

# SCBTII Proceeding



The 8<sup>th</sup> International Conference on Sustainable Collaboration in Business, Technology, Information and Innovation

“Synergizing Digital-Based Technology, Accounting, and Management in Developing Business Sustainability and Economic Growth in Emerging Markets”

Prama Grand Preanger Bandung Indonesia  
July 20<sup>th</sup> 2017

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The 8<sup>th</sup> International Conference on Sustainable  
Collaboration in Business, Technology, Information  
and Innovation



**PROCEEDING**

**The 8th International Conference on Sustainable Collaboration in Business, Technology,  
Information and Innovation**

“Synergizing Digital-Based Technology, Accounting, and Management in Developing Business  
Sustainability and Economic Growth in Emerging Markets”

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## Preface



This publication contains the papers that were presented at the 8<sup>th</sup> Sustainable Collaboration in Business, Technology, Information and Innovation 2017 (SCBTII 2017) held on July 20<sup>th</sup>, 2017 in Prama Grand Preanger Hotel Bandung. This seminar was organized as the series of the 4<sup>th</sup> anniversary of Universitas Telkom. Being a world-class university as the vision of Universitas Telkom brings consequences, one of them is to responsible for publishing research paper.

During the early stages, SCBTII 2017 has drawn a great deal of attention. At the time, the ball room packed to its full capacity of 150 people, while 70 other people had gathered in a separate room to follow parallel sessions. Those present belonged to the circles of academics and economic society from Indonesia and abroad.

The present collection contains the papers of the seminar organized to offer a suitable context. The authors were invited for their up-to-date knowledge of the field. These contributions mainly centered around Strategy, Entrepreneurship, Economics; Digital-Based Management, and also, Accounting, Finance and Corporate Governance.

This encapsulates the presentation and the discussions that accompanied it. It owed much of its success to the active participation of speakers and participants. I also have to express a word of thanks to my colleagues at the Universitas Telkom, Ikatan Sarjana Ekonomi Indonesia and Ikatan Akuntan Indonesia who helped to organize the seminar and also to Universitas Galuh and Politeknik Negeri Bandung for your cooperation in SCBTII 2017.

Farida Titik K  
Bandung, July 20<sup>th</sup> 2017

## PROCEEDING

### **The 8th International Conference on Sustainable Collaboration in Business, Technology, Information and Innovation**

#### **Seminar and Conference Background**

The novel digital technologies are transforming all industries and the way companies operate across all vertical markets. They create new business opportunities for digital entrepreneurs both on the supply-side and the demand-side. The advent of digital era has produced several successes and failures stories in the business world. Both of them provide lessons about adaptation in digitalize world. Some companies were failed to grasp the opportunities of digital business models.

Digital technology offers business three key benefits. Firstly, digital technology facilitates faster and more efficient working. Second, digital technology help businesses to more flexibility adapt to change. Finally, digital technology can be used to create new forms of knowledge and intelligence to benefit humankind.

By empowering business leaders with tools and methods to analyze data and make informed decisions in data-rich environments. This seminar will review accounting and management issues related to synergizing Digital-Based Technology in business and government.

The conference will involve the participation of internal and external stakeholders, such as: employees, managers, the board of directors, investors, consumers, regulators, researchers and practitioners around the world (professionals, directors and entrepreneurs of any sector and department who want to adapt the latest trends in digital era). It will encourage debates and address issues across local, national, and global context based on the theme: "Synergizing Digital-Based Technology, Accounting and Management in Developing Business Sustainability and Economic Growth in Emerging Markets".



**PROCEEDING**

**The 8th International Conference on Sustainable Collaboration in Business, Technology,  
Information and Innovation**

“Synergizing Digital-Based Technology, Accounting, and Management in Developing  
Business Sustainability and Economic Growth in Emerging Markets”

**Bandung, July 20<sup>th</sup>, 2017**

**Keynote Speaker**

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Dr. H. Ahmad Heryawan, Lc., M.Si

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**Speaker :**

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**INVITED PAPER**

**Assessment of Strategic Human Resource Interventions in Select Government Departments in West Bengal, India: Conceiving a Measurement Scale**

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**Abstract**

With a prelude of literature on strategic human resource management, this paper highlights a research design for creating a measurement scale that can be used to understand the extent of applicability of HR interventions in the Government departments in West Bengal, an eastern state in India. Literature on the study hovers round on the key areas of strategic HR viz. applicability of strategic HR at work, leadership practices, relevance of business ethics, the optimistic flavor of motivational drives, the identifiable areas of employee engagement, elements of job satisfaction, and spirit of restructuring organizations. On this backdrop, four departments primarily allocated for service sector of the state economy namely Labour department; Commerce & Industries department; Health & Family Welfare department; Technical Education & Training department of the state of West Bengal have been considered for the present study. The research scale is formulated in the name of “Potential Assessment of Human Resource Interventions in Public Departments” i.e. “PAHRI – PD” scale has been initiated on the lines of five broad areas of strategic human resource interventions viz., employment, management and development, measurement and acknowledgement, building departmental culture and environment and nurturing of human resource in this paper. The study makes an attempt to conceive a measurement scale to measure applicability of strategic HR interventions in government departments of West Bengal in eastern India.

Keywords: strategic, interventions, HR, scale, assessment, government, West Bengal

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**1. Introduction**

Organizations thrive on people. The image of an organization is reflected through goodwill and trustworthiness upheld by its human force. International competition and global competitiveness have brought in the need for laying much importance and relevance of people factor at work-domain (Monappa, 1997). The inclination towards strategic human resource interventions at the organizational terrain has revolutionized the pathway for success and sustenance for today’s business houses in the long run. Strategic HRM gives the direction on how to build the foundation for strategic advantage by creating an effective organizational structure and design, culture, employee, value proposition, systems thinking, an appropriate communication strategy and preparing an organization for a changing landscape (Ray Chaudhuri & Basu, 1997). The essence of the working paper is oriented towards exploration of SHRM and essentiality of human resource interface in the public domain. The scope of the paper revolves around with the potential of strategic human resource interventions in the specified government departments in the state of West Bengal.

## **2. Literature Review**

### **2.1 HR at Work Place**

A good work environment is one that brings out the best in people. The epicenter of any productive functions is ensured through the linkage of desirable working conditions and workers attributes inducing potential output (Valle, 2005). The employer-employee relation is the vital backbone for successful accomplishment of any organizational activity at work front. People work best in a setting marked by mutual respect, personal dignity and support which utilizes one's skills and abilities with cooperation, coordination and integration at the functional platform. A safe workspace eliminates workplace aggression and thus boosting workers' performance (Flanagan, Strauss & Ullman, 1974). The gift of safe and civil atmosphere, the climate free from threats and violence with the existing policy for equity and justice against all odds in the name of harassment, bullying- all induces a positive feeling, a sense of belongingness and motivation among the workforce.

### **2.2 HR & Leadership**

A common consensus has evolved in leading business houses emphasizing the need and necessity of leadership amidst increasingly turbulent and complex organizational environment (Schein, 1992). The reelection of guiding thoughts with a mission designed through universal vision is the essence of new millennium leadership. To combat the storms of organizational catastrophe a leader should adhere to the directives of crisis management in the sphere of over-viewing the actual situation with prompt action compounded through management of expectations and assuming control action supplemented by a liberal outlook (Kragnes, 1994). The conglomeration of a host of varied attributes of way of life in the form of language, race gender, ethnicity, experience, knowledge and other allied elements characterizes effectiveness of future leaders across the globe. The potentials of strategic leadership pave the way towards global leadership characterized with visionary outlook, assembling core competencies, human capital component, new technology spectrum, commitment in important strategies, structuring an ideal organizational culture, implementation of balanced controls and engagement in ethical 3 activities (Gouldner, 1950).

