 months). This research was using experimental methods with experimental design RAL (Complete Random Design) which consists of 3 treatments repeated 3 times. The first treatment is carried out by a group of first farmers partner, second Treatment is carried out by a group of second farmer partners, and the third treatments was done by Bachelors of the farm who have had experience in hatching of ducks. The results of the research was shown that the treatment of Variant (hatching) ascendant was give effect ($p < 0.05$) toward the percentage of hatching in Petik Mas Program. The conclusion of this research, the hatching organizer was affect to percentage of hatching and the number of eggs that are fertile.

Keywords: Duck, hatching mechine, improving well-being, petik mas.

I. INTRODUCTION

Petik Mas program (Hatching duck flocks to prosper society) of farmers groups at Padang. The groups are devided to two group: A and B group. It is a system in increasing well-being society of farmers or suburban society groups. This system is implemented by giving 100 of duck for each farmer that was ready to lay, and the breeders are trained to know the Sapta livestock business, that are; the selection of DOD (the old duck), management breeding of duck, how to make a feed formula, making the good stable, livestock disease, and livestock marketing. Then the breeders are taught to make their own hatching machine, it was hoped they are be able to hatch the eggs that they have. It is also function to get DOD, to sold or to growed up in increasing the number of duck they have.

The livestock were selected in the Petik Mas program is duck, it caused by it has a high adaptation environment, put up with disease, the death rate was low than chicken (Mulatsih, et al, 2010). According to Haqiqi (2008) states, the number of ducks egg production was longer than chicken, it has low hatch so need to brooded by using hatching machine automatically which has the great ability to hatching, practically, efficient energy and high hatching capacity. The automatic hatching machine need stability temperature around 98-102 ° F, the humidity machine around 70%, and the egg is rotated 3 times in 24 hours (it around at 8:00 pm, at 13.00 hours and 20.00 wib) Rica 2015.

Two groups of the farmer were taught how to hatch the eggs that they have produce by using hatching machine with a capacity 200 of eggs. The experience in hatching egg of duck will affect to the hatching result. Anonimous (2010) was concluded that, the success of hatching by using

machine was influenced by operator (experience), machine, and egg.

The percentase of hatching is the number of eggs that was succeeded in slit from eggshell of fertile eggs that was taked in hatching machine. According to Sutyono and Krismiati (2006), the hatching capacity were affected by the egg that provided for hatching, genetics factors, temperature, humidity of machine, age of mother duck, fertile of egg, eggs size, and eggs hygienic. Hodgetts (2000) States that, the temperature and humidity of machine is an important factor to incubate of embryo and hatching success.

Based on the description above, the researcher needs to conduct a research with the title the success of Hatching Ducks in Petik Mas Program at Padang.

A. The purpose of the Research:

1. To know the hatching capacity, embryo mortality, result of of hatched that was done by farmer group than animal husbandary Bachelor.
2. To know the breeders ability of farmers group in produce DOD and hatching machine productivity they have.

B. The Significance of the Research:

The benefit of this research is to know the farmers group ability in implementing the hatching duck to improve the prosperity Petik Mas Program at Padang.

II. METHOD

This research was done by experimental methods with the observed variables is hatch capacity, result, and the hatch egg mortality. The design is used in this research is a Random complete Design with 3 treatment and each treatment was repeated three times. The treatment consists of: P1 = Hatching was done by A groups of farmer, P2 =

Hatching was done by B groups of farmer, P3 = Hatching was done by Bachelor of animal husbandry groups. The data were analyzed by using the variants analysis. The tests was done by using T test.

The implementation of hatching was done after two of the group are taught how to choose the eggs, management of using machine, and hatching by using the same shape and size of machine. Feed of the ducks is given to farmers group that have given 3 times a day. The feed that is given consists of; bran, snails, fish meal, and expired bread. While the Bachelors group is produced by own of Feeds and mixed it with snails and expired bread. The egg was collected within 5 days. Changed the position was done 3 times a day. Candling was done on the 7th and the 14th, and the end of hatching was done spraying to keep the humidity inside of machine. The egg was cleaned and weighed in the group amount to 50 granule.

The formula of hatching capacity, mortality, and results are as follows:

Hatching capacity :

$$DT = \frac{\text{The number of eggs that hatch}}{\text{The number of eggs that fertil}} \times 100\%$$

Embryos Mortality:

$$ME = \frac{\text{The number of eggs that death}}{\text{The number of eggs that fertil}} \times 100\%$$

Hatch Results:

$$HT = \frac{\text{The number of eggs that hatch}}{\text{The number of eggs that hatched}} \times 100\%$$

III. DISCUSSION

The result of this research on the Petik Mas Program about results hatching capacity, mortality of embryos and result of hatching the ducks egg can be seen in Table 1.

Variabel	Implementing of Hatching			significanc e
	Farmers Group Partners A	Farmers Group Partners B	Animal husbandary scholar	
Hatch capacity (%)	0,9281 a	0,9381 a	0,9581 a	P<0,05
Embryo Mortality (%)	0,0881 a	0,9381 a	0,9581 a	P>0,05
Hatching Results (%)	0,75 a	0,81 a	0,84 a	P>0,05

A. Hatching capacity

The result calculation of the research in table 1, it can be seen that the hatching capacity was implemented by the

Bachelors of animal husbandry (95%) was higher than that carried out by farmer groups of partner A and B (92% and 91%). It shows that the experience of bachelors animal husbandry in getting hatching capacity was better than two of farmers group who was trained in the Petik Mas Program. The Farmers Group in the Petik Mas Program have got the hatching capacity that was closed to breeders who have been doing the usual hatching. According to Rarasati (2002), the other factors was influenced the high or low of hatching capacity are; weight of eggs, long retention of egg, and fertility. Rica (2015) States that, the quality of the hatching capacity such as shape of the eggs, thickness and smoothness shells of eggs. The weight of the eggs that was hatched by farmers ranged from 61-63 grams when the duck was already producing 2 months. According to Wulandari (2005), the hatching of eggs should weight 65-75 grams/grains when the production of the ducks already stability to lay.

B. Embryonic Mortality

Based on variant analysis is shown that the treatment of hatching that was done by farmer group is gave affect ($p>0,05\%$) toward Embryo mortality. The estimate embryo mortality of farmers A and B groups is around 8% and 7%. If it is compared, the bachelor was got lower 5% than farmer group (table 1). It is the best result from hakim statement, et al (2008), the states that the arab's chicken egg that was be old 7 days and produces of mortality around 44,2%. in this research was got Embryo mortality around 43,3%. It is better caused by the eggs are used in this research was less than 5 days. While the egg that is used by hakim in his research is 7 days. This theory also support by Iskandar (2003), stated that the mortality in hatching process was influenced by the age of egg, the longer deposited of the eggs could be affect result in the decomposition of organic matter.

The mortality obtained in hatching can be caused by too low humidity in the machine and machine's temperature is high at the end of the hatching. Air humidity function to reduce or keep fluids in the eggs and brittle the eggshell. From the beginning of the study, the temperature of the machine was keeps between 98 ° F to 102 ° F so that hatching can be done with satisfactory results. Hodgtts (2000), the standard of hatching temperature 36 ° C-39 ° C, the young embryos are very sensitive to changes of temperature during incubation and it should not be hotter or cooler 2°C from the standart temperature. Hamdi (1991) also state that, if there is a decrease in temperature in long time, the eggs will hatch is slower than 21 days and if occur the increase temperature is more high than normal, so the embryo would experience dehydration and will die.

The humidity inside of the machine must be keep secure with good in optimal condition, if the humidity is not optimal, so the embryo is not able to slit eggshell which is too hard. According to Rusandih (2001), most of the embryos which is hatched found dead around the 22 to 27 during the incubation. It commonly called a dead-in-shell and divided into three categories; The first category, the embryo grows and develops normally, but it has not effort to break through the eggshell. This categories commonly dead on day 28. The second category is dead on the same day, but it shows the characteristics of a flat beak and curved with oedema and bleeding in the muscle of the back part of the

head of the hatching. The incident is the sustainable impact of the embryo in break down the eggshell was failed. The third category is death around the 22 to 28 of days. The deaths in this category due to the fault position during developing, so it inhibits the embryo to get out of eggshell. According to Wineland (2000), the humidity will be stable if water supplies in the basin should always be available and adequate.

C. The Results of Hatching

Based on the research that has been carried out that the hatching treatment from a group of partners gave affect on real ($P > 0.05$) toward hatching results. The hatching result that was got is around 75%, 81% and 84% from hatching. While the estimated of hatching result around 49,5% to 3,09% from the percentage of hatching result each treatment A group, B group, and Bachelor group (table 1). The highest hatching result is shown by Bachelors is followed by B group and A group. It shown that the knowledge and experience greatly affects to results of hatching duck eggs on the Petik Mas Program.

According to Rukmana (2003) the factors that was gave affect to hatching are the source of descendant among other things, a hereditary trait in producing sperm and egg cells must be of a superior duck as well as the influence of food due to the deficiency of vitamins (A, B2, B12, D, E and pantothenat acid may cause reduced egg hatching capacity). Rasyaf, (1990), states that the rotation of eggs will be able to increase the hatching capacity. According to Haryoto (1999), the failure of hatching also caused by the rent of age is too young or too old. The success of hatching is influenced by big or small the eggs that will be hatched, and the weight of eggs that will be hatched should be equal, places and prolonged storage were appropriately (Shanaway (1994).

IV. CONCLUSIONS

Based on the results of the research it can be concluded that the success of hatching farmer group in Petik Mas program have comparable with the Bachelor's group. This result is shown that hatching capacity, mortality, and hatching results have closed with Bachelor group. It hoped to Farmers Group at Petik Mas Program can improve the welfare of their group

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UTILIZATION OF RUPIAHS CURRENCY IN JAGOI BABANG BORDER

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Abstract. This study discusses the usage amount in the activities of buying and selling in the Border Region NKRI particularly in district Jagoi Babang Bengkayang, Bengkayang Regency. This study using a qualitative method use depth interviews with community leaders who are competent with the economic problems that exist in the District Jagoi Babang Bengkayang, in Bengkayang regency. In Jagoi Babang District, Bengkayang Regency existence more widely used ringgit currency than Rupiahs. In fact, users do not other than a citizen of Indonesia. But there are no financial institutions in the District Jagoi Babang, Bengkayang regency and also their market share in Malaysia then they prefer choose other currency as a legal tender. The existence of the neighbour currency more widely used in Indonesia obviously is a National Security issue in economics. The aim of the research that want to be achieved is, described and discover the cause of using ringgit currency in every transactions by the community of Jagoi Babang District and the impact.

Keyword: rupiah, the border communities.

I. INTRODUCTION

The border areas of countries are a very important area for national defense and security. West Kalimantan is a border of NKRI and the Malaysian that holds the potential of natural resources, but the potential has not used so not to encourage self-reliance of local communities. Susilo (2008) found that the majority of people in the border areas of Kalimantan living below the poverty line. They are difficult to reach the nearest town and the construction of facilities that they are seriously inadequate, live in poverty, and trade activities dependent on Malaysia. In the area of Indonesia-Malaysia border decline of nationalism, local people interact more with citizens in neighboring countries and was blown away by the ringgit, TV broadcast and radio, telephone access and transport, and also venture capital is more easily obtained from the State Malaysia.

Indonesian people who live in Indonesia-Malaysia border life depends on the state of Malaysia, it is triggered due to lack of facilities in the border areas of Indonesia whereas the better conditions of the community in the border area of Malaysia. Observing these conditions, the population administration and management of the lives of citizens in the border need to be considered (Srebro & Shosany, 2006). The theory of the formation of the border need to be used to analyze errors border management so can make lagging regions more dependent with the State Malaysia than the State Indonesia.

Socio-economic conditions in the border sinking resulted in local communities dependent on neighboring countries. In turn, the reliance on neighboring countries result decrease of the nationalism sense. In this study the definition as feel of possesses to have a nation or a love for his country, so-called "nationalism". Nationalism, according to Smith

(2001: 11), arising from the desire of individuals to be part of a nation; nationalism is also shaped by heredity so that even if someone had migrated he remains a part of the nation. Opinions about nationalism were used in this study as a tool for determining the influence of socio-economic problems towards the sense of nationalism in the border areas of the country.

Patton (2009) in his research about the border in East Kalimantan-Malaysia explained that the lack of attention to the development of border regions resulted a negative impact on the country's sovereignty, resistance and ideology of the nation, the waning national awareness of both aspects of the political, economic, social, cultural, and defense and security for the people in the border areas of the country. Based on these studies it is known that in the border areas that do not get the attention tends to be a crisis of nationalism.