### **2.3 HR & Ethics**

In the last two decades the waves of several visible trends and attitudinal changes have been reflected in the management of thoughts emphasizing on eternal human values (Gentile, 1998). With the flow of time the essence of human values seem to be nurtured within the shell of Human Resource Management synthesizing a holistic view of life, touching the spiritual heights with material attainment. The nucleus of Business-Government-society is the core of every ethical structure prevailing across boundaries (Miceli, Near, 2001). Strategic Human Resource Management has evolved as the backbone to regain from illusionary ethical values and exaggerated misconceptions through interactive video, ethical games, moral dilemma discussions and imparting training at various levels of ethical misapprehension. The essentials of ethical mission, in the framework of international human resource management throw light on creation, nurture, communication and efficacy in relation to ethical values in the organizational hemisphere (Brenner, 1992).

### **2.4 HR & Motivation**

The spotlight focusing the zenith of sustainable organizational development can be vested on the stimuli of human force at the organizational platform. Organizations become successful when employees are enriched with abilities and designed with desire to accomplish given tasks (Shane, Locke & Collins, 2003). The zeal and enthusiasm of the workforce induces for employee commitment which is blended with certain or critical motivational elements viz. synergy- the existing force of living being and cause of any activity, the individual behavior- leading towards goal centric function, the behavioral determination- to act appropriately on nay organizational upheaval (Latham & Steele, 1983). A close connectivity with attachment and attraction towards job can be witnessed where involvement induces employees to achieve superior results which in turn encircle the process of commitment and continuity and constancy. Amidst recycling effect of environmental sphere the



harmony between environmental morale and corporate environmental responsibility is of utmost relevance in the new millennium encyclopedia (Miner, 2006).

## **2.5 HR & Employee Engagement**

The epicenter of organizational excellence revolves around to the degree and extent human involvement at work. To have a committed workforce ensures satisfaction, consummation and fulfillment in the minds of employee (Petri, Bryson, Ilmakunnas, 2012). The essentiality of conveying the real meaning and rationale of the need for employee engagement creates the path for drafting the right decision which ultimately induces an employee to get a positive inclination to the job assigned. A growing body of literature on 'happiness' has become an important focus in aspect of human life. Happier employees are more easily to 'broaden-and-build' themselves, more creative (Cohen, 1991). Resilient, socially connected, physically and mentally healthy and more productive. Subjective well being and welfare is the core of happiness projecting equilibrium between personal life and social life, enjoyable work terrain, sound health and energy, democratic style of management keep employees happy (Robertson & Cooper, 2011).

## **2.6 HR & Job Satisfaction**

People today are largely acknowledged as key resources and valuable asset at work. A good beginning with the right intention, enthusiasm and the desire towards accomplishment of job is the way towards enhancing human capacities at work in the real sense of the term. A resourceful worker creates a concrete foundation in building the process of job satisfaction through job performance (Locke, 1970). Literature suggests that performance based pay, job rotation and empowerment are higher levels of HR initiatives that influence job satisfaction. Blending of engagement of man-power, evaluation of human abilities and enhancement of job opportunities are keys to ensuring job satisfaction and contentment among employees (Schmidt, 2007). Quite apparently it can be cited that the '4P's' i.e. working location referred to as 'place', remuneration defined as 'perks', upliftment termed as 'promises' and working duration quoted as 'presence' all combined pave the doorway to job satisfaction (Ganzack, 1998).

## **2.7 HR & Organizational Development**

As we step forward in the new millennium organizational survival and endurance ties knot with challenges-competitions-changes. Organizational development is an ongoing advancement process of human values with a focus on productivity designed with promises and programmed for performances (Beeson & Davis, 2000). The siblings of effective organizational renovation are embedded within the layers of the social spheres coupled with realistic aspect of good governance. The journey towards organizational development movement witnessed the intervention of cultural components with change agents viz. power haring, collaboration, teamwork, autonomy all contributing to the cultural values in which the organization operates (Cumming & Huse, 1989). The notion of organizational development has gained prominence as a tool towards innovation, creativity, novelty and escalation in the corporate hemisphere. Organizational development is not an 'end' but a 'means' in generating enormous opportunities and potential in the search of the 'good' and 'goodness' for making organizations more successful and satisfying (Weick & Quinn, 1999).

## **3. Research Objective**

Although quite some amount of research has been done in the field of Human Resource Interventions in management literature, there are hardly a handful of studies on strategic HR interventions and their applicability in the workplace in the Indian context. More-so nothing much has been studied on application of SHRIs in the public sector in the Indian context. No apt measurement scale for measuring the reality application of strategic human resource interventions in the government departments of West Bengal has been conceived so far. Considering this phenomenon as a research gap, the key objective of this paper is to highlight a research design for conceiving a measurement scale to identify and assess the applicability of HR interventions in the Government of West Bengal, in the light of some select government departments viz.: the public departments



of Labour; Commerce & Industry; Health & Family Welfare; and Technical Education & Training in the Government of West Bengal.

A brief detail of the four departments considered for development of scale are enumerated as:

- ✓ i. Labour Department: This department is chiefly concerned with the administration of the enactments and to promote harmonious industrial relations. Labour department, Government of West Bengal is devoted to the cause of the toiling masses comprising the underprivileged, deprived and poor inhabitants of the state.(www.westbengal.gov.in).
- ✓ ii. Commerce and Industries Department: This department is mainly responsible for promotion and regulation of large and medium scale industries and trade and commerce in the state. Commerce and Industries department is assigned with the tasks of formulating and implementing industrial policies and strategies required for the development of state economy.(www.westbengal.gov.in).
- ✓ iii. Health and Family Welfare Department: Vested with the responsibility of maintaining and developing the health care system in the state of West Bengal through its Health & Family Welfare Department which provides financial and managerial support for the improvement basic health care facilities at the rural level.(www.westbengal.gov.in).
- ✓ iv. Technical Education and Training Department: The state of West Bengal has vested the responsibility to Technical Education & Training department to provide technical know-how among the students of economically backward areas of the state with subsidised fee structure. The core areas of this department include promotion and encouragement in the growth and development of skill development programmes throughout the state. (www.westbengal.gov.in).

The authors of this paper have proposed a structured research design for creation of the “**Potential Assessment of Human Resource Interventions in Public Departments**” i.e. “**PAHRI – PD**” scale. The nomenclature of this measurement scale has been coined by the authors themselves.

#### 4. The Research Design for Conceiving the PAHRI-PD scale

The Research Design for preparation of the PAHRI-PD scale has been envisaged in terms of a handful of steps.

##### Step – I

##### Defining the domains on the basis of literature review & experts/judges opinion

A detailed study of literature coupled with interactions and discussions with experts in the Human Resource functional area have been taken up for identifying the broad domains of the study.

The broad domains referred to the functional areas of HRM in the staffing of man power, supervision and improvement of human resource, estimation and recognition of personnel, enhancing departmental cultural spirit and taking care of man power at work place.

The five major domains of the scale have be identified as

Dom A Employment of Human Resource

Dom B : Management & Development of Human Resource



Dom C : Measurement & Acknowledgement of Human Resource

Dom D : Building Departmental Culture & Environment of Human Resource

Dom E : Nurturing Human Resource at work

## Step-II

### Defining the Sub domains/Subscales under each domain & defining the items relating to the Sub domains

On the basis of further literature review an understanding of the problem to be investigated, the sub domains have been identified under each domain and multiple items of study have been identified relating to the sub domains

The following table (Table 1) shows the number of sub domains or sub scales items at this stage.