Such conditions are also found in districts Jagoi Babang. District of Jagoi Babang is one sub-district-owned land borders of Indonesia which located in the district of West Kalimantan Bengkayang Region. The problems were so complex that faced in the border area is a geographic location that is not profitable and far from urban settlements; lack of transport facilities and infrastructure and communication resulting this region isolated from economic and social activity, because of the lack of transportation resulted in the primary needs to be expensive and on the other hand the results of people production. However, the condition is inversely proportional to the border areas in Malaysia, where transport and pre advice means of survival and road access more easily reached. This is what triggered the society District Jagoi Babang are more likely to trade with neighboring countries (Serikin- Malaysia). Sub-district

community Jagoi Babang more dominant interact with the community neighboring countries (Serikin- Malaysia) in everyday life, to fill basic material needs of survival.

Wibowo (2012) explained that people in border areas are more likely to sell produce to the region Serikin - Malaysia, in addition to the public in Jagoi Babang prefer to bring or buy directly from Serikin-Malaysia. This condition must lead to the use of the grounds ringgit currency more efficiently. Most of the results of natural resources owned by the District Jagoi Babang Serikin trafficked to Malaysia, arguing that the relative distance is closer than heading to other regions in Indonesia, namely to the market or Bengkayang city. Lack of infrastructure in the district Jagoi Babang such as transportation facilities, transportation, and communication requires public Jagoi more dominant Babang choose to Serikin Malaysia to make ends meet. To conduct such transactions, public Jagoi Babang use ringgit currency as a payment when transaction in the Serikin market (Malaysia). The results of field studies and interviews with several people in Jagoi Babang show that more people use the ringgit currency rather than currency. The condition is triggered by reasons facilitate transactions, the use of ringgit currency also dominated the transactions that occur traditional market and stalls in Sub Jagoi Babang, even the prices of goods in kiosks Jagoi Babang pegged or labeled in currency values ringgit, Due to the value of the ringgit was higher than currency.

Further Wibowo explained that since before the country's independence, the interaction between communities in the border Indonesia region and Malaysia has been established. Geographical conditions also contributed to the causes of these interactions. This shows that it has long been the public in Jagoi Babang recognize two types of currencies namely rupiah and ringgit. Geographical conditions that support the establishment of communication and long distance when compared with urban areas it is not wrong if then people Jagoi Babang sack live in Malaysia and they are more likely to use the Malaysian ringgit. The survey showed that about 50% of people Jagoi Babang using ringgit currency of approximately 35,000 while the use of the rupiah currency as a medium of exchange is only about 50% of the total circulation of money. In the process of storage or saving in a bank, Jagoi Babang's use Rupiahs. Based on Laws No. 3 of 2004, that the currency of the Republic of Indonesia is the rupiah (Rp). Rupiah currency is legal tender in the territory of the Republic of Indonesia. In its function as legal tender, then any activity using money or has the purpose of payment or obligation must be filled with money if committed in the territory of the Republic of Indonesia.

The reasons for selecting the place in this research because the District Jagoi Babang as one of the entrances Indonesia or veranda leading, which should be considered is managed and organized optimally to be eligible to become a city, but in fact the District Jagoi Babang very far behind when compared to the city neighboring countries thus resulting in social inequality on the border, resulting in border communities are more likely to interact with the

community neighboring countries in terms of socioeconomic and use the ringgit currency in transactions. The reason the authors take the District Jagoi Babang, West Kalimantan is due to geographical reasons, namely that these districts are directly bordered by Serikin-Malaysia. The purpose of this study that to be reached is to describe and determine the causes of the District community Jagoi Babang using ringgit currency in transactions and impact.

II. RESEARCH METHOD

In this study the authors use this type of field research that seeks to delineate the factors that cause people tend to use the Jagoi Babang ringgit currency transactions. The data used in this research is secondary data and primary data, and data collection techniques that I use in this research are through a research library that is based on the books, internet and media interviews. While data analysis used is qualitative *content analysis*. Data analysis techniques in this study using qualitative data analysis method that describes and illustrates the data based on written sources that exist and the facts visible. The focus of this research is to use the ringgit currency and the impact.

III. DISCUSSION

One of the identities is the currency of a country where the currency is used as a means of dealing and is legally recognized by the state concerned. In any area, as long as the place is still under the auspices of the state, the state currency set can be used. But the different conditions experienced by some regions on the border where people are using two currencies. One of the border region in Indonesia is Jagoi Babang. Abdul (2013) states that Jagoi Babang is the point of the country, home state, front line, of the Indonesian state. This area should be a line of defense of the country, but due to many factors including the region's lagging when compared to urban areas. In everyday life Jagoi Babang use two types of currency for transactions, namely the Indonesian rupiah and the Malaysian ringgit. It is caused by factors of trade and the high value of the currency ringgit.

Trade is the relationship of economic activity between the state that is realized by a process of exchange of goods and services on a voluntary basis and mutual or all measures that aim delivered the goods for the purposes of daily life, the process of the producer to the consumer. Trade is also a process of exchange of goods and services from one region to another. Social activities emerged due to differences in the needs and available resources among regions. The economic basis of trade based on the fact that each country is different, both in the supply of resources, institutional, economic, social as well as the ability to grow and develop. That difference raises the goods produced are also differences, required fees, as well as the quality and quality, therefore it is easy to understand their country is superior and privileged in production. The economic aspect is very important role in improving the welfare of human life, including on trade.

Trade interactions between the different communities living in the border occurred long ago and naturally. Every individual has the basic necessities to continue their lives that could not be fulfilled without the help of other people so it is a need for interaction with other groups or individuals in order to fulfill basic needs. Malaysian market is potential for agriculture at the border. In addition to easy access for farmers to sell their agricultural products, also followed by a sale value is very high if compared to the domestic market. The market price in Malaysia more competitive, more expensive in terms of buying agricultural community on the border, or better for the agricultural community, so do not be surprised if we see a lot of people who sell agricultural farm and plantation all across the country (Malaysia).

The second factor is the exchange rate. In fact ringgit currency value is higher than the value of rupiah. The value of the applicable currency will be determined by market supply and demand. The high value of ringgit currency causes people Jagoi Babang more likely to use the ringgit currency transaction activities of everyday life, it affects the value of the rupiah exchange where the values of the rupiah lower. Moreover, the community needs Jagoi Babang about 70% comes from Serikin Malaysia than from urban areas in Kalimantan. In addition, the availability of employment, although through illegal procedures, not a few people from Jagoi Babang interested in working in Serikin Malaysia. In addition, much more fulfilled life needs of Serikin Malaysia make Babang Jagoi society depends on basic supplies from neighboring countries. The condition was eventually made public Jagoi Babang using ringgit currency for transactions. Certainly the use of ringgit currency continuously will eventually gave them a negative impact.

Cashmere (2008) suggested that the impact of the use of money can caused ringgit is a habit that will become a life-contingent that will be stubborn. Seeing the reality is that the conditions in the environment do support the use of ringgit currency. This of course is the duty of the government to start paying attention to regional development in the border regions, so that people can prefer to socialize in their own territory than in the neighboring countries. Usage habits ringgit currency if allowed to continue will ultimately impact on the sense of nationalism. The emergence of social jealousy will reduce nationalism in border areas will not be avoided if the governments continually ignore the conditions in the border region.

The erosion of nationalism border communities have started to appear. Evidently, the discovery of Jagoi Babang peoples who have an identity card (IC) or an identity card belonging to Indonesia and Malaysia's identity. Peoples at the border, especially adjacent to neighboring countries such as Malaysia, almost every day to hold economic contacts with the neighboring country. So do not rule out the community prefer to be in neighboring countries. Nationalism and economy are two sides of the coin are very closely related. How could a sense of nationalism that can be awakened if the quality of life of economically low, unavailability of jobs provided by the government of Indonesia.

Speaking about nationalism in the border areas closely related to national resilience where national security makes people capable of developing national strength and able to overcome all the problems and threats that come from the state from within and from outside. The national resistance would be very difficult to understand and even to apply in public life Jagoi Babang given the economic conditions are much different between Jagoi Babang and Serikin Malaysia. Environmental conditions in the region Jagoi Babang terms of economy are not as advanced as the border regions of Malaysia. The difference can be a threat to society Jagoi Babang nationalism.

Azmi (2015) states that the form of economic endurance is reflected in the living of the nation's economy conditions who contain capability to maintain stability and healthy economic dynamic and capable of create national economic independence with high competitiveness. To maintain the stability of the economy, people first have to appreciate and use the currency. However, in reality rupiah in Jagoi Babang is not as famous as the Malaysian ringgit. The inequalities in the region increasingly clear because there is no Jagoi Babang Bank. Whereas the Bank is control the circulation of currency in an area. The function of the Bank's own existence is made clear in the Banking Act Law No. 10 of 1998 which states that the bank has a role to support the implementation of national development in order to improve equity, economic growth and national stability towards improving the welfare of the people. The absence of banks in the region shows the low level of public economy in the region. Supposedly, not only in urban areas are equipped with a decent living, but in the border region into the forefront of the country should be developed on par with urban areas so that nationalism has eroded just because of jealousy, where people Jagoi Babang that every day stared directly with Serikin Malaysia should be confronted with different economic life.

A striking diversity of life over time will affect the nationalism. A sense of nationalism can be defeated only because of the need to survive and the salary offered by Malaysian higher. Differences in economic conditions are evident. Therefore, it is necessary to attract people to use Jagoi Babang rupiah. Although the local government has sought to address the use of ringgit currency, by issuing a policy does not allow or permit the public to use ringgit currency in terms of payment of the administration of the institution where there is in the area of both health centers, schools or other institutions, also required the development of the region continuously so Babang Jagoi region not far behind the urban areas, and ultimately society Jagoi Babang will begin to stop looking at the needs of neighboring countries.

IV. CONCLUSIONS

Jagoi Babang is one of the Indonesian outer sub-district which lies in the northern part of West Kalimantan. Sub-district Jagoi Babang is one of the districts bordering

with neighboring countries (Serikin) Malaysia. Geographical conditions which directly borders with neighboring countries, enables people Jagoi Babang conduct trading activities either sell or buy basic goods for daily needs of Serikin Malaysia, and the transactions are made public Jagoi Babang using two currencies, namely the rupiah and the ringgit currency Serikin in the market and in shop and traditional markets in Jagoi Babang. As for some reason people Jagoi Babang using ringgit currency in everyday life due to: (1) trade, in the fulfillment of basic needs; (2) the value of ringgit currency is higher than the rupiah. In addition to these two factors the development of lagging regions compared to Malaysia Serikin factors have contributed to the low interest in the use of rupiah in Jagoi Babang. Facilities are minimal, plus the absence of banks to make the rupiah is not growing, so the ringgit currency more dominating. The results of the analysis of the impact of their use in the ringgit currency transaction fees Jagoi Babang society, both positive and negative. For the economy of Indonesia of course this had a negative impact, because people Jagoi Babang started hanging with the ringgit even lead to the erosion of a sense of nationalism border. Nationalism over time will erode the economic conditions are much different, where they find the necessities of life are met by Serikin Malaysia rather than Indonesia itself.

V. SUGGESTIONS

1. The importance of attention from national and local governments to pay more attention area border, the border to the creation of public welfare.
2. The need for a special body set up to plan and co-ordinate the implementation of the trade relationship. Mainly to preserve the unity and territorial integrity, national security and defense, as well as improve the welfare of the people in the border region.
3. Increasing the supply of currency rupiah or reproduce the rupiah currency in circulation at the border by establishing financial institutions in the border area.
4. Development of balanced regional infrastructure to meet the needs of decent living in the community.

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WEAVING CULTURE OF THE DAYAK KENINJAL

(Case study in Ribang Semalan village, Tanah Pinoh district -Melawi Regency)

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Abstract: The background of this study is Dayak Keninjal cultural in Melawi Regency . The aim is to describe the history, motifs, colors and symbolic meanings of the Tenun Ikat Dayak Keninjal . Focus of this study is Dayak Keninjal communities in Ribang Semalan village. This research uses descriptive qualitative research, the data in this study are pictures and words. Data collection techniques are using observation, interviews, and documentation. In this study to examine the validity of the data that has been acquired: Persistence observations , Triangulation. To analyze the data in this study using four grooves, namely data collection, data reduction, data presentation, and conclusion. The results of this study indicate that: Tenun ikat Dayak Keninjal motif consist of at least 23 motif. This motifs after analysis resulted in seven motif derived from the oral tradition of Cinta Mani and are deeply rooted in the culture of Dayak Keninjal. Cinta Mani motif with variations such as: Temado (human), Sandong, Boats, Seeds of the Belian, Flower of the tengkawang, Shield, fences, Seropak, Lunju / stiff, spear, Saber, cassava leaves (symbol of simplicity), fish halfbeak , bamboo shoots, rice, and rice-cotton. Colors of the Tenun ikat Dayak Keninjal are red, pink, brown, blue, dark blue, purple, orange, gray, white, black, green and yellow. These colors are used for the base color fabric and color motif. The symbolic meaning of each type of motif and color Tenun ikat Dayak Keninjal are: (1) Woven Temado has meaning as a leader must have a soul wise and prosperity in the life of the whole community, (2) the meaning of the associated picture of the everyday people Dayak Keninjal, they live of farming and living off their crops and pets and achieve a prosperous life.