Table 1

<b>Domain</b>	<b>Sub Domain or Sub Scale</b>	<b>Items</b>
[A] Employment of Human Resource	A.1 Manpower Planning A.2 Job Analysis and Job Design A.3 Recruitment and Selection A.4 Placement and Induction	43
[B] Management & Development of Human Resource	B.1 Employee Training and Development B.2 Career Planning activities of Employees B.3 Performance Management	37
[C] Measurement & Acknowledgement of Human Resource	C.1 Job Evaluation C.2 Compensation, Administration and Employee Benefit Programme	26
[D] Building Departmental Culture & Environment of Human Resource	D.1 Well Managed Departmental Structure D.2 Clear Departmental Communication D.3 Clean & Consistent Departmental Culture D.4 Planned Change and Departmental Development	62
[E] Nurturing Human Resource at work	E.1 Grievance and Discipline Management E.2 Collective Bargaining E.3 Participation & Empowerment E.4 Trade Unionism E.5 Industrial Relations	50

Total number of items at this stage has been 218 in all.



### Step- III

#### Expert/Judges opinion and Item Language Construction

The scale has been then circulated among 25 experts/judges in the field of HRM comprising of both academicians and practicing managers in the industry in Kolkata as well as across the country for their opinions about the appropriation of the sub-domain and the items in relation to the purpose of the study. The experts have been chosen indentifying their considerable experience in the field of Human Resource Management as an academician or as an industry practitioner.

With the incorporation of the views and opinions of experts/judges some of the sub domains/sub scales have been restructured, certain sub domains have been merged with other sub domains or sub scales while certain sub domains have been totally deleted. Some items too have been deleted in the process.

The scale has been further improved upon and developed in accordance with the 14 Classical Rules stated by Edwards, 1957 for a clear and discrete language construction of the items in the scale.

These steps have initiated the basic layout of the “Potential Assessment of Human Resource Interventions in Public Departments” i.e. “PAHRI–PD” scale, considered in this paper.

The following table (Table 2) shows the Domain, Sub Domains/ Sub –Scales and also the number of items associated with each Sub Domain/Sub Scale .

Table 2

<b>Domain</b>	<b>Sub Domain or Sub Scale</b>	<b>Items</b>
Dom A. Employment of Human Resource	i. Manpower Planning ii. Job Analysis and Job Design iii. Recruitment and Selection iv. Placement and Induction	40
Dom B. Management & Development of Human Resource	i. Training and Development ii. Career Planning activities of iii. Employees iv. Performance Management	35
Dom C. Measurement & Acknowledgement of Human Resource	i. Job Evaluation ii. Compensation, Administration and Employee Benefit Programme	25
Dom D. Building Departmental Culture & Environment of Human Resource	i. i.Well Managed Departmental ii. Structure iii. ii.Clear Departmental iv. Communication v. Clean & Consistent Departmental Culture vi. Planned Change and vii. Departmental Development	60
Dom E. Nurturing Human Resource at work	i. Grievance and Discipline i. Management	50



Domain	Sub Domain or Sub Scale	Items
	ii. Collective Bargaining iii. Participation & Empowerment iv. Trade Unionism v. Industrial Relations	

Total number of items at this stage has been 210 in all.

Thus this paper has revealed five specific Domains with a range of Sub Domains/Sub-Scales along with it. All these have been done through literature review, experts/judges opinion and incorporation of the 14 Classical Rules by Edwards 1957.

#### Step- IV

##### Assessing the applicability of the items

To assess the applicability of 210 items in the scale two techniques were adopted. One was through rating by experts and the other by statistical technique of item analysis.

##### (i) Rating by Experts

The scale so far developed has been then further circulated to 10 experts/judges, who were selected at random from among the previously considered 25 experts.

Thereafter a mathematical exercise has been taken up to eliminate items which do not seem to be much of relevance in the context of the present study as per opinions of the 10 experts to whom the scale as in was circulated.

The exercise has been as follows:-

- a) Considering each item under each sub domain the following calculation was done:  
Sum of scale responses of all 10 respondents  
10
- b) If quotient is less than or equal to 3.0, the item is rejected and if quotient is greater than 3.0, the item may be considered for acceptance- accepted.

The following table (Table 3) shows the number of sub-domains or subscales and items at this stage.

Table 3

Domain	Sub Domain or Sub Scale	Items
Employment of Human Resource [A]	4 (A.1, A.2, A.3 & A.4)	8+11+7+10=36
Management & Development of Human Resource [B]	3 (B.1, B.2 & B.3)	15+8+10=33
Measurement & Acknowledgement of Human Resource [C]	2 (C.1 & C.2)	11+11=22
Building Departmental Culture & Environment of Human Resource [D]	4 (D.1, D.2, D.3 & D.4)	14+14+11+17=56
Nurturing Human Resource at Work [E]	5 (E.1, E.2, E.3, E.4 & E.5)	7+8+10+11+10=46

The total number of items at this stage has been 193 in all.

(ii) Item Analysis

Before finalizing the scale, the item subtotal correlations had to be computed between each item and their respective sub-domains. Only those items that correlated quite significantly ( $P < 0.05$ ) with their respective sub-domain were decided to be considered for inclusion. For this purpose the draft scale was administered to the Pilot sample .

Step – V

Pilot Study: Preliminary administration and Item analysis

The scale thus set up has been put forward for a test run towards a Pilot Study .

Sample for Pilot Study: The sample for pilot study consisted of 112 samples of four select departments under Government of West Bengal viz. Commerce and Industries Department, Labour Department, Technical Education & Training Department and Health & Family Welfare Department.

The sample of respondents was asked to respond on their perception of the critically of each sub-domain (SHRIs) in relation to each of the items mentioned. The response has been made on the basis of five-point scale.

The procedure for data collection has been considered in terms of:-

- i. Primary face to face interaction with the individual respondents in selected organization and departments with the sealed questionnaire discussed and explained to them in person.
- ii. Face to face interaction with specific contact persons in the selected organizations and departments with the scaled questionnaire discussed and explained to them and later distributing the same to the rest of the others considered as sample respondents for their feedback.
- iii. Telephonic interaction with the contact person and / or respondents with the questionnaire discussed and explained to them.
- iv. E-mail communication with the contact persons and the respondents of the selected organization and departments with the scaled questionnaire being discussed and explained to them.
- v. A combination of sum or all of the above four approaches as was felt suitable in specified cases.

Step-VI

Questionnaire Construction & Testing

Based on the responses of the Pilot Study an attempt has been made to create the final scale. The final questionnaire consisted of basic demographic information about the respondents and the responses from the total sample for all the items following a rating scale 1-5, 1 meaning 'not at all applied' & 5 meaning 'extremely applied'.

The Reliability Test has been conducted for five domains viz. Domain A i.e. Employment of Human Resources, Domain B i.e. Management and Development of Human Resources, Domain C i.e. Measurement & Acknowledgement of Human Resource , Domain D i.e. Building Departmental Culture and Environment and Domain E i.e. Nurturing Human Resource at work.

In all cases the value of Cronch Back Alpha appeared to be greater than 0.70, thus showing all the constructs in the scale as reliable.