Keywords: Keninjal, Tenun ikat, Motif, Temado.

I. INTRODUCTION

Cultural diversity in the form of craft is one of the cultural features of great value, good views in terms of philosophical and symbolic terms, of the symbolic meaning here is the human activity in creating meaning refers to the reality of their daily journey. According Sumintarsih [1], the craft is a national culture that has existed since the time of our ancestors, the first craft arises because of the human drive to survive. Cultural diversity that exist in Indonesia is one characteristic that is priceless. Indonesia's diverse ethnicities, customs, his tribe. In general, the culture in Indonesia has been used since then handed down through generations.

In other words, the cultural diversity of the region with all the characteristics and uniqueness of the capital is a great fundamental in the development of national culture, therefore, the cultural values of the area need to be researched, explored and then developed in line with the level of development of the life of this nation from time to time. Similarly, the handicrafts produced Dayaks Keninjal in Melawi Regency, located in West Kalimantan province,

originally sourced trust hereditary and became a tradition that can not be abandoned. It is ingrained and becomes part of their lives.

In the Dayak Keninjal community in Ribang Semalan of making a craft item has become a thing to do as it relates to the needs of both external as well as spiritual needs. Handicraft weaving is one of the Dusun Ribang semalan community cultivated meet demand.

Its presence is undeniable in ensuring the survival of which is not instantaneous, even deeply rooted in the culture of the community. This is not a part of the elements of art, especially art. Where is the art in Indonesia is basically allied integrated culture, a series of local culture or ethnicity combined with finesse. The most powerful character and become his image as he departs from a common root.

The Craft of Weaving in Ribang Semalan have a lot of produce ikat. Some of these efforts are resulting either from motifs, colors and clothing products are essentially the same and quite interesting. To be able to see and know about the Tenun ikat Dayak Keninjal, the researchers will

explore artwork weaving these terms of histories, motifs, colors and symbolic meaning.

II. PROBLEM RESEARCH

Based on the above, the research team is focusing, as well as highlighting the existence of Tenun ikat Dayak Keninjal in Melawi that is expected to become the flagship product of the Melawi district as a being and the concept of culture which is the blueprint for human life Dayak Keninjal. In a simple formulation of the problem of this research is how the histories, motifs, colors and symbolic meaning woven fabrics (tenun ikat) Dayak Keninjal in Melawi.

For field operations, formulated the following research questions are:

1. What is the history of weaving in Ribang semalan.
2. How do Dayak Keninjal Woven motif
3. How do Dayak Keninjal colors
4. Any symbolic meaning to each color and motifs of the Tenun ikat Dayak Keninjal

III. RESEARCH PURPOSES

The aim of this study:

1. To know the cultural history of weaving tenun ikat in Ribang semalan
2. To know the various motifs of the tenun ikat Dayak Keninjal
3. To know the colors of the tenun ikat Dayak Keninjal
4. To determine the symbolic meanings on each motif and color tenun ikat Dayak Keninjal Dayak .

IV. THEORETICAL BASIS

Knowledge weave in Indonesia has been known since several centuries before Christ. This knowledge is a continuation of the knowledge make craft items by using woven made of fibers and in the form of leaves, wood fiber used as clothing and container goods. This leads to the development of quality woven materials used and getting to know the motives and colors that are prioritized in the woven product. Developments motifs woven hangings Indonesia many influences from China, India, and Arabic. Some of the results of Indonesian culture is woven songket from Sumatra, Kalimantan, Sulawesi, Nusa Tenggara Timur. Weaving Ulos of Batak, weaving Gedhog of East Java, weaving Geringsing from Bali [2].

Gittinger [3] reveals:

In the history of China in 518 BC mentioned that from the northern part of Sumatra wear clothes of silk, silk fabric is enriched imported fabrics, because the silk is not woven in Sumatra and Java, until the advent of the kingdom of Srivijaya around the 8th century AD. For China at that time cotton yarn is very interesting because it is in the relationship between the two, representing of India such as Sumatra, Java and Bali they bring gifts of woven cotton fabric. Exchange of cultural events that happen around the 7th century and 8th century.

According to Wanda Warming and Gawaski [3], several regions in Indonesia such as Kalimantan, Sumatra,

Sulawesi and East Nusa Tenggara have not colored woven earliest. They have certain capabilities of yarn dyeing, and they know the colors. The cultural aspects by experts predicted owned by the people who called in prehistoric times Indonesia around the 8th century until the 2nd century BC.

Besides woven residing in Indonesia are also songket. Songket as one of the Indonesian culture is very close relationship with gold thread or silver. This was confirmed by Salim and Peter (1995: 1452) that:

Songket is woven embroidered gold or silver "Besides threads of gold and silver threads are also used colored silk threads and other ". Songket weaving is done mostly by craftsmen - songket including South Sumatra, Lampung.

There are several terms of some of the areas that call origin of the word like in Palembang songket comes from the word songko. in West Sumatra songket term comes from the word sungkit, From said menyungkit yarn according Gittinger in Therik (1989: 32) states that:

The principle is called songket additional threads, as linked to the dig process or warp yarns in making decorative patterns. Mechanical inserting extra stick to lift the warp threads with a stick, which is a kind of bone on palm leaves or gebang.

It can be concluded that songket weaving is weaving the embroidered gold or silver through the warp dig threads (menyungkit) process using decorative patterns feed supplement or additional warp to embellish the base fabric. Traditional dress of woven fabrics have diverse functions, it indicates the identity of regional and clan identity or status in the community level because each region adheres to typical traditional reflected in the work of the loom. In addition, the meaning contained in the clothing itself in the lives of people who use it as a supporter of the culture itself.

Weaving as traditional clothes in addition to functioning as a protective cover and the body also plays an important role as a complement to the traditional events. This is because in a loom works, not only has the value of the function and beauty alone, but more importantly there is something that is associated with traditional symbolic meaning, which is contained in the motifs and colors found in woven itself. A habit that has become a tradition to believe that the colors and motifs have magical powers and functioning as intermediaries for the adherents of customs with ancestor and creator.

In addition, in the role in the social life, the use of weaving a symbol of wealth and prestige of a person in the community, in addition to those things woven as well as clothes that have a high value and indicate social status in society. This culture is still found in some areas in Indonesia until now.

A. Motif Fabric

Motif is an ornament (decoration), ornaments derived from Greek words meaning of the word ornare decoration or jewelery (Soepratno, 1984: 11). Motif is a design created from parts or elements form a line, which is sometimes very influenced by stylized forms of natural objects with distinctive styles and rhythms. Each motif created with basic shapes as lines, such as lines of various terms

(triangles, rectangles), the line curls or spiral, circular or serpentine (horizontal, vertical), line- gyrate and intertwined and interlaced, line serves as fractions (gathering), a vertical line, slash, and many other forms. According Saiman (1997: 49), namely:

Motif is a design created from parts of the form, the various lines or elements that are sometimes so strongly influenced by other forms of natural situations, objects, style and distinctive characteristics.

The motifs contained in woven fabric in Indonesia is very diverse, it is because each region has its background expressing different in shape motifs on fabrics they make. Differences motif not only from the different beliefs of the background for the creation of a motive, but due to technical factors as well as the creation of local environmental motifs function in everyday life so different from one region motifs with motifs in other regions. Motifs in the present is not limited to traditional motifs alone, the times and the market demand is very decisive in processing motif to be modified or developed without leaving its original form.

Decorative motifs were arranged regularly repeated motifs on the implementation of a work of art decoration that is applied to the style and decor (simplification) forms that exist in nature such as plants, animals and humans. According Soedarso (1976: 7) motif is: Motif is a picture of the subject in a work and a description of the principal disseminated to realize a harmonious masterpiece. Motif in general is the deployment of lines and colors in a particular form of reset.

Motif is the beginning of the achievement of a goal in the depiction or a work, and the motive is also an image showing that the nature and style of an embodiment. The role of determining the motive is very good and the absence of a weaving, dyeing and processing skills in addition to weaving. Can not be determined by the size of the theory, possible arrangements of these motives are far from each other, adjacent, intersect and overlap, and whether both will be determined by the success of the set composition and color fields according to the usefulness color, Tenun ikat patterned mostly natural vegetation, especially in the form of flowers. Besides, there are also other motives compositions generally can be grouped into five parts, the first:

- a. Geometric motifs are decorative geometry consists from line straight, broken lines, circles, squares (poleng), ranks, parallelogram, rhombus, zig zag, hexagons, and triangles.
- b. Plants motif is the shape of leaves, flowers, fruits, stems and others.
- c. Animal motifs and fauna species of animals are often used as a motif among bulls, lions, elephants, birds and birds of paradise .
- d. Human motives is the motif embodied in the form of puppets and face.
- e. Motif combinations (prembon). Prembon motif is the combination of various motifs. The combination is made such that it can add to the beauty of the fabric. Examples include plants motif combined with geometric motifs, human motif with animal motifs, plants motif with human motives and so forth.

B. Color Fabric

According to Haidar (2009: 23), the color is a certain spectrum contained in a perfect light (white). While Aminuddin (2009:10), revealed that the color is a visual element made of pigment (dye). A similar opinion was expressed by Sanyoto (2010: 12): Color is the reflection of light from something that looked so-called pigment or color of the material that is typically found in objects for example is paint, hair, rocks, leaves, textiles, leather and others. In the last weaving dyeing process uses a special dye woven or usually called dye textiles.

Color is one of the elements of beauty in art and design. Color is the impression that by the light of the eye, so the color will not form if there is no light. The definition according to Darma Butler (1989: 5), when the color is taken from the Sanskrit word has a broader meaning, namely temperament, caste, sounds, letters, syllables, words. Word color comes from the latin celare or occulere means to cover (English: color, French: couleur, Netherlands: kleur).

Colors can be defined objectively or physical properties of light emitted as a subjective basis or as part of the psychological experience of the sense of sight. Sadjiman (2010: 13) argues that each color has a characteristic in this respect are traits possessed of a color. Characteristics of the colors need to be taken into consideration in the application of color to achieve the desired goal by artists and designers. Butler (1998: 10), states that Since the first human use of colors to please his life. The color function is as follows:

1. Attract Attention

Spontaneously people impressed if they see color, because color has a strong influence and can be a driving force, so as to raise the desire to do something or want to have the goods.

2. Generating Feelings

Colors can stimulate the eyes, before filing someone sees first craft been vibrated by the existing color on the item, in addition to color function also has the psychological effect of the color gives a particular effect on the feeling, the life and soul of a person.

In general, color can be classified into three groups of colors: primary colors, secondary colors, tertiary colors. The primary colors or primary colors are colors that can not be obtained by means of mixing, consisting of red, blue and yellow. Secondary color is the color the result of a balanced mix of primary colors with primary colors as well. Color These include the color purple, the color Orange, and green colors. The latter is a tertiary color, the color resulting from mixing the secondary colors with primary colors, such as red, purple, blue-purple, blue-green, yellow green, Orange color yellow, and red colors Orange.

C. Symbolic meanings

In Indonesian Dictionary (1997: 416), the meaning has meaning (1) purposes (2) intended speaker or writer, the definition given to a form linguistic . Each motif woven

produced has a certain symbolic significance. These meanings show the depth of understanding of values. Its symbolic meaning is the meaning or purpose motif created works of art that have a rationale and basis for the creation (idea). According to Ulman (in Pateda. 2001: 82), revealed the meaning is the relationship between meaning and understanding, understanding the meaning of a notion or concept that has a thing.

The symbol is the symbol (KBBI, 2005: 1066), the word comes from the Greek word symbol. Symbols meaning a mark or characteristic that tells it to someone (Widagdo, 2008: 20). While the meaning or intent (KBBI, 2005: 703). So the symbolic meaning is the meaning of a symbol or signs that have meaning or can be called also a symbol that has the intent and purpose. And a variety of weaving patterns, traditional weaving has deep symbolism. The symbol is a tangible means of communication which can be numbers, letters, pictures, or oral.

According Poerwadarminta (1989: 490), revealing: Symbol or emblem that is a kind of sign, painting, sayings, badges and so forth that states something or that contain a particular purpose. eg white color contains a symbol of purity.

Symbol or emblem is a sign or image to convey information or a certain value (Kuswilo, 2008: 4). Symbol is the language used to convey ideas, emotions, desires or event into a symbol. Its symbolic meaning is the meaning or purpose motif created the work of art that has a background of thought and creation. Its symbolic meaning is used for a specific purpose or meaning is conveyed certain information to the public or the public (Kuswilo, 2008: 5).

V. RESEARCH FINDINGS

A. General condition of the Research Location

Desa Bina Jaya is one of the villages in Melawi precisely in the district Tanah Pinoh, the district capital, namely Kota Baru. Bina Desa Jaya administratively divided into three hamlets namely: Ribang Rabing village, Tombak village, and Ribang Semalan village. Areas of the Bina Desa Jaya is 1483 hectares, the population of 1,438 inhabitants with the number of men and women's lives as much as 835 603 people. Residents in this village 90% is from the Dayak Keninjal with adherents of Christian Religion of 95% and 5% adherents of the Catholic religion. Geographical conditions Desa Bina Jaya is a hilly area crossed by the River Sekotu which is one Pinoh River, which eventually empties into the River Melawi.

Produce handicraft of the Ribang Semalan village is handloom weaving (Not Weaving Machine Tools). Mileage hamlet of the provincial capital of West Kalimantan (Pontianak) about 580 km. Whereas if the downtown Nanga Pinoh of this village is about 87 km and if the mileage of the central government in Tanah Pinoh, this village is about 13 km or about 30 minutes drive

Communities of the Ribang Semalan village in general are farmers who grow rice and rubber, which is a method of farming that during this time they know and do hereditary, as for the way of farming paddy farming is still less do. Paddy farming cultivation process and is done only

once a year during the growing season from August to March. Results from agriculture can only meet food needs for a year, even then if no damage crops in the growing season. In addition to farming community in this village also do the tapping rubber in which each household its own minimum of 2 hectares of rubber plantations, when tapped every day can produce rubber \pm 7 kg of water per day, the price this time @Rp 5 thousand / kg, then each household its only got Rp 35 thousand per day.

The potential Natural Resources are abundant with soil fertility so whether they are possessed of this village can not be managed optimally by the community. They are still very dependent on the outcome of the results of his farm rubber, there are many other potential that has not been attempted, such as pepper, coffee, coconut, sugarcane and tubers. The plants are numerous in this village, although special care not to do these plants can flourish. To plant sugar cane, for example, many of us have encountered there, the plant is used by the community to serve as brown sugar. They were able to make this brown sugar in a day as much as 6 prints. With a selling price of sugar is between Rp Red 8-10 thousand per one piece, where the weight of the printed \pm 0.5kg. Brown sugar made from sugar cane has a very different taste with brown sugar in the market today. Brown sugar is marketed around the Desa Bina Jaya alone and by the community is used as a sweetener substitute for sugar in the manufacture of confectionery.

Another potential can be found in this village in the form of crafts such as weaving, making conical hat, basket, the hood of food and others. Making these crafts can be encountered in this village which is mostly done by women, especially mothers. Knowledge gained in the manufacture of this craft is taught by generations of their parents. The handicrafts are more widely used for daily necessities for their families, and the raw materials for making crafts are still numerous in the surrounding woods in this village.

Of the total area of land owned by the society had managed about 40% while the untapped still very wide about 60% of the area of the village, including forests in which villagers Bina Jaya which is the Dayak Keninjal community still hold their cultural traditions, such as the community in general Dayak in West Kalimantan, is very dependent on the forest as a place to look for the needs of everyday life both for clothing, food and board. Utilization of forest by the people is used as needed, so that the forest can still be used for the next. The area of land owned by the community, including forests that are considered unmanaged, bringing the interest of large investors to make palm oil plantations. In the period of the last 4 years there have been three oil palm plantation companies that have done business. These three plantation companies are PT. Bumi Sawit Utama, PT Palma, PT Agro Kencana Makmur sustainable all of which are located in the hamlet Ribang Rabing. At the moment this is a new village that has been used as oil palm plantations, while the other hamlets in the village have not made their land for plantations, but has become a target for plantation companies to perform activities of dissemination to the public. Until now, the activities change the land into oil palm plantations has not

been done because it has not received approval from the public.

B. History of weaving

Based on the narrative of respondents, craft weaving in Ribang semalan has existed since before the Dutch colonialism in Indonesia. In the past, home appliances such as baskets and mats are woven results. The history of the emergence of craft Keninjal Dayak this stems from idea Mrs Dodoi , two years ago when he participated in a training activity in Nanga Pinoh, related to the creative economy for 4 days. At the training taught make key chains and webbing. This training hint of ideas on how to improve the role of women in the village. Margareta name is a mother who often offer a variety of homemade ikat. Mrs Margareta selling woven from office to office. One day the Mrs Margareta is offered so your teacher / trainer makes weaving in Ribang semalan. Mrs Margareta willing to become a coach. The idea is realized, the Mrs Dodoi direct message as much as 5 sets of weaving equipment, as well as suggestions from the mother Margareta.

In Ribang Semalan indeed many mothers are often made of woven crafts including weaving and others. No More 20 mothers were participating in activities under the guidance of the mother Margareta weave. To this day there are 15 people who are very proficient and productive weave This activity is financed by Mrs. Dodoi with its own funds. The training lasted a month. The participants were very spirit, each produce different motifs. Motif derivatives. One of them motif Cinta Mani, the main image Temado. This motif lifted from origin stories, which have been living in the hearts of citizens Ribang Semalan.

Cinta Mani is an expert chisel carving expert who lived about six generations ago. He engraver temado, stumbling and others. This engraving is a custom of antiquity when people die. There are levels in the community, if people are able to be made Temado and Sandong. If people return headhunting, they have created of Pantar (statue). This carving symbolizes of the charisma and prestige. Only special people, depending on the title. Mrs Dodoi a great-grandson of Cinta mani semen, his son to seven of seven brothers.

Habits of a bygone era that likes to spin, making yarn from cotton (kapok). Then used it to weave in the traditional way. Embroidering begins from here. Oral tradition of stories handed down about Love Mani often sounded by the village elders. This story Excavated back, the wisdom of the past tense. Mrs Dodoi childhood like to hear the story. Mrs Dodoi have sincere intention to build the village. Creative economy in rural development. For a month they practice seriously. Despite their low education (generally not complete primary school), but they have exceptional intellectual ability.

Some motifs successfully produced from them, depending on inspiration both from culture and from their daily lives. They learn the stages carefully weaving stage, there are a dozen stages. They are only too well utilize Mrs Margaretha presence. Nearly three years of their work and the results are amazing. The relationship of Mrs Dodoi and Mrs Margaret like brother and sister. Cooperation developed well and are very productive. The knowledge

gained is quite high and the results are amazing. What made very positive. They want to see the mother weavers. Weave businesses that have been broadcast by TV One impact is very positive. This business is growing. Now they are getting ready to face the Asean Economic Community (AEC). They must be more creative. Skill weave in Ribang Semalan have raised the degree of the women in this village. The target of them are go national and international. Tenun Ikat Melawi from Ribang semalan already very well known.

C. Motives Weaving of the Dayak Keninjal

The motives are applied to the craft of weaving Dayak Keninjal influenced by the spirit of Cinta Mani, the main motive is Temado, after the motives that influenced the life experiences of weavers like plants motif motifs bamboo shoots, tengkawang florals and fruit motifs Belian. Both motifs of animals or animal motifs . Third fish halfbeak motif of culture in everyday situations such as boat motif, motif seropang or spear.



Fig. 1 Statue of ancient sculptures at Home



Fig.2 Temado in Dayak's Keninjal Old Grave

The motifs are applied to the craft of weaving Dayak Keninjal influenced by the spirit of Love Mani, the main motive Temado, after the motives that influenced the life experiences of weavers like plants motif motifs bamboo shoots, tengkawang florals and fruit motifs Belian. Both motifs of animals or animal motifs .. Third halfbeak fish motif of everyday culture as

The motifs developed is the creation of women artisans, taken from motifs that already exist then combined. Making the motif used is not always refer to the existing motif, but there also were adjusted with consumer tastes. The motifs are applied to the Dayak ikat Keninjal are:

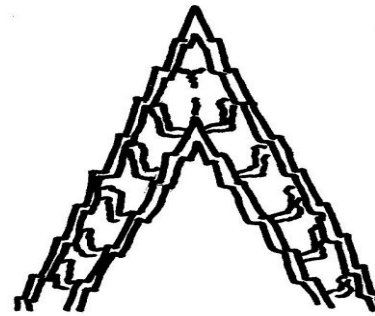
1. Motif of the Plants Nature

This motif or complexion is taken from image imaginary kind Tumbi vegetation, and are taken from various forms ranging from leaves, flowers and stems. Motif Tumbi vegetation using feed belt techniques and techniques warp ikat among others used in the craft center Dayak Ikat Keninjal in Hamlet Ribang semalan the motive bamboo shoots, fern leaf motifs, floral patterns and motifs tengkawang purchase wood pieces (ironwood). Below we describe the motives in Ribang semalan.

a. Motif Shoots Bamboo Shoots



Motif bamboo shoots have a simple form and jointed if the skin is opened, this is because the bamboo shoots have a memorable unique shape. bamboo shoots motifs used as a motif woven fabricSee image



Picture Motif Shoots Bamboo in Weave

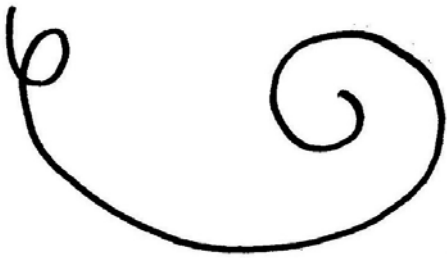


b. Fern leaf motif

Fern leaf motif is a motif taken from ferns. Motif fern leaf has a form of a screw that resembles the letter S stylized, wherein the motive screw is given a decorative motif shaped leaves with two sizes namely leaf motif with large and small sizes that have been stylized prepared repeatedly and interconnected to form a composition that is neat and harmony



Picture: Motif Tengkawang Flower



Picture : Motif fern fronds



Picture: Motif Edge Flower Decorator Tengkawang



Fern leaf motif has a form that is simple and attractive fern tendrils of this is due to have a memorable unique.

c. Flower Motif Tengkawang

Florals tengkawang a motif taken from plants tengkawang. Florals tengkawang has a form that is using flower leaf motif repeated tengkawang arranged into two parts in the middle of the flower motif tengkawang, there is a motif rhombus shape with a smaller size as the stamens and as an ornamental motives. Where floral tengkawang on the sides there is a motive motive rectangular jointed are arranged in a neat section sides tengkawang floral motif to decorate it.

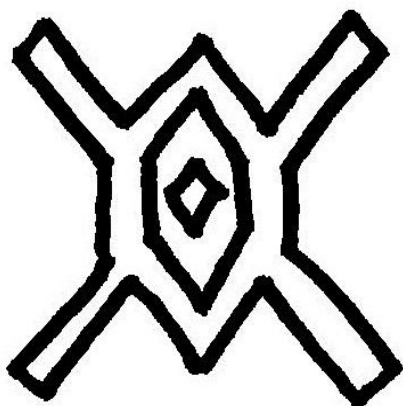
The basic idea of the creation of floral tengkawang that has an interesting shape and this is because the typical floral motif tengkawang has some characteristics which have petals surrounds. Tengkawang floral motifs are motifs created in the days of yore. Flowers tengkawang has the advantage that as a queen of flowers (roses). Among the many types of live flowers, flower tengkawang is one of the flowers that are symbols or emblems of religious life in human civilization (Dodoi interview, September 2016).

d. Motif Flowers / Fruits Belian

Belian fruit motifs taken from plants belian / ironwood. This purchase fruit motif has the form of fruit motif ironwood, at the center of the motif depicted with rhombus motif with the motif section there are four lines long. The basic idea of the creation of the purchase fruit motif is a type of fruit that has a distinctive shape than others, judging from the flowers arranged in a unique, beautiful and attractive. Motif applied is natural motifs that describes the characteristics of the Dayak Keninjal people in Ribang semalan. Motif purchase comes from wood purchases. Belian wood is a strong wood that is sturdy and can last a long time in all seasons. Likewise with Dayak Keninjal in Ribang semalan, that our tribe is famous as the tribe strong and reliable through the purchase of goods can use as the basic building (home). Belian wood is to make temado, Make Statue. Our tribe

that is robust and reliable, although it must pass through various obstacles. The problems in this life.

Purchase fruit that has a slightly oval shape that is quite beautiful and unique because belian fruit closely related to the past life of the Dayak Keninjal.