## 5. Results

The Domains and Sub Domains/Sub Scales of “*Public Department Human Resource Intervention Potential Assessment Scale*” - “**PAHRI-PD**” scale thus created are:

### Dom A. Employment of Human Resource

- A.1 Manpower Planning (8 Items)
- A.2 Job Analysis and Job Design (11 Items)
- A.3 Recruitment and Selection (7 Items)
- A.4 Placement and Induction (10 Items)

### Dom B. Management and Development of Human Resource

- B.1 Employee Training & Development (15 Items)
- B.2 Career Planning (8Items)
- B.3 Performance Management (10 Items)

### Dom C. Measurement & Acknowledgement of Human Resource

- C.1 Job Evaluation (11 Items)
- C.2 Compensation, Administration & Employee Benefit Program (11 Items)

### Dom D. Building Departmental Culture and Environment

- D.1 Well managed Departmental Structure (14 Items)
- D.2 Clear Departmental Communication (14 Items)
- D.3 Clean & Consistent Departmental Culture (11 Items)
- D.4 Planned Change and Departmental Development (17 Items)

### Dom E. Nurturing Human Resource at Work

- E.1 Grievance and Discipline Management (7 Items)
- E.2 Collective Bargaining (9 Items)
- E.3 Participation & Empowerment (10 Items)
- E.4 Trade Unionism (10 Items)

## 6. Conclusion and Managerial Implications

The endeavor in this paper to create a standardized measurement scale to identify and understanding the extent of real life application of typical HR intervention in the government departments in West Bengal Government is an enabling step forward in gauging the applicability of HR interventions in the Government departments. The

implication of this study is the conception of the 'PAHRI-PD' scale to measure the application of HR intervention in the public work setting in the Government of West Bengal. Authorities and senior managerial officials in the Government of West Bengal can use this scale to understand the core areas where improvement is necessary in the application of HR interventions, considering the public departments in the West Bengal Government. Accordingly authorities in the Government may revisit their drive towards initiating HR practices in the workplace and improve upon the necessary deficiencies in the application of HR intervention in the West Bengal Government.

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**INVITED PAPER**

## **Study On The Selection Of Alternative Strategies To Face Business Competition In Monoponik Bandung**

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### **Abstract**

Alternative strategic plan can be an option for Monoponik as a company engaging in creative industry in Bandung to compete with other competitors. The purpose of this research is to analyze the strengths, weaknesses, opportunities and threats of Monoponik in order to create an alternative strategy to be used in competing with the competitors. This research used a qualitative method. The primary data were obtained through deep interviews and the secondary ones were collected through literature studies, literatures, and internet access. The sampling method was the purposive one involving 3 interviewees. The results showed that the total IFE-Matrix score is 2.559 and the EFE-Matrix is 2.55, and the result of IE-Matrix has positioned Monoponik in the V-cell quadrant of holding and maintaining which contains two alternative strategies namely market penetration and product development. QSPM analysis resulted in the total score of 6.71 which means product development strategy is the appropriate alternative strategy and suitable for Monoponik to implement. There are four kinds of strategies obtained from the SWOT analysis to support product development strategy.

*Keywords: Strategic Management, Business Strategy, QSPM Matrix, SWOT Matrix, Creative industries*

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### **1. Introduction**

In the midst of the growing global economic challenges, the government takes serious efforts to support the development of creative industries into strategic sectors which can play bigger roles in the national economy contributing to GDP, job creations and exports. A number of policy breakthroughs have been made, including the prioritization of creative economic development in the national RPJM 2015-2019 and the establishment of a creative economy body as the institution to supervise the development of creative economy in particular. Creative industry is the utilization of individual creativities, skills, and talents to create welfare and employment. The creative industry is further divided into 14 sectors and one of them is the design sector. The city of Bandung as a center of textiles, fashion, art and culture is also known as "Paris van Java", it is a creative city with great potential of human resources, having been selected as a creative city pilot project for East Asia in Yokohama 2007, Bandung has created the slogan of Bandung Creative City to support the mission. Some efforts have also been made by Bandung City Government in developing creative industries which include facilitating meetings with the creative communities. Having a population of more than two million people, it is not impossible for the city of Bandung to develop businesses in the creative industry sector since the human resources in Bandung are considered to have good creativities. Bandung city is conducive for the development of creative industries. The people in Bandung are tolerant with new ideas and appreciate individual freedom which become the main capital of it to develop creative industries. Bandung city has targeted a rapid development through the presence of creative industries which is in accordance with the Kampung Juara program as expected by the Mayor of Bandung Ridwan Kamil. The growth of graphic design industry in Indonesia is very rapid and this of course directly requires quality standardization for its professional graphic designers. The current standardization is no longer possible to accommodate the development rate of graphic design. However, considering what has been happening both abroad and in Indonesia, it is expected that this effort can be a reference to face the growth in graphic design field.

Monoponik as a company in the field of creative industry has the mainstay subdivision of design in the city of Bandung. New ideas, technological innovations and creativity have encouraged this business to continue producing works in the industry. Nowadays, there are around 40 companies taking place in the creative industry competition of graphic design subsector in Bandung city (Data of ADGI Indonesia Chapter Bandung). The number continues to increase along with the development of era, technology, and business climate which will affect the creative industry competition of graphic design sub-sector in the future. Due to the rapid growth of creative industries in the city of Bandung, many new businesses have emerged and the evolving era of globalization towards the ASEAN Economic Community (MEA) has made the business competition tighter. As a result, old businesses must devise a strategic plan to be able to compete with new businesses and existing competitors. The strategic plan itself is a decision process and actions referring to one or more effective strategies for achieving organizational goals (Mirzakhani, *Et al* 2014). Therefore, Monoponik must be able to compete in the world of creative industries in Bandung.

Bandung as a creative city under the leadership of Mayor Ridwan Kamil will succeed the program of Kampung Juara, this will certainly lead to an increase in the potential of creative industries. Therefore, Monoponik as a company engaging in the field of graphics and domiciled in the city of Bandung will face the increasingly tighter creative industry competition. Monoponik must then prepare a strategic plan to be able to compete against the potentials that will occur both from the internal and external sides of the company. From the internal side, the company can find out the strengths and weaknesses, while from the external one, the company can identify the opportunities and threats in the external environment. Through the analysis of *Internal Factor Evaluation - IFE Matrix*, *External Factor Evaluation - EFE Matrix*, *Internal-External - IE Matrix*, *SWOT Matrix*, and *Quantitative Strategic Planning Matrix – QSPM*, the internal and external aspects of the company will be known, so that the suitable alternative strategies for Monoponik to be able to compete in the creative industry business competition will be found.

## 2. Literature Review

The definition of business from Raymond E. Glos in Umar, Husein (2003: 3-4) is considered to have the most extensive coverage, namely "Business is all activities organized by people who are engaged in commerce and industry providing goods and services for the need to maintain and improve their standards and quality of life ". The first strategy definition proposed by Chandler (1962) in Rangkuti, Freddy (2006: 4) mentions that strategy is the long-term goal of a company, as well as the utilization and allocation of all the resources necessary to achieve that goal. According to Liu in Li (2013), strategy management not only develops and devises strategies but also contains management to develop the strategy implementations, so this is the whole set of management processes. David Fred, R (2010: 324), essential strategy-forming technique can be integrated into the three-stage decision-making framework, namely the input stage (first stage), matching stage (second stage), and decision stage (third stage).

In the first stage, an analysis test of Internal and External Factors Evaluation Matrix (IFE Matrix and EFE Matrix) is used. Achmad, Machmud, *et. al* (2013), the final step in carrying out internal strategic management audit is the preparation of the Internal Factors Evaluation (IFE Matrix). This strategy formulation tool summarizes and evaluates the key strengths and weaknesses in the business functional areas, as well as a foundation for identifying and evaluating the relationships between these areas. According to Achmad, Machmud, *et. al* (2013), the External Factors Evaluation (*EFE Matrix*) matrix allows strategists to summarize and evaluate the economic, social, cultural, demographic, environmental, political, governmental, legal, technological, and competitive information. After the completion of the first stage, then it is proceeded by the second stage using internal-external matrix or *IE-Matrix* and *SWOT Matrix* analyses. According to David Fred. R (2010: 344-345), Internal-External Matrix (*IE Matrix*) positions the various divisions of an organization in the appearance of nine cells. The IE matrix is based on two key dimensions: the total IFE weight score is on the x axis and the total EFE weight score is on the y-axis. Li, Ping (2013), the SWOT refers to a comprehensive method considering the various conditions of internal factors and the external environment, implementing an evaluation system and selecting the best business strategy.

Beidokhty, *et al* (2011), the SWOT in words means four factors of strength, weakness, opportunity and threat,



and identifying the processes, studies and evaluations of the potential and influencing the internal and environment variable is called SWOT Analysis. According to David Fred. R (2010: 350-351) the analytical technique in the literature designed to determine the relative attractiveness of alternative measures is the *Quantitative Strategic Planning Matrix* (QSPM), which compiles stage 3 of the analytical framework of strategy formulation. This technique objectively shows which strategy is the best. QSPM uses the input analysis from stage 1 and the matching results from the 2nd stage analysis to objectively determine the strategy to be implemented among the alternative strategies. Razmi in Mirzakhani, *et al* (2014), QSPM is one of the decision-making tools which helps managers to prioritize and choose the strategies they need.

### 3. Research Methodology

This research used the descriptive qualitative method. The qualitative research method is often called naturalistic research method because the research is done in natural conditions (natural settings). Indrawati (2015: 206), a qualitative research method is also a research method which involves the analysis of data in the form of description and the data is not directly quantifiable. Qualitative research method is a research method used to examine the condition of natural objects, (as opposed to experiments) in which the researchers are as the key instruments, sampling of data sources is conducted purposively and in snowball-like, the collecting technique uses triangulation (merges), data analysis is inductive / qualitative, and the qualitative research results emphasize more on meaning than generalization. Qualitative data analysis is inductive which means the analysis is based on the data obtained, then a certain relationship pattern is developed or become a hypothesis. If the data which have been collected repeatedly using triangulation technique shows that the hypothesis is accepted, then the hypothesis is developed to become a theory. In this study, the researchers used data analytical technique model of Miles and Huberman. Miles and Huberman in Sugiyono (2013: 430) suggest that the activities in the qualitative data analysis are carried out interactively and continuously until it is complete, so the data have then been saturated. The activities in data analysis are *data reduction, data display, and conclusion drawing / verification*.

### 4. Discussion

#### 4.1 The First stage – (Input Stage)

*Internal Factor Evaluation - IFE Matrix* is used to determine internal factors which affect the competitiveness of a company related to the strengths and weaknesses which are considered important. The weights are generated based on the priority determined by the interviewees, to obtain the weight of 1, the two factors are firstly divided to get the respective total value of 0.5. The weights then are assigned according to the predetermined priority in order to have the appropriate weight values. The rating is obtained from the average rating of the three interviewees which then become the average rating figure. Rounding up is done if the average rating result is  $\geq 0.5$  and rounding down is done if the average result is  $< 0.5$ . The weight is after that multiplied with the rating to generate a score, then all scores are totaled to gain the total score of *IFE-Matrix*. The following is the table of *IFE-Matrix*

Table 1. IFE Matrix

	Internal Factors	Weight	Rating	Score
<b>Strengths</b>				
1	Motion graphics is the best product of Monoponik compared with the competitors	0.15	4	0.6
2	Combination ability by adapting external style and internal style	0.071	3	0.213
3	Team cohesiveness as the result of kinship coaching	0.054	4	0.216
4	Continuous product development	0.058	3	0.174



	<b>Internal Factors</b>	<b>Weight</b>	<b>Rating</b>	<b>Score</b>
5	Most of the products are in accordance with the wishes of the clients	0.047	3	0.141
6	Always revise the project to maintain the quality of the product	0.12	3	0.36
	<b>Weaknesses</b>			
1	The marketing is not maximized	0.069	2	0.138
2	Bad financial system	0.15	2	0.3
3	The company's website has not been optimized	0.145	1	0.145
4	Unclear organizational structure	0.056	2	0.112
5	The existing production equipment have not fully supported the business activities	0.033	2	0.066
6	The CRM has not run well	0.047	2	0.094
	<b>Total</b>	<b>1</b>		<b>2.559</b>

From the results of the analysis in Table 3.1, it is known that the strength factor with the greatest weight is number 1 of 0.15 and the weakness factor with the biggest weight is number 2 in the amount of 0.15. The total IFE-Matrix score obtained is 2.559. After that the EFE-Matrix analysis is done. In the *External Factor Evaluation-Matrix* process analysis, several probability factors and some threat factors are weighted and rated for scoring each factor, then the scores are summed up to get the total score of EFE-Matrix. Like IFE Matrix, the weight of EFE-Matrix is also generated based on the priority specified by the interviewees, to obtain the total weight of 1, the two factors must firstly be divided into the value of 0.5 for each of them, after that, the weights are assigned according to the predetermined priority to generate the appropriate weight value. The rating is obtained from the average rating of the three interviewees to generate the average rating figure, it will be rounded up if the average rating result is  $\geq 0.5$  and rounded down if the average result is  $< 0.5$ . The weights are then multiplied by the ratings to get the scores, next all scores are totaled to attain the total score of the EFE-Matrix. The *External Factor Evaluation - (EFE) Matrix* is used to evaluate the external factors which determine the company's success in the competition. The following is the table of EFE-Matrix:

Table 2. EFE Matrix

	<b>External Factors</b>	<b>Weight</b>	<b>Rating</b>	<b>Score</b>
	<b>Opportunities</b>			
1	Government policy in creative industry growth	0.1	2	0.22
2	The creative climate of Bandung city	0.12	3	0.45
3	Bandung city as a world design city	0.05	2	0.12
4	There is no substitute of Monoponik's products	0.03	2	0.1
5	The influence of western design culture is growing rapidly	0.1	2	0.22
6	Rapid technological developments	0.1	3	0.36
	<b>Threats</b>			
1	Rapidly changing trend of design	0.18	3	0.45
2	Tight competition because of the increase of new competitors	0.17	2	0.26
3	Rapid growth of both new and existing competitors as they continue to innovate	0.15	3	0.36
	<b>Total</b>	<b>1</b>		<b>2.55</b>

Based on the results of the analysis in Table 3.2, it is known that the opportunity factor with the biggest weight is number 2 of 0.12 and the threat factor with the biggest weight is number 1 of 0.18. The total EFE-Matrix score obtained is 2.55. The total score obtained will then analysed in the second stage which is the matching stage of the IE-Matrix analysis.