Picture Motif Decorator of the Belian Fruit

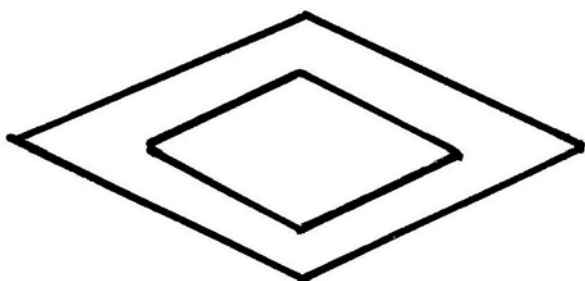
e. Motif Animals

Animal motifs which are located around the environment provides basic idea of creation in the making ikat motifs. This motif derived from animal forms that were around and beneficial in human life such as fish halfbeak. This beast is described in a form that is stylized.

f. Geometric Motif

Geometric motifs which are located around the environment provides basic idea of creation in the making ikat motifs. Motifs taken from various forms of geometric shapes, these motifs derived from other forms of geometry as a rhombus shape, straight lines and so forth. Geometric motifs contained in Ribang semalan is a line and rhombus.

Motif rhombus geometric motifs taken from the line rhombus. Motif rhombus using irregular geometric shape with a length field the same side.



Picture: Motif Rhombus

The basic idea of the creation of a rhombus motif that has an interesting shape rhombus geometric ornament is likely to have a flexible nature, rhombus motif can be applied to or incorporated in a variety of objects.

g. Human Motif (Temado)

Human motif adopted from the painting Temado Love Mani work since 6 generations ago. Providing basic idea of creation in the making ikat motifs in Ribang semalan. This motif is a stylization of the forms of the human body. Human motif taken from areas of the Land Pinoh because human motives were considered to have magical powers and revered. Conception of eternal life in the other world is realized in the form of symbolism, as a symbol of the embodiment of ancestral spirits, drawn from the life on the past as the influence of the elements considered to have magical powers around him.



This motif influenced by oral tradition On Dayak Keninjal: In ancient times there lived a girl who was left for dead by her father. She lived with a brother. Kampong that everyone is good at weaving, he himself does not understand, so the entire village every day mocked him yet clever work. There the angel told him to heaven to see his mother. The angel told me to learn with your mother in heaven. The dream was told by his brother. Bang in what way we are to heaven. This I want to learn weaving but not understood, there auto learning without teacher. His brother took the decision in that case should be set up stumbling. You're going to make a dish. They both go to heaven covered. They finally met with his mother. Her mother asked, why here, I want to learn to weave with mother. Her mother taught her to weave directly with pictures (motives) Temado. The mother's message, developing of this motif when you weave. In this way you will be able to mate. You're going to meet a mate. Houses, you are now at war. Later head hunter brought you put your husband in this temado motif fabric. Later stumbling store in which you use before ascending to heaven. Husband is you who will be the next leader. Temado then it is woven a leader.

VI. SYMBOLIC MEANING OF THE COLOR AND WOVEN.

Before discussing about the colors and the symbolic meaning of the tenun ikat Dayak Keninjal, clarified in advance what color and symbolic meaning. The application of color on woven plays an important role in the formation of motifs, in addition to these colors can also add beauty to the cloth. Colors on Keninjal Dayak woven has meaning as media appearances artistic aspects and the beauty of color also contain symbolic meaning which is specific messages of creation.

Because color is a representation or expression of beauty and also can distinguish a form from its surroundings. It is embodied in art forms, including traditional of ikat. Dayak community recognize the term generally used in coloring in the color of clothing, the terms are closely related to coloring objects found in nature. Color of the woven the Dayak Keninjal has two characteristics, namely from the color of the young to the old colors used in the application of the basic colors of fabric and color motif. The color will not regardless of what name is the symbol, everything must contain symbols as well as weaving Dayak Keninjal having a meanings symbolic depth: as a work or a human behavior that is poured into an art of weaving that has meaning in public life.

As a result of man's work Dayak Keninjal has the meaning contained therein is as a message or a trustee of manufacture. From the above statement can be concluded that the color and symbolic meaning contained in woven is closely related to human life in terms coloring and symbols or meanings contained in each woven of the Dayak Keninjal . Below is described about the color and the symbolic meaning of the woven Dayak Keninjal

VII. CONCLUSION

Based on the research that has been described in previous chapters, it can be concluded:

1. Culture weave on Dayak Keninjal existed before the Dutch colonized Indonesia.
2. Motif of the tenun ikat Dayak Keninjal in Ribang semalan the creation motifs derived from the work of Cinta Mani. A motif found in Ribang semalan are (1) the motives of vegetation such as bamboo shoots, ferns, flowers tengkawang, and fruit purchases. (2) The animal-print fish halfbeak motifs , (3) human motives and (4) the living cultural motif as motive of boat. Motifs are found in seven shades of woven fabric.
3. Color ikat of Dayak Keninjal in Ribang semalan are red, brown, white, black. These colors are used for the base color fabric and color motif. Color woven fabric Ribang semalan there is only one color on the fabric. These colors make the characteristic in Ribang semalan. Color is just this sort precisely add consumer appeal.
4. In life will not be separated from what is called a symbol, everything must contain symbols. Likewise with weaving in Ribang semalan. Meaning of ikat in Ribang semalan are: (1) the meaning of the close relation with the religious system. (2) the meaning of which is closely related to human interaction. Humans should love each other, respect, forgiveness and mutual help. (3) the meaning associated with excitement but it

should be with caution. (4) the meaning that it developed or prosperous life. (5) Woven (Temado) has meaning as a leader. Leaders must have a soul wise and prosperity in the life of the whole community, (6) the meaning of being a woman. She was the beauty in life, (7) the meaning of everyday life of Dayak Keninjal, their living from farming and their estates. Additionally they live on pets. They should be able to achieve a prosperous life.

SUGGESTIONS

Having taken the above conclusion, it can be given the following advice:

To the managers of production houses Dayak Keninjal ikat in Ribang semalan. They are expected to maintain the existence of ikat craft is to stay awake sustainability. The woven fabric is a high Keninjal Dayak cultural value.

To the Government of Melawi , if it would make Dayak Keninjal ikat as a superior product Melawi, it would require more serious efforts for the guidance and assistance of the weaving. Craftsmen have to be more professional and productive. Governments need to provide financial support and marketing. These products competitive in the ikat market .

The practitioners of the weaving in Ribang semalan. The fabric should be labeled. The label is sewn to the fabric already in the fold. The presence of this label allows consumers to search for it on the market. and ready to be marketed, the label's existence characterizes Dayak Keninjal ikat.

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GENDER INEQUALITIES IN THE NOVEL ISINGA AND EMANCIPATION STRUGGLE

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Abstract. research was to describe the gender inequalities in the novel *Isinga*. His goal was to expose the gender inequalities experienced by women Irewa, a character in the novel. The theory of gender inequalities include subordination, violence, marginalization, stereotype, and the double burden, then emancipation struggle. novel *Isinga* showed the injustice women Papua who are represented by cast of Irewa. Irewa experienced marginalization because the role and functions of women only complement that determine all decisions and policies are men. Therefore the subordination against women figures into an event that lets because he only plays a role in the world and domestic reproduction. Irewa stereotype women as weak, make it accept physical violence and inner with resigned. Irewa very heavy workload because he had to meet all the needs of the family, her husband does not help in the least because Meage already handed over some pigs as a dowry that made him have no responsibility in the family. The implications of this novel shows behind all the injustice received Irewa make it rise helps fellow women. However, the Irewa were not able to penetrate the world of patriarchy represented by her husband, Meage.

Keywords: Gender inequality, novel, patriarchy, emancipation struggle

I. INTRODUCTION

Novel is a work of imagination offering a wide range of human's problem in life. Author appreciate the various problems earnestly then reveal them through the means of fiction in accordance with his or her views. Novel produced by an author who has sensitivity on seeing any situation, circumstance, and having touched feeling experience. Novel is not born from emptiness tradition. Authors who are at particular communities see and experience it, which resulted the appearance of great works and touching hearts readers. This is in line with the opinion of Altenbernd and Lewis in Nurgiyantoro [1] which says that narrative prose is imaginative, but contains truth that dramatizes the relationships between people. However, it is done selectively and it is formed in accordance with the objectives which also incorporate elements of entertainment and enlightenment of the human experience. The selection of the life experience is obviously subjective.

Problems faced by women from time to time is always interesting to talk about both by women and men. Women's problem in society and culture largely due to differences in men and women. Then, those different roles and characteristics that establish a culture considered to be a natural by public order [2]. Once discussing about woman, the woman's relation to gender culture is the most appropriate. This is because gender is described as a difference of behavior between the sexes resulted from the construction of society. It is neither biological thing nor God's nature. Instead it is created by the community through a long process of social culture. Hence, the gender change

from time to time, from place to place Gender as a social consciousness is awareness among citizens that things originated or derived from the distinction between male and female are social culture, or something that is formed by the public order. Furthermore, the distinction of men and women has been the cornerstone of the inequality since the society views woman is lower than man. Gender as a social culture issue is the gender inequality that resulted in various forms of injustice and oppression based on gender and women are those who are more vulnerable as victims.

The novel discussed in this study is *Isinga* by Dorothea Rosa Herliany. *Isinga* novel is a novel set in Papua which talks about the oppression of women. Women faced persecution because of religious beliefs and customs perpetually participated in patriarchal dogma and discrimination. The imagination of Indonesia authors consider that Papua has not unfinished yet unraveling women's issues. Hosniyeh stated that Irewa as the figure in *Isinga* novel is an extraordinary woman who is able to come out of oppression and even help enhance the dignity of other women [3]. Moreover, Andi Nur Faizah M in the article "Isinga: Stories of Women alienated from her Sexuality, Motherhood and Intellect" stated Irewa experienced three forms of alienation: the alienation of sexuality, motherhood, and intellect [4]. Furthermore, the author is not only expose gender inequality experienced by Irewa but also uncover her fights reaching gender equality.

Isinga describes about the life of people in Papua whom are very thick with customs. The author state about rituals of tribal people in Aitubu and Hobone village that is rarely known to the general public. Book by Dorothea Rosa Herliany is not only invites the reader to understand the story

alone but also to be pampered with a cultural knowledge that is very thick with singing, dancing as well as rich meaning advice. Dorothea Rosa Herliany presents the stage of Papua's imagination through the publication of the novel *Isinga*; Papua's romance. This novel invites the reader to explore the universe of Papua through tragedy and romance of Meage and Irewa with the background conflict of socio-cultural, gender issue, and activism. *Isinga* which means a mother or a female, comes from the language of Aitubu village. It depicts a woman (Irewa) from Aitubu village. Irewa is one of Aitubu people living in outback Irian traditionally (not dressed, still wearing a loincloth). Existing health center has been built by missionaries (Christian) though the police station is so far away which needs two days trip away to be reached. The only transportation is water transportation using very simple boat [5].

Backwardness of remote area can lead to gender inequality and oppression. However, we found Irewa's efforts to achieve equality. Therefore, this article discusses about gender inequality and emancipation's struggle in the novel of *Isinga*.

A. GENDER AND EMANCIPATION

Definition of sex and gender is indeed not clearly distinguished. Whereas the definition and the term of these two words should really be distinguished. Gender is a division of the two sexes of human who refers to the biological characteristics of each gender, i.e. male and female. The man is a human who has a penis and has sperm, while a woman is a human who has reproductive organs such as uterus, fallopian and vagina for childbirth, has ovum for producing eggs, and has tools for breastfeeding [6].

The word of gender in Indonesian dictionary often means the same as sex gender. According to the concept of gender, the understanding of gender is different from the sex gender. Sex gender is also called genital or reproductive organs. Sex gender refers to the nature of sex, which is owned biologically by human. Penis, testis and prostate are the characteristics of main gender possessed by male. The biological function of these tools is to produce sperm, fertilize and impregnate. Chest hair, hands or feet thick, adam's apple, deep voice, muscular body posture, mustachioed are secondary characteristics of male. Vagina, ovaries, and uterus ovum are characteristic of main gender owned by female. The function of these tools are to have menstruation, pregnancy, childbirth and breastfeeding. The bark is smooth, sound softer or high pitched, large breasts, smaller posture are typical of secondary characteristics of female [7].

Furthermore Crapo also says that gender is a social identity that consists of someone who is expected to rule as masculine or feminine (gender). In all cultures there are two common gender, i.e. female is synonymous with the rules or the features of women and a male who identified rules or the features of men.

The biological differences in gender only looks in terms of sex gender, i.e. male and female. However, there are also other traits between the sexes, for example, men are stronger than women.

Crapo's view seems not only by associating the gender with biological differences, but also by relating to how men

and women differ in the nature, characteristics, and skills possessed.

Yoce Aliah Darma states, gender as the appearance is different between men and women in terms of values and behavior. For example; women known as the gentle, beautiful, emotional and motherly. While men are considered strong, rational, manly and powerful. The characteristics of the properties can be exchanged, for example, there is a meek man, a strong, rational and mighty woman. Changes of these characteristics may occur from time to time and from place to place [8].

Moreover, Mosse explains that fundamentally, gender is different from biological sex. Biological sex is a gift; we are born as a male or female. However, the way that makes us masculine or feminine is a combination of the building blocks of basic biological and biological interpretation by our culture. Every community has a variety of "script" to be followed by its members as they learn to play the role feminine or masculine, as well as each community has its own language [9].

Later, Darma makes more specific sense, namely, Gender is a "nature" that is attached to the men and women who are socially and culturally constructed. Gender is defined in terms of the angle of non-biological between men and women. Gender is the construction of socio-cultural or social categories (femininity and masculinity) which reflected in the behavior, beliefs, and social organizations. Therefore, gender is a social concept [10].

If it is viewed as a general authority, women is slightly lower than men because of her role only in the domestic sector (households), while the role of men in the public sector (the workforce). Therefore, his role that is outside the home can produce the material. Thus, all matters in household is submitted to men as the head of household.

Gender refers to the qualities attributed by society to men and women differently. The properties of emotional, tender, shy, timid and patient attached to the types of women (feminine), while properties such as rational, strong, dashing, and protective affixed to the kind of men (masculine). The properties can thus be modified, arranged or shaped by human beings through education, training or engineering. Understanding gender according to Fakihs was an understanding through a trait, behavior, roles, and responsibilities of particular being labeled to men and women differently, but can be exchanged labeling and not fixed, it can change from time to time and from place to the place [11].

Gender inequalities are often encountered in the form of discrimination, marginalization, subordination, and the double burden of violence. The fifth form of discrimination is a gender bias, which is a view that distinguishes the role, position and responsibilities of men and women in family life, community and country.

The gender difference is in fact not a problem as long as it doesn't cause gender inequality. However, the problem turns out that the gender difference has spawned a variety of injustice, both for men and especially for women. Gender inequalities is a system and a structure in which both men and women are victims of the system.

II. METHOD

Research of this method uses qualitative approach through content analysis techniques. Content analysis is the study which will discuss the contents profoundly towards the written or printed information of mass media. "Content analysis is a research technique produces replica and valid conclusion from the data of a context. This techniques is really suitable through taking conclusion on contextual variables and text-based [12].

III. DISCUSSION

A novel of *Isinga* sets in a township named Aitubu. People in this village are known by wearing nose ornaments. People in Aitubu has lived in central section of Papua for hundred years. This spot is situated at an altitude of 1,500 meters, in the valley of Megafu mountain range. The sun shines in the underneath valleys. The air is very cold at night. Rain comes almost every afternoon then stop in the morning. Light, bright, and fresh air throughout the day though the sun's heat against the skin.

Giant mountains layered with pass-gap stands firmly. The height are approximately 5000 meters. There are big rivers, valleys, marshes, forests, cliffs, lakes, and waterfalls. When we stand in a high place then we can see the neighbor village, Hobone. The habits and daily life of the two villages are the same. These township-village located in the remote area. They are made from several groups separated by steep valley so that the communication among them is often hampered. Aitubu has about 15,000 people inside.

The theme of *Isinga* novel tells about the women's struggle in Papua who face the patriarchal system in the economy and social life. Irewa as Papua's woman is a very miserable wife who married with a husband named Malom. He has highly no mercy and respect for women.

A. Marginalization

Marginalization can be caused by the differences of sex (gender differences). Female forms of marginalization also occurs in the household, society, culture and even country. Marginalization means: a process of marginalization of gender differences which resulted poverty.

The misery of Irewa's life began when Irewa was kidnapped by Malom, whereas ritually Irewa already becomes a wife of Meage. She just waits for her menstrual time so that she could stay at in a same home with Meage. Malom kidnapped Irewa and brought her to Hobone. Aitubu's men wanted to attack the Hobone village because of the kidnapping case. However, the two villages have agreed that Irewa would become yonime, a peaceable tool between these two villages.

In agreement of the village, Irewa becoming a yonime is a provision that cannot be contested. Irewa is not being consulted and is not given the opportunity to choose to accept or reject it. A decree approved by men is mandatory to be filled by women. The marriage with Malom brings misery to her because she does not love him. However, the marriage must be accepted as she becomes yonime or a tool for peace.

B. Subordination

Attitudes put women in a position that is not important because the properties of women's emotional and irrational [13]. Thus, subordination means a judgment or presumption that a role performed by one sex is lower than the others.

Malom treated Irewa harshly and even beat her because he did not appreciate Irewa. Irewa only a tool to satisfy the lust of Malom. Malom wants to have Irewa for her beauty. Irewa cannot deny Malom's prompting. In fact, Malom will blindly hit Irewa if she does not do what he wants. Even when Irewa is sick, she must fulfill all wishes of Malom.

This has to do with the opinion of Simone de Beauvoir [14]. Women are the patrimony of men, first from her father, then from her husband. Under the harsh patriarchal line, women do not have the rights of herself. The women can live well, educated and so on is because of the generosity of the father. When the daughter is married, the father handed over his power relay, to the husband. Husband feels his wife is his own thing. He can treat her according to his wishes because he has redeemed her by giving up cash or other objects that become the requisite to her family.

C. Double Burden

Double burden means the workload acceptable by one gender is more than the other gender. Irewa accept more workload in her family. She took care all the needs of the family, ranging from farming to plant corn and vegetable, then having harvest of sago and vegetable, cooking and others. Malom would not help with household work because it was the responsibility of women. Irewa goes to farm by holding her child to harvest taro, sago and others to the needs of the family.

In Aitubu's culture, there is known that Aitubu woman is an "Iko" woman, which is a strong woman. In Papua, a woman who has married must bear all the needs of the family, such as raising children, taking care of her garden, aking care of food and getting fortune for daily life.

"A woman should be able of gardening. Diligent on pulling weeds. Throws caterpillars and removes the damaged leaves or yellow leaves eaten by mice, or fungi. Clever looks for firewood, squeezes sago, cooks, and works the other household chores." - Advice Mama Kame (Pg. 23). Thus, by bringing a baby into the camshaft, Irewa walks to the garden, lake, and river. She works on a normal work day. Everything should be managed and prepared by Irewa including the food. It also happens to all the women in Hobone. Grandmothers who are old, young woman while waiting on her sister who was also still a kid, all women works in the garden. That is the main activity of women at Megafu Mountains. (P. 69).

D. Violence

Violence is an invasion or attacks on the physical and mental integrity of a person's psychology. It is committed against particular gender and women generally become the object as a result of gender inequality. Forms of violence are rape and beatings, harassment, and creating dependency. Violence against women is caused more by power and inequality in society [15].

Irewa experienced oppression in her marriage since Malom was very rude and did not appreciate her. He would beat and trample Irewa if she cannot fulfil all his needs. Malom over charged Irewa with various household duties. Malom would not help with the chores because he always says that it is women's work.

"Malom slaps Irewa's head. Irewa falls easily. Malom kicks Irewa body that had fallen to the ground. Irewa belly is stepped on with both feet." (P. 79)

When Irewa was sick, Malom kept telling her to work into the garden because the household life is her responsibility.

"On the fourth day, Irewa has not recovered yet from her illness. Malom began to scold her. Irewa said that she has no energy to work. Though Malom said sweet potatoes should always be present. He was hungry. The pigs must be fed. Afterwards Irewa explained about her illness then Malom became upset. Irewa was considered as a talkative woman so that he slapped her mouth while she was speaking. Malom said that tomorrow she should've gone into the garden again." (P. 73).

Malom, as well as the understanding of other men in Papua, assumes by giving dozens of pigs to the woman's family as dowry means that men can treat women according to their wishes. The men think that they already have the women or their wife completely and they can be treated in accordance with men's wishes.

The violence experienced by Irewa was physical violence such as beatings of her body. She was sometimes unable to walk or stand up after being hit by Malom. Inner Violence has been received since the beginning of the marriage for Irewa did not love Malom. Subsequently, Malom presence in the house was torture and caused anxiety in Irewa's mind. Irewa experienced sexual violence as Malom refuse to understand her health conditions after two days of miscarriage. He instead forced her to "serve".

E. Sterotyping

All forms of gender inequality above are actually rooted from the same source of error. It is the genderstereotypes of men and women. Stereotype itself means giving a raw image, label or stamp to a person or group that is based on wrong or misguided assumption. Labeling is generally carried out in two or more relationships and is often used as an excuse to justify the actions of one group over the others. Labeling also shows unequal power relation or unbalanced aiming to conquer or dominate another side. Negative labelling can also be given based on the assumption of gender. However, negative labeling is often inflicted upon women.

In this village, there was a school established by priest Ruben. The lessons given are related to reading, writing, and any matters about agriculture. The school is intended for young men of Aitubu who were already at the age of 12. The time to study is for a year. Nevertheless there is no school for women due to the wild nature. In addition, women are needed more in the house to work in the garden or take care of family. Irewa as one of the woman who goes to school there since her house is not too far from the school is really happy to acquire new knowledge.

The above statements show that education is for boys, while girls' influence are more needed in the house to take care of families and garden. Thus, the education given to boys, while girls do not need education.

F. Emancipation struggle

Emancipation struggle is carried out to obtain the acknowledgment of women's rights in life. Emancipation is a recognition of women's presence to be respected as a human being, who have the body and the feelings.

Irewa increasingly aware that Malom cannot be expected to sustain the life of their family. Malom has sold many of their land to foreigners who come to the village, and the money from the sale of the land was spent by Malom for drinks and hired prostitute's women.

Irewa becomes more open-minded because she often sells vegetables to the city district, District Yar. For that reason, Irewa sells the land where she lived and buys a house in the city district. She rented a stall to sell vegetables. The sale of vegetables does very well. Many neighbors entrust their vegetables on Irewa's stall to be sold. Irewa doesn't care about what has been done by Malom. She only thinks about how to find the money for her children's tuition.

On the other side, when the regeneration is entered into the coast of Papua in the capital district, Malom acquainted with prostitutes coming from Surabaya. When each ship anchored, he would always come to the district to look for new prostitutes. Hence, Irewa got syphilis several times.

Irewa with the help of her twin sister, dr. Jingi, has the opportunity to know the virtual world (internet). Jingi teaches Irewa how to use email. When Jingi went to German, they were exchanging email. It also extends the horizons of Irewa.

The wife of district head saw the hard work, persistence, and "intelligence" of Irewa. Later she invites her to work together on creating useful activities for women in the neighborhood. The wife of district head concerned about the women in her district whom did not have the knowledge, skills and so on. She and Irewa managed the association "Marya Space" for the advancement of women.

Irewa had never thought anymore about the whereabouts of Malom that sinks deeper into the world of prostitution. In Irewa's life, she only thinks about how to have the money to send her child to school so that she or he will not suffer just like her.

IV. CONCLUSIONS

Irewa experienced gender inequality because the patriarchal system is very high in her society. Marginalization happened because the women in the region does not have the right to speak, and the function of woman is only within the domestic space. The subordination experienced by Irewa in her marriage is because Malom did arbitrary, and did not appreciate Irewa as a woman and wife. The hard work of Irewa is to fulfill all needs of her family life which become her responsibility. Irewa experienced a double burden for a living, fulfilling needs of her family, and taking care of the house. Negative stereotype carried Irewa because women are creatures that its existence is in the domestic world, so they have never been involved in a

public space. Irewa often goes to the district market. She finally decides to move to the city district to light up her life.

Irewa teach women to be aware of her rights and be educated women. Irewa no longer concerns with what Malom does, because she is too busy to develop herself and earn a living to pay her child tuition.

What has been done by Irewa is a step up from a woman of Aitubu. However, as part of Aitubu's society, she still cannot break down the injustice of Aitubu's women. In fact, Irewa is not successfully parse from Malom power as a husband. She is only able to escape from his husband.

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UNIVERSALITY OF “ADIL KA’ TALINO, BACURAMIN KA’ SARUGA, BASENGAT KA’ JUBATA”, SYNCHRONISTIC APPROACH ON THE FAMOUS BYWORD OF DAYAKⁱ KANAYATNⁱⁱ TRIBE

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Abstract. Structuralists believe that somehow the words (*parole*) are arbitrary, given to occasional and sudden changes. The meaning of words changes throughout time. Those changes frequently depend hardly on behavior or mood. However, this assertion must be perceived together with other structuralism axiom, i.e. the true meaning of a specific word can (still) be approached by investigating into its idealized abstraction in its particular language (*langue*). The Dayak Kanayatn’s byword, “*Adil ka’ Talino, Bacuramin ka’ Saruga, Basengat ka’ Jubata*”, is becoming more and more popular nowadays, thanks to its massive use in local Borneo formal and informal meetings. Its popularity cannot be by chance, considering the enormous number of tribes in Borneo. This paper intends to dig deeper into the origin and genuine idealized abstraction of the byword. The approach will be synchronistic. I choose this approach not to ignore the fact of diversities, but to engage in more intimate terms with the byword itself. Deep structural analysis shows that the byword apparently has traits of universality in each of its element and concept, yet not too simple to comprehend.

Keywords: structuralism; word; language; idealized abstraction.