## 4.2 The second stage – (Matching stage)

After the completion of the first stage analysis test, then the second stage is carried out firstly through the analysis of IE-Matrix test to determine the position of Monoponik. Both total score results of IFE-EFE Matrix will be analysed in this test. The following is the analysis test results of IE-Matrix:

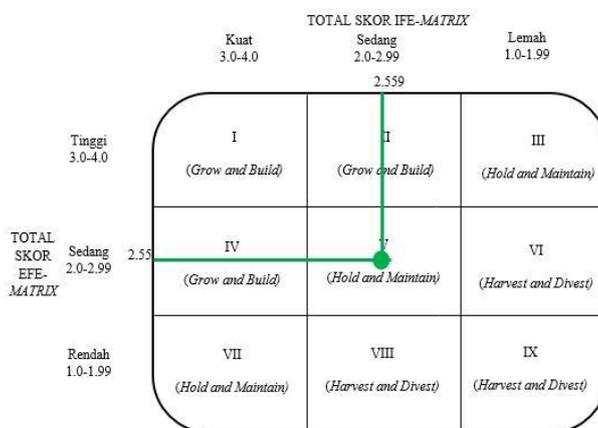


Fig 1. IE-Matrix

The total internal score of Monoponik is 2.559 which falls into the medium category meaning that Monoponik is neither strong nor weak in maximizing the strength and minimizing the company's weakness so it can achieve the company's goal, then the total external score of Monoponik is 2.55 which can be categorized medium, meaning that Monoponik is neither strong nor weak in taking advantage of the opportunities and overcoming threats. From the results of IE-Matrix which have been analyzed, it can be concluded that the position of Monoponik company is diesel V which means hold and maintain. In the V cell quadrant, there are 2 strategies including market penetration and product development. After conducting the analysis of IE-Matrix, then it is continued by doing the SWOT analysis to generate strategies which fall into the categories of market penetration and product development. Here are the SWOT results which have been analysed:

Table 4. SWOT Matrix

Strengths (S):		Weaknesses (W):	
<ol style="list-style-type: none"> <li>1. Motion graphics is the best product of Monoponik compared with the competitors.</li> <li>2. Ability to combine the overseas styles and domestic ones.</li> <li>3. Team cohesiveness due to kinship coaching.</li> <li>4. Continuous product development.</li> <li>5. Most of the products are in accordance with the wishes of the clients.</li> <li>6. Always revise the project to maintain the quality of the products</li> </ol>		<ol style="list-style-type: none"> <li>1. Marketing is not maximized.</li> <li>2. The financial system is not good.</li> <li>3. The company website is not yet optimized.</li> <li>4. Unclear organizational structure.</li> <li>5. The availability of production equipments have not fully supported the business activities.</li> <li>6. The CRM has not run well</li> </ol>	
Opportunities (O) :		WO strategies :	
<ol style="list-style-type: none"> <li>1. Government policy in creative industries growth.</li> <li>2. The creative climate of Bandung city</li> <li>3. Bandung city as a world design city</li> </ol>		<ol style="list-style-type: none"> <li>1. (S2-S4-O5) Increasing the references of overseas / western design styles which can be combined or adapted to create better products.</li> <li>2. (S1-O1-O2-O3) Contributing</li> </ol>	
SO strategies :		WO strategies :	
<ol style="list-style-type: none"> <li>1. (S2-S4-O5) Increasing the references of overseas / western design styles which can be combined or adapted to create better products.</li> <li>2. (S1-O1-O2-O3) Contributing</li> </ol>		<ol style="list-style-type: none"> <li>1. (W1-O6) Utilizing technology to improve the marketing system to find new market opportunities.</li> <li>2. (-W2-W3-W5-O6)</li> </ol>	

4. There is no substitute of the Monoponik's product	together with the government to support the policy of developing creative industries through Monoponik's best Motion Graphic works with the theme of Bandung city to steal the attention of prospective domestic and foreign clients.	Improving the financial system and website as well as providing the latest production tools to take advantage of the increasingly sophisticated technological developments.
5. The influence of western design culture is growing rapidly		
6. Rapid technological developments		
<b>Threats (T) :</b>	<b>Strategy ST:</b>	<b>Strategy WT :</b>
1. The design trend is changing rapidly	1. (S2-S4-T1-T3) Innovating the products through a combination of design styles by observing the rapidly changing graphic design development to create new trends of graphic design to compete with the competitors.	1. (W4-W6-T2-T3) Immediately improve the organizational structure by establishing a clear and targeted divisions to accelerate the growth of the company.
2. Competition becomes tighter as the new competitors increase.		
3. Rapid growth of both new and existing competitors as they continue to innovate.	2. (S6-T2) Maintaining product quality for the customer satisfaction to keep them loyal to Monoponic as new competitors also increase and it may not easy get new customers	2. (W6-T2) Improve and maintain good relationships with the customers and suppliers

The SWOT test analysis has resulted in 8 strategies to support market penetration and product development. There are 2 strategies for each SO, WO, ST, and WT. After performing the IE-Matrix and SWOT analysis tests in the second stage, then it was proceeded by performing the QSPM analysis test in the third stage.

### 4.3 The third stage – (Decision stage)

QSPM is the tool that allows the strategists to evaluate alternative strategies objectively, based on previously identified key internal and external success factors. The needed strategies include market penetration and product development. The weight values for each internal and external factors are obtained just like how to get the IFE and EFE Matrix scores which have been analysed before, then the attractiveness Score (AS) is obtained just like how to get the rating value in IFE and EFE Matrix analysis i.e. the average answer given by the three interviewees is rounded up if the average result is  $\geq 0.5$  and rounded down if the average result is  $< 0.5$ . The weight is multiplied by the *Attractiveness Score* to generate *Total Attractiveness Score*, then all the total scores are summed to get the total QSPM score.

Table 5. QSPM

Alternative Strategies		Weight	Market penetration		Product Development	
Major factors	AS		TAS	AS	TAS	
<b>Opportunities</b>						
1	Government policy in the development of creative industries	0.1	3	0.33	3	0.33
2	The creative climate of Bandung city	0.12	4	0.6	4	0.6
3	Bandung city as a world design city	0.05	3	0.18	4	0.24
4	There is no substitute of Monoponik product	0.03	2	0.1	3	0.15
5	The influence of western design culture is growing rapidly	0.1	3	0.33	3	0.33
6	Rapid technological developments	0.1	3	0.36	3	0.36
<b>Threats</b>						
1	The design trend is changing rapidly	0.18	3	0.45	3	0.45
2	Competition is tight as the new competitors increase	0.17	3	0.39	3	0.39
3	Rapid growth of both new and existing competitors as they continue to innovate	0.15	3	0.36	3	0.36
<b>Strengths</b>						
1	Motion graphics is the best product of Monoponik	0.15	3	0.45	3	0.45



	compared to the competitors					
2	Ability to combine and adapt overseas styles and the domestic ones	0.071	3	0.213	3	0.213
3	Team cohesiveness due to kinship coaching	0.054	2	0.108	4	0.216
4	Continuous product development	0.058	3	0.174	4	0.232
5	Most of the products are in accordance with the wishes of the clients	0.047	3	0.141	3	0.141
6	Always revise the project to maintain the quality of the products	0.12	4	0.48	4	0.48
<b>Weaknesses</b>						
1	The marketing is not maximized	0.069	3	0.207	4	0.276
2	The financial system is not good	0.15	3	0.45	4	0.6
3	Company's website has not been optimized	0.145	3	0.435	4	0.58
4	Unclear organizational structure	0.056	3	0.168	2	0.112
5	The availability of production equipment have not fully supported the business activities	0.033	3	0.099	3	0.099
6	The CRM has not run well	0.047	3	0.141	3	0.141
Total				6.156		6.71

From the analysis results of QSPM *Matrix* data, it was found that the total score of each strategy is different. Market penetration as the first alternative strategy has a total score of 6.156 while product development as a second alternative strategy only gets a total score of 6.71, thus from the two strategies, the appropriate one to be implemented in Monoponik is product development because its total score is bigger than that of market penetration strategy.