I. INTRODUCTION

Words and phrases are arbitrary, for each one of them is product of consensus. They are perceived, created and even defined by their very own anthropological and social context. Nevertheless, the result of the ever-changing meaning(s) of words doesn’t necessarily render them implausible. Words and phrases are at the same time rational, for each one of them is product of mind (*ratio*). All knowledge of human being are formulated, imparted, reserved and inherited in words. One can argue some of the knowledge are already conceived in basic instincts and intuition of human. However, even those instincts and intuition are products of human mind (i.e. brain impulses) and then translated into words.

Words are absolute means necessary to communicate. As a logical consequence of this proposition, words must be reasonable (can be rationalized). In spite of that, words are often misunderstood because of many reasons; to say a few of them: demographical, sociological, psychological, emotional, spiritual, etc. Therefore, study of words is never obsolete and at the same time, never unidimensional. At this point, Structuralism comes strong to provide deep analysis on words with their idealized abstraction as starting point. Structuralists claim that at the background of every word, unique and distinct idealistic meaning must be evident for every human being using the same particular language (*langue*) in the same particular context.

This paper is an effort to put the Dayak Kanayatn’s byword “*adil ka’ talino, bacuramin ka’ saruga, basengat ka’ Jubata*” in its structural and idealized context. The

purpose is to offer more understanding of the principle idealized values behind the phrase and thus, dissolve prejudices about the phrase. It appears among scholars that linguistics study of languages in Borneo is definitely challenging. Problems rise mainly because of the enormous variants of the languages, yet somehow they sprout from undefined cultural homogeneity and lexical similarities (King, 1982; cf. Sorente, 2014). This situation is ideal for structuralism synchronistic approach.

II. SYNCHRONISTIC APPROACH ON THE BYWORD

The way of the synchronistic approach can be aptly utilized to analyse these so-called three philosophical principles of Dayak Kanayatn. Evidently, there are several semiotics questions derived from casual reading of it. For example, the first word “*adil*” is already a loanword. Nevertheless, this paper will not exclude entirely historical insights of the byword.

A. *Adil ka’ Talino*

Adil (*noun, nominative, neuter*). *Adil* is clearly a loanword from Indonesian *adil*, which comes from the Arabic homophone derived from *عدل* (*’adala*) “to act justify”. There is no word in Kanayatn Tribe’s languages, such as *Banana’-Ahe, Badamea-Jare, Baampe* and all their other variants. (Rufinus et al., 2003) which has the same sense as *adil*. In its syntaxes context, this word should be a noun, instead of an adjective. In Indonesian, *adil* as noun usually attached to affixes “*ke-*” and “*-an*” to produce the word *keadilan*, which means “just traits (in acts, behaviour, etc.)” (Kamus Besar Bahasa Indonesia, www.kbbi.web.id accessed on

November 29th, 2016). It is usually and rightfully translated into “justice”. *Keadilan*, and thus *adil* in Kanayatn Tribe’s languages, has broad sense: “to act just”, “to behave just”, “to live just”, “to be just”, and even “to exist just”. Hence, the word doesn’t only have ethical sense, but also social, existential, and philosophical senses.

Regarding the Aristotelian categorisation of justice, *keadilan* seems to include all these meanings: (1) *iustitia commutativa*: in sense that everyone should receive compensation in accordance with the value of thing(s) she/he gives or trades; (2) *iustitia distributiva*: everyone should receive justice in accordance with her/his professionalism, sacrifice, merit and contribution; (3) *iustitia legalis*: everyone has the same rights and obligation in front of the law for the merit of *bonum commune*, (4) *iustitia vindicativa*: everyone should recompense to any wrongdoings she/he does corresponding to the degree or/and impact of her/his crime in front of the law, (5) *iustitia creativa*: everyone has the same right to express their creativity in arts and culture free from any outer repression; and (6) *iustitia protectiva*: everyone is protected by the law from any wrongdoings that targets her/him. Moreover, there are still some addition meanings of the word *keadilan*, which correspond to reflective consequences. One must be just or truthful toward herself/himself. Only by being truthful or just toward herself/himself one can truly takes full responsibility in every deed she/he conducts.

Ka’ (preposition). The preposition *ka’* in Kanayatn Tribe’s languages cannot be univocally translated. Its function is highly depended on the context. In the phrase “*adil ka’ talino*”, the preposition can be translated as “toward” and/or “for”.

Talino (noun, accusative, neuter). The noun *talino* can be simply translated as “human”. However, the meaning of *talino* is deeper than mere about humanity. It is the first realm of three realms that arrange the natural order. The other two are *sabayatn* (*Saruga*) and *Jubata* (Thomson, 2000). *Talino* is the realm on earthly order, social structure where people dwell.

The social structure of Dayak Kanayatn Tribe is somehow egalitarian (Rufinus, 1997, 2011²). They do not recognize class or strata division in their societies. Instead of appointing their tribal and cultural leaders according to their family background, they choose to elect them democratically (Aten, 1997, 2011²). People of Dayak Kanayatn Tribe in general incline toward pacifism. They would openly accept any stranger with great hospitality, even to live among them. Indeed, in the past several bloody conflicts between Dayak Kanayatn Tribe and other ethnics occurred. However, the riots were always due to large social-economic disruption background, especially, when blood related *adat* (heavy customs) was concerned.

To discuss more about the egalitarian nature of Dayak Kanayatn Tribe, the nouns in its languages do not have gender. They do not have gender segregation in formulating their pronouns either. For instance, the pronoun for third person singular, either for a man or a woman, is just simply “*ia*”. In their society, man and woman are treated as equal, regardless their different function and task in their society due to their physiology (Julipin, 1997, 2011²). Therefore,

“human” in Dayak Kanayatn Tribe’s language consists of all humanity.

With idealized abstraction through above syntax and semantics analysis, “*adil ka’ talino*” attains its very own personal, ethical, social and universal elements:

- 1) *Personal*. To be just to the others, one needs to be truthful first towards herself/himself.
- 2) *Ethical*. The phrase promotes fair and just way of life.
- 3) *Social*. To act just, to behave just, to be just, to exist just, not just toward everything, but toward human. This part of the byword is definitely social in nature.
- 4) *Universal*. “Human” in the phrase refers to every man or woman in strong non-discriminative senses.

B. *Bacuramin ka’ Saruga*

Bacuramin (verb, reflexive, all-person, neuter). The word “*bacuramin*” is yet another loanword from Indonesian. It comes from the root word “*cermin*” which literally means “mirror”. This is a borrowed idea because the indigenous people of Borneo didn’t have original knowledge nor technology to make mirror. As a verb *bercermin* in Indonesian, other than “to look in the mirror for oneself reflection”, can also mean “to look/to gaze/to contemplate upon someone or something or event as (good or bad) example or lesson or goal” (KBBI, 2016). Semantically, *bacuramin* in the byword context can only mean the latter.

Ka’ (preposition). Here the preposition has sense “to” or “upon” or “toward”.

Saruga (noun, accusative, neuter). Another loanword from Indonesian, “*surga*” derives from Sanskrit *svarga*, स्वर्ग. According to Benediktus, instead of Hinduism or Buddhism concept, its true meaning was borrowed from Christianity concept of “heaven” (Benediktus, 2002). This claim is plausible concerning the mutual influences between *adat* Dayak and interpretation of Gospel in West Kalimantan, Indonesian Borneo (Thomson, 2000). The choice from the elders to use the word *saruga* instead of the original word of the second realm *sabayatn*, furthermore supports the argument. In its original meaning, *sabayatn* means the dwelling place of the deceased human spirits. It is an indifferent spiritual realm, where the deceased dwell temporarily in a journey towards *Jubata*. The human spirit in *sabayatn* can still linger with the living, and even can be summoned. There are possibilities at some point some of the spirits turned malevolently toward human and become evil. *Saruga*, however, is a final destination for every good spirit.

Idealized abstraction of the phrase “*bacuramin ka’ saruga*” reveals eschatological (from *eschatos* Greek: last/final) element of Dayak Kanayatn Tribe. The phrase presupposes the hope of better life after death. The idea of gazing upon heaven makes an impression of steady and intense will for life eternally in happiness. At this point, even not all believe in eternity of soul, quest for wellbeing is every man ideal way of life.

C. *Basengat ka’ Jubata*

Basengat (verb, reflexive, all-person, neuter). This reflexive verb is a metaphysical word. It is rather difficult to translate. The word is usually translated literally as *bernafas* to Indonesian. The noun *napas* in Indonesian has deeper root in *nafs* in Arabic or *nephesh* in Hebrew. The

Indonesian word *napas* has only one meaning: “air inhaled through nose or mouth and then exhaled from lungs” (KBBI, 2016). Hence, as a verb, *bernapas* simply means “process of inhaling and exhaling air”. However, the noun *sengat* has meanings closer to the Arabic word *nafs* or Hebrew word *nephes*. In Arabic *nafs* (masculine) means “self” (individuality, identity), which includes soul, psyche, spirit, mind, etc.ⁱⁱⁱ The Hebrew noun *nephes* (feminine) is biblical and has meaning “a soul, living being, life, self, person, desire, passion, appetite, emotion”.^{iv} *Sengat* in its full sense also has meanings “breath, soul, spirit, life, life force, life essence, psyche, mind, etc.”. Because of these various meanings of *sengat*, the translating of the verb *basengat* becomes problematic. It can mean “to project one’s soul”, “to integrate oneself”, “to inhale/take”, or simply “to breathe”. But, in the context of the byword, its function is everything but simple.

Ka’. In its non-simplistic context, it is difficult to discern the unique function the preposition. It can be translated as “to”, “as”, “toward”, “in”, “into”, or even “from”.

Jubata. This is another problematic word. In Dayak Kadayatn Tribe, the word *Jubata* generally accepted as the third realm of natural order. However, there is no consensus yet, and may never be one, about what it is. *Jubata* can be plural and singular. There are several *Jubata*, but it exists one *Jubata* who is higher than all the others. *Jubata* is the destination for spirits of the dead, but at same time there are *Jubata* who dwell in things, such as mountain, hills, tree, river, river banks, cave, big stone, fork in paths, entrance to the village, and even the peak of the roof of *rumah radakng*, the traditional long house of the Tribe (Thomson, 2000). *Jubata* is/are indeed sacred, but not omnipresent and definitely not a singular being in its full terms.

In several accounts, the idea of polytheism and even animism still remain deep within Dayak Kanayatn Tribe’s conscience. However, recently Andasputra and Vincentius clearly state that there is only one *Jubata*. In their account of the creation of human they explain that even though there are three persons who create human: *Jubata Ne’ Panitah*, *Jubata Ne’ Patampa/Jubata Ne’ Pajanji*, and *Jubata Ne’ Pangedokng*, there is only one *Jubata*. The one who utters the creating word is *Jubata Ne’ Panitah*. After the creation *Jubata Ne’ Patampa/Pajanji* is the one responsible to make the human in the image of *Jubata*. While, *Jubata Ne’ Pangedokng* is the one who breathe into the human the breath of life. Thus, *Ne’Adam* and *Ne’ Siti Hawa* is created. This concept of creation is very similar, but still not the same as the account of Judaism, Christian, and Islam (Andasputra and Julipin, 1997, 2011²). If we are to translate *Jubata* into “God”, especially the monotheistic God of Judaism, Christian, and Islam, the byword would be simpler to comprehend, yet not at all easy. Combined with *basengat*, the phrase will have spiritual and theological meaning, such as “breath together with God”, “to integrate oneself into God”, or “to project oneself toward God”.

At the end, one should question why the Tribe decided to choose *saruga* over *sabayatn*, but prefer to preserved it (*Jubata*) in the byword. Probably behind this choice they

still have unresolved conscience that they might still cling on their animistic and polytheistic views on natural order.

III. CONCLUSION

- 1) The byword was an effort from Dayak Kanayatn Tribe to communicate their ideal abstraction and concept of natural order into words known by modern societies. Many loanwords and loaned concept from different cultures and beliefs are used to impart these natural principles.
- 2) The effort itself reveals the natural character of this Tribe, which is keen to open themselves to the world, to make themselves known universally.
- 3) However, some problematic and unsolved concepts even among themselves remain. Probably, they still want to preserve their unique identity and their pride regarding their *adat*.
- 4) The byword itself is about natural order. The main subject of the principles is human. Behind these words lies a call for every human being to achieve wellbeing and the means of achieving it.

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ⁱ Yekti Maunati defines the name “Dayak” as a relatively modern constructed reality. It only came to surface at the end of nineteenth

century in the context of Dutch-colonialization (Maunati, 2004; cf. Harimurti, 2011). At first, this appellation was an insult to those inlanders. In several tribes in West Borneo, the word “Dayak” and its variants means “headwater”. The word was then adopted by settlers to insult the local indigenous people as “people from headwater”. However, the title was gradually had evolution of meanings. Nowadays, native tribes living in Indonesian part of Borneo are generally identified as “Dayak” (Bamba, 2008).