## 5. Conclusion

Based on the analyzed research results, the conclusions which go along with the formulation of the problems and research objectives are as follows:

1. The first stage of the strategy formulation which is the input stage has resulted in the internal and external factors from interviews and observations which after that the data were analyzed through IFE-EFE *Matrixes*. In accordance with the first and second purposes of the research, 12 internal factors were obtained consisting of 6 strength factors and 6 weakness factors, and 9 external factors consisting of 6 opportunity factors and 3 threat factors. The result of the IFE *Matrix* analysis has obtained a total score of 2.559 and the EFE *Matrix* has obtained a total score of 2.55.
2. The second stage of strategy formulation which is matching stage has generated the data analysis from IE *Matrix* and SWOT *Matrix*. The result of IE *Matrix* has positioned Monoponik in cell V with the alternative strategy of *hold and maintain* between the strategies of market penetration and product development. The SWOT has resulted 8 strategies containing 2 strategies of each SO, WO, ST, and WT.
3. The third stage of strategy formulation is the decision stage which is done with QSPM analysis to fit the third research objective. Based on the results of IE *Matrix* on the 2 strategies, the QSPM analysis results revealed that product development strategy is the appropriate and suitable one to be implemented in Monoponik with a total score of 6.71 compared to market penetration strategy which only has a total score of 6.156. Based on the results of SWOT *Matrix*, in product development, there are several alternative strategies as follows:
  - A. Increase the references of overseas / western design styles which can be combined or adapted to create better products.
  - B. Conduct product innovations by combining different design styles and observe the rapidly changing graphic design developments to create a new trend of graphic design to win the competition against competitors.
  - C. Improve the financial system and website and procure the latest production equipment to get along with the utilization of the increasingly sophisticated technological developments.
  - D. Immediately improve the organizational structure by establishing a clear and targeted divisions to be



able to grow the company quickly.

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# The Influence Of Organizational Culture And Organizational Structure On The Implementation Of Knowledge Management Process In Corporate University Of PT. XYZ

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## Abstract

Since mid-90s, knowledge utilization and management has started to get attention from the business world. It's due to a shift in business from manufacturing industry to knowledge economy-based industry. This shift leads to the emergence of knowledge worker who works using knowledge to create value-added. This change also creates requirement for the implementation of knowledge management (KM) to manage knowledge in company. Evaluation on the implementation of KM processes and factors influencing the processes is necessary so that the implementation of KM can be improved continuously.

This study measured the implementation of KM process and the influence of organizational culture and organizational structure on KM process in Corporate University of PT. XYZ.

The research respondents were 140 employees of Corporate University of PT. XYZ. The data analysis technique in study used path analysis with *software SPSS for windows* version 23. Data was collected by questionnaire containing 72 statement items related to organizational culture, organizational structure and KM process.

The analysis result showed that organizational culture and organizational structure simultaneously had significant influence (62,2%) on the implementation KM process which can be categorized as STRONG. Partially, organizational culture had significant influence (53,2%) on KM process. Partially, organizational structure had significant influence (9%) on KM process.

Keywords: Knowledge Management, Organizational Culture, Organizational Structure

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## Introduction

Knowledge has become a primary economic resources which should be managed and integrated into company business management. The implementation of knowledge management (KM) aims to manage knowledge in company. The implementation of KM also serves to avoid knowledge lost due to employee turnover.

Companies which implement knowledge management in their businesses have higher *Total* Return to Shareholder (TRS) and Return on Revenues (ROR) than average companies listed in Fortune 500. Asian companies which implement knowledge management in their businesses also have higher TRS and higher ROR than average companies listed in Fortune 500.

Corporate University of PT. XYZ was established for training & development, as well as to be knowledge factory in PT. XYZ in facing business turbulences. Corporate University in PT. XYZ will experience massive retirement. The average number of employees entering retirement age from 2016 to 2020 is 10% of total employees in 2016, so the number of employees in 2020 is predicted to be 70 or 50,72% of total employees in 2016. According to Droege & Hoobler (2003), employee resignation can cause knowledge lost, especially in companies whose main resources is human capital. Considering the retirement trend and the "nature of job" in Corporate University of PT. XYZ is "knowledge intensive work", without the correct strategy of implementation of KM, knowledge lost may happen.

Although Corporate University of PT. XYZ has implemented KM for a long time, according to assessment, knowledge sharing behavior hasn't become a part of daily routine in business process. Most employees access KM system in competency assessment period as the sharing knowledge document is used for promotion. After the competency assessment period, knowledge sharing behavior disappears. According to Firestone & McElroy (2003), KM isn't entrenched yet if knowledge sharing and knowledge transfer behaviors are influenced by organizational politics and organizational incentive.

**Table 1. 1 Data of Access of Employees of Corporate University of PT. XYZ to KM System**

MONTH	DOCUMENT UPLOAD		DOCUMENT ACCESS	
	2015	2016	2015	2016
1	1	0	6	0
2	2	0	27	0
3	9	2	54	15
4	4	5	68	38
5	14	33	84	1095
6	76	104	146	361
7	16	7	146	17
8	0	0	35	0
9	0	0	266	0
10	0	N/A	321	N/A
11	1	N/A	42	N/A
12	0	N/A	39	N/A
<b>Total</b>	<b>123</b>	<b>151</b>	<b>1234</b>	<b>1526</b>

Many companies fail to implement KM because they're too focused on the technical aspects of KM and don't pay attention to cultural aspect and working climate. Companies which successfully implement KM are companies which invest energy and efforts to organizational cultural and working climate. Organizational cultural and working climate will support knowledge sharing and knowledge transfer.

Survey to measure the health of organizational culture in Corporate University of PT. XYZ in 2015 showed that it was quite unhealthy. According to Lee & Choi (2003), organizational culture had significant influence KM processes, including knowledge sharing. One of the main factors inhibiting organizational culture is **hiding information**. According to Lee & Choi (2003), hiding information due to lack of trust can be harmful to the process of knowledge creation. Lee & Choi (2003) also explain that trust, which is defined as mutual confidence, will encourage openness which supports knowledge exchange.

Another main factor inhibiting organizational health in Corporate University of PT. XYZ is **control**. Power and control, according to Lee & Choi (2003), are related to organizational structure which is centralization dimension. Lee & Choi (2003) also explain that organizational structure can reinforce or inhibit the success of the implementation of KM.

### Theoretical Basis and Methodology

Davenport & Voelpel (2001) propose knowledge management as a means to manage knowledge in company. Andreeva & Kianto (2012) and Matin & Sabagh (2015) state that the implementation of KM has direct and indirect effects on company performance. According to Lee & Choi (2003), there are three main components of knowledge management, i.e. KM enabler, KM process and organizational performance. They are:

1. KM process is KM activities which are structured and coordinated to manage knowledge effectively.
2. KM enabler is organizational mechanism which encourages consistent growth of knowledge.
3. Organizational performance is a degree of organization's achievement of business objective. In terms of organizational performance KM, the measured achievements are generally organizational learning, profitability, and financial benefit.



Hung & Ho (2014) states that KM process is a method to transform implicit, fragmentary, and private knowledge of individual or group into intellectual asset of an organization. Lee & Kang (2005) propose five processes related to KM process which can be used to describe the implementation of KM in organization in operational context. They are knowledge creation, knowledge accumulation, knowledge sharing, knowledge utilization, and knowledge Internalization.