ⁱⁱ The origin of the name “Kanayatn” is still in debate (Bamba, 2008). The name was first mentioned by Dutch Catholic Missionary, Fr. Donatus Dunselman OFM.Cap. in his classic publication in both one of the Kanayatn’s language, Banana’ and Dutch (Dunselman, 1949). This work was recently translated to Indonesian (2015). Dunselman refers the name Kendayan or Kanayatn to Dayak tribes living within the hills areas (Dayak Bukit, *lit.* Dayak of the Hills). In recent days, these wide areas include several regencies, namely: Regency of Pontianak, Regency of Mempawah, Regency of Landak, Regency of Bengkayang, and Regency of Sambas (Andasputra and Julipin, 1997, 2011²).

ⁱⁱⁱ www.livingislam.org (accessed November 29th, 2016).

^{iv} www.biblehub.com (accessed November 29th, 2016).

MICROBIAL CONTAMINATION ON SLAUGHTERHOUSE IN KENDARI

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ABSTRACT. This study aimed to assess the total of microbial contamination on beef obtained from slaughterhouse in Kendari. The study was conducted using completely randomized design with 3 treatments and 4 replicates. The treatments were thin, moderate, and fat body conditions of Bali cattle. Results showed that total microbial contamination in general (*coliform*), *E. coli*, *S. aureus*, *Salmonella* and *Pseudomonas shigela* in beef with respect to body condition was not significantly different ($p > 0.05$). The highest colony count was observed in moderate body condition reaching 5.42×10^1 colony/g, while the lowest count was found in thin body condition attaining 3.93×10^1 colony/g. The mean value of contamination was found highest in moderate body condition (3.58×10^6 colony/g), while the lowest was in thin body condition (2.34×10^6 colony/g). Beefs with moderate body conditions exhibited the highest contamination of *E. coli* that attained 3.45×10^1 colonies/g, while the lowest contamination was found in thin body conditions reaching 3.12×10^1 colonies/g.

Keywords: Beef, body score condition, microbes, slaughterhouse, Bali cattle

INTRODUCTION

An optimal quality and quantity of carcass and non carcass portions are an indicator to measure the quality of livestock. The production of edible portion from carcass and non carcass indicates the success of livestock fattening because it shows their productivity as a whole. It is expected that a high quality protein will be supplied from meat to fulfill consumer demand.

Meat is an edible muscle tissue of animals (especially mammals) and derived from skeletal muscle or in the tongue, diaphragm, heart and esophagus with or without fat. The quality of meat is affected before and after slaughtering. Several factors affecting meat quality prior to slaughtering are genetic, species, genera, type of cattle, sex, age and additives from diet. Meanwhile, factors after slaughtering are related to bleeding which gushes out of the meat, and microbial contamination. Supplying meat

requires a special attention because it is easily and quickly contaminated by microbial growth that can reduce meat quality.

Currently, the average meat consumption in Indonesia is less than 2 kg/capita/year, far less than the average meat consumption in developing and developed countries reaching 5 kg/capita/year and 25 kg/capita/year, respectively (Delgado et al., 1999). Therefore, in 2014, the government of Indonesia launches a program known as "self sufficiency of meat" to raise people awareness on consuming meat. This program is also expected to produce better meat quality reared by intensive, semi-intensive or traditional method. The quality of meat presentation becomes the special focus on this study because miss handling may lead to problems in the level of consumer.

In traditional markets, it is common to see meats with inferior qualities such as rotten, unfresh, expired, imitation, and meat with additive substances. Those meats are considered unhealthy and inedible. According to the government regulation No. 22 in 1983, government of Indonesia through Agricultural Department stated that “safe, healthy, undamaged, and halal (lawful in traditional islamic way)” should be applied when it comes to supplying meat. The increasing demand for food security in recent years has made people become increasingly concern on health.

The present study was designed to analyse the productivity of Bali cattle in Southeast Sulawesi by assessing the characteristics of edible portion, production and quality, microbial content, and heavy metals in the carcass of traditionally reared cattle. The purpose of this study was to assess the total of microbial contamination on beef marketed in Kendari.

MATERIALS AND METHODS

The study was conducted from June-November 2012 in the Laboratory of Microbiology, Faculty of Math and Science, Halu Oleo University. A total of 30 Bali cattle consisting of 15 cows and 15 bulls with different weights were selected and divided into three body score conditions (BSC) namely thin condition (BSC 1), moderate condition (BSC 3), and fat condition (BSC 5). The score conditions were determined according to AMLC-APFINDO (1996) and Hafid (2007), in which cattle obtained BSC 2 had no fat covering narrow pelvis and elbows area, clear sitting bone, spinal and rib, thin brisket, starving, clear head tail, flank and twist. Cattle obtained BSC 3 showed moderate appearance with thin fat covering pelvis, sitting bone, spinal and rib area, starving, less appearance of base of tail, fat accumulation appears in brisket, flank, and

twist. Meanwhile, cattle obtained 5 BSC when exhibiting compact body performance, fat accumulation in pelvis, sitting bone, and rib area. Fat heavily covers base of tail. Moreover, brisket, flank, and twist areas are fully covered by fat and are noticeable.

Medical investigation was made prior to slaughtering to make sure that the cattle were healthy. The cattle were initially weighted and their sexes were recorded. After that, the the cattle were slaughtered humanly using a sharp knife on the neck cutting the jugular veins and carotid arteries and also trachea and esophagus to get a large quantity of blood gushing out of the body (Hafid and Rugayah, 2009).

Skinning was started from slicing through middle brisket and abdomen part to the medial leg. Skin was removed from the lower ventral part to the back of the body. Body weight is subtracted to the weight of gut contents to calculate empty body weight. Carcasses (fillet, flank, brisket, front and rear thigh) were weighted after cutting, skinning, and evisceration. Beef and bone were separated to obtain the total weight in every parts of the beef cattle. In the present study, the fat content in carcass was unable to be measured and it merged with the beef because the chilling room was not available in the slaughterhouse.

Some materials used were sample plastic containers, autoclave, analytic weight, erlenmeyer, pipette, ampoule bottle, petri dish, reaction tube, bunsen burner, drigalsky, preparats, microscope, cutter, ph meter, pan, inoculating loop, gas stove, camera and stationery. Other materials were 70% alcohol, aquadest, *Eosin Methilen Blue Agar* (EMBA), *Manitol Salt Agar* (MSA), Nutrient Agar (NA), colour substances and water to determine biological quality of the samples. Meat samples obtained from the thigh and shank, and kept in plastic polyethylene were then transferred to a thermos containing ice to avoid microbial

contamination. The materials used were initially sterilised with 1 atm autoclave at a temperature of 121°C for 1 hour. The samples were then evaluated for physical, chemical, and microbiological qualities. Total Plate Count (TPC) was used to determine the presence of *E.coli* and *S. aureus* was evaluated using *Eosin Methylen Blue Agar* (EMBA) and *Manitol Salt Agar* (MSA). The variables measured in the present study were (*Total Plate Count*), *E. coli*, *S. Aureus*, *Salmonella sp.*, *Pseudomonas sp* and *Shigela sp.*

RESULTS AND DISCUSSION

Total colony of *Coliform*, *E. coli*, *S. aureus*, *Salmonella*, *Shigela* and *Pseudomonas* in beef based on body condition is presented in table 1.

Table 1. Total colony of *Coliform*, *E. Coli*, *S. aureus*, *Salmonella*, *Shigela* and *Pseudomonas* based on body condition.

Variable	Body condition		
	Thin	Moderate	Fat
<i>Coliform</i>	2.34 x 10 ⁶	3.58 x 10 ⁶	3.27 x 10 ⁶
<i>Eschericia coli</i>	3.12 x 10 ¹	3.45 x 10 ¹	3.35 x 10 ¹
<i>Stphylococcus aureus</i>	3.93 x 10 ¹	5.42 x 10 ¹	4.15 x 10 ¹
<i>Salmonella sp.</i>	0.00 x 10 ¹	0.00 x 10 ¹	0.00 x 10 ¹
<i>Shigela sp.</i>	1.33 x 10 ¹	1.00 x 10 ¹	1.00 x 10 ¹
<i>Pseudomonas sp.</i>	1.00 x 10 ¹	1.67 x 10 ¹	2.00 x 10 ¹

No significant difference among the treatments ($p>0.05$)

The total colony of *E. Coli*, *S. aureus*, *Salmonella*, *Shigela* and *Pseudomonas* in thin, moderate and fat body conditions was not significantly different ($P>0.05$). The highest mean of contamination was found in beefs with moderate body condition reaching 3.58 x

10⁶ kolonies/g, while the lowest contamination was found in thin body condition attaining 2.34 x 10⁶ colonies/g. According to BSNI (2009) the standard of TPC content in fresh frozen meat (carcass and without bone) and chopped chicken is not greater than 1 x 10⁶ colony/g.

Table 2 shows that beef collected from slaughterhouse in Kendari contained microba exceeding the threshold of BSNI. This may be resulted from unhygienic locations where the samples were collected. Furthermore, unsterilised cutting utensils, the use of the same water for cleaning carcass, and chicken coops which are close to slaughtering places get carcass contaminated through the air. Microbial contamination in the beefs occurred when the animals remain alive till prior to consumption (Lawrie, 2003).

Microba contaminating the blood may originate from unhygienic cutting utensils. The other source of contamination comes from the preparation of carcass to the storage and marketing. Visceration is the biggest source of contamination either from intestine or feces through cutting utensils and hands of the workers (Innanusantri and Setiowati, 2011). Moreover, Buckle et al (2009) reported that meat destruction is due to favorable chemical compositions for the growth of microorganism.

Analysis of variance shows that biological quality of beefs were not significantly different ($p>0.05$) in the mean of total contamination of *E. coli* found in the slaughterhouse. The contamination level of *E. coli* was highest in beef with moderate body condition reaching 3.45 x 10¹ colonies/g, while the contamination level of *E.coli* was lowest in befs with thin body condition attaining 3.12 x 10¹ colonies/g.

The mean of *E.coli* found in the beefs collected from slaughterhouses exceeding Indonesia National Standard No: 7388:2009 of 1 x 10¹ colony/g. This shows

that the sanitation in the level of meat processing was poor in quality.

The contamination of *E. coli* may come from water used for processing. Buckle et al (2009) found that the contamination of *E. coli* in the fresh and processed meat derives from water used for cleaning the carcass. Moreover, Inanusantri and Setiowati (2011) reported that meat can come into contact with feces during slaughtering and visceration. Therefore, the contamination was unable to be avoided, even though in a clean slaughterhouse environment because the used water had been contaminated beforehand. A high contamination of *E. coli* causes gastroenteritis indicated by digestive problems and an acute diarrhea.

Hygenity and sanitation in retailing butchers may lead to a faster damage in carcass due to a high number of contaminants. Retailers who set up the carcass business close to main roads exhibit low sanitation than the ones far from the main roads. This was indicated by a high number of dust and poor sanitation (Inanusantru and Setiowati, 2011)

The present study found that the mean of total colony of *S. aureus* in beef from three different traditional markets was not significantly different ($p>0.05$) (table 4). The highest colony was found in moderate body condition reaching 5.42×10^1 colonies/g, while the lowest was found in thin body condition attaining 3.93×10^1 colonies/g. According to BSNI No: 7388:2009, the maximum threshold for microbial contamination is 1×10^2 colony/g in fresh/frozen meat or meat where bones had been removed. The meat samples contaminated by *S. aureus* in this study below the threshold. This indicated that when beef were collected from every traditional market, they had been contaminated by *S. aureus*. The contamination, however, was harmless and

remained in tolerable range. Contamination might occur due to lack of sanitation of slaughtering utensils.

Nugroho (2010) reported that there were at least 10 colonies/g of bacteria found in the skin of chicken before processed, yet the number increases to more than 10^3 colonies/g during slaughtering. It was also reported that the contamination of *S. aureus* increases when the the hands of the workers and water used for chilling come into contact with freshly cut meats.

Cunningham and Cox (1987) reported that bacterial cotamination of *S. aureus* occurred in all stages of processing in slaughterhouse, beginning from arriving, slaughtering, soaking with warm water, removing skin, evisceration, cooling and cutting, until the preparation of table for processing and selling.

CONCLUSION

In conclusion, the total of microbial contamination in general (coliform), *E. coli*, *S. aureus*, *Salmonella*, *Shigela* and *Pseudomonas* in beef cows with respect to body condition was not significantly different. Yet, the mean of TPC and *E. coli* found in beef collected from slaughterhouse in Kendari exceeded the threshold of SNI 2009. Therefore, the meats were unhealthy to be consumed. It is recommended that the retailing butchers maintain the sanitation during post harvesting process and product distribution. It is also required to have a serious control from competent parties on the beef cows marketed around kendari.

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