Lee & Choi (2003) describe KM enabler which significantly influence the implementation of KM, consisting of organizational culture, structure, people, and information technology. Lee & Choi (2003) also state that organizational culture is the most important factor for the success of KM. In terms of organizational structure, Lee & Choi (2003) state that organizational structure can reinforce or inhibit the implementation of KM. According to Lee & Choi (2003), there is relation among knowledge enablers. Furthermore, Lee & Choi (2003) that Bennett & Gabriel (1999) perform a study on the relations between organizational structure, organizational culture, size and environment.

Alavi & Leidner (2001) state that organizational culture is the most important factor for the success of the implementation of KM and company should make cultural shift to change employee behaviors on KM. This is supported by Zheng & McLean (2010), who state that organizational culture is the strongest factor which influence the implementation of KM and suggest that the implementation of KM should prioritizes culture-building activities. Hung & Ho (2014) determine dimensions of organizational culture which support KM process, i.e. collaboration, trust, learning, innovation, and expertise.

Hung & Ho (2014) categorize organizational structure into relating to degree of centralization and relating to degree of formalization. Lee & Choi (2003) state that centralized organizational structure will inhibit communication between departments and reduce the frequency of idea sharing. Lee & Choi (2003) also state that decentralized organizational structure (autonomy) proves to facilitate more spontaneous process of knowledge building. Autonomy is measured by indicators of employee freedom to make decision and available limitation related to the freedom. Formalization is measured by indicators of degree of freedom given to employee to follow the established rules and procedures.

Based on data from the company, journal and the reviewed theories, the following research framework was made:

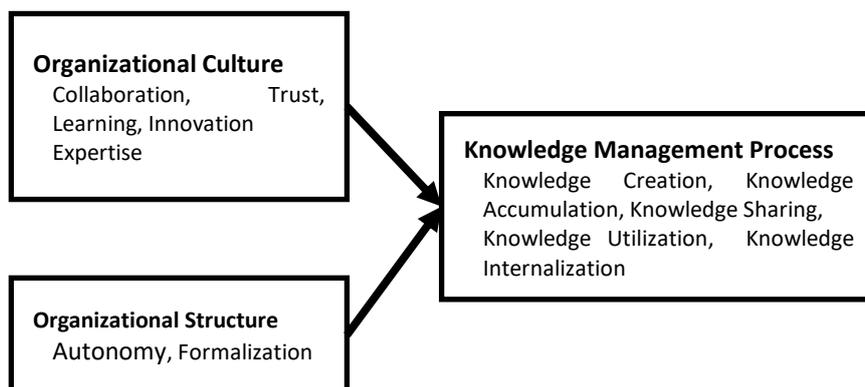


Figure 1. Chart of Framework

### Data Collection Method

Data in this study was collected by distributing questionnaire. The statements in the questionnaire were related to variables discussed in this study, i.e. organizational culture, organizational structure and KM process. The researcher also performed literature study by studying literatures related to this study. The data from this literature study was collected by reading books, online information sources, the company's books, and previous studies related to the present study. The result of literature study was used by the researcher in discussing the problem in this study.

Population of this study is employee of Corporate University of PT. XYZ. Toal According to Sugiyono (2013:80), population is generalization area which consists of objects or subjects which have certain quantity and characteristic determined by the researcher to be studied and to have conclusion drawn. This study used Non-Probability Sampling which, according to Sugiyono (2013: 66), is "A sampling technique which doesn't give the same opportunity for every element or member of population to be selected as sample." In sampling, this study used saturated sample method. According to Sugiyono (2013: 68) "Saturated sampling is a sampling technique is all population members are used as sample. It's often used when the population is relatively small." Using saturated sampling technique, the sample used in the present study was all employees of Corporate University of PT. XYZ in 2016.

### **Hypothesis**

Based on the framework, the research hypothesis was Organizational Culture and Organizational Structure had significant influence on KM Process simultaneously and partially. Detailed research hypothesis are below:

1. Simultaneous hypothesis: "Organizational culture and organizational structure simultaneously had significant influence on the implementation of KM process in Corporate University of PT. XYZ."
2. Partial hypotheses:
  - a. Organizational culture had significant influence on the implementation of Knowledge Management Process in Corporate University of PT. XYZ.
  - b. Organizational structure had significant influence on the implementation of Knowledge Management Process in Corporate University of PT. XYZ.

### **Discussion**

The sample used in this study was 140 employees of Corporate University of PT. XYZ. The respondents were given questionnaire which was a set of 71 statements on Organizational Culture (X1) and Organizational Structure (X2) and KM Process (Y). All 140 employees filled the questionnaire.

The result of descriptive analysis showed that organizational culture which consists of the dimensions of collaboration, trust, learning, innovation, and expertise in Corporate University of PT. XYZ was strong with a value of 80,50%. It showed uniformity of employee behavior in Corporate University of PT. XYZ and indicated that employee behavior should be improved to support the implementation of KM Process. The dimension with the highest score was expertise (82,6%), showing the mastery of the employees of Corporate University of PT. XYZ of certain subjects required in the teaching process. The dimension with the lowest score was innovation (77,98%), showing that innovation in Corporate University of PT. XYZ could be improved by providing sufficient resources.

The result of descriptive analysis on variable organizational structure which consists of the dimensions of autonomy and formalization showed that the organizational structure in Corporate University of PT. XYZ was good with a value of 76,92%. It showed that the implementation of organizational structure had considered task distribution well by giving controlled freedom to employees consistent with their tasks and responsibilities.

The result of descriptive analysis on KM process which consists of 5 (five) dimensions, i.e. knowledge creation, knowledge accumulation, knowledge sharing, knowledge utilization, and knowledge internalization showed that the implementation of KM process in Corporate University of PT. XYZ was good with a value of 78,79%. Dimensions with values far above the value of the implementation of KM process were knowledge sharing (82,68%) and knowledge creation (82,26%). It showed that employees in Corporate University of PT. XYZ easily performed knowledge sharing and knowledge creation. Dimensions with values far below the implementation of KM process were knowledge accumulation (74,94%) and knowledge utilization (75,98%). It showed that the employees of Corporate University of PT. XYZ had difficulty performing knowledge accumulation and knowledge utilization. The value of knowledge internalization was 78,14%, close to the overall value of KM. It showed that the employees of Corporate University of PT. XYZ were able to perform knowledge internalization easily despite

some difficulties.

### Path Analysis

Path analysis is a statistical technique used to examine the comparative strength of direct and indirect relation or influence between variables.

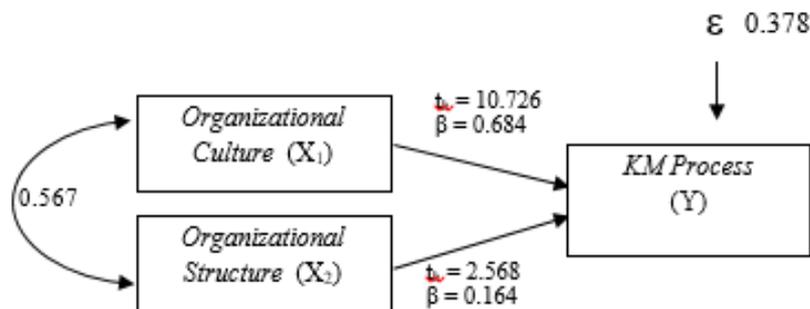


Figure 2 Model of Path Analysis Study

Based on the calculation above, it was determined that the influence of Organizational was 68,4% and the influence of Organizational Structure was 16,4% on KM process and 37,8% was influenced by other factors.

### The Influence of Organizational Culture and Organizational Structure on KM Process Simultaneously

Table 2 Result of F Test of Variables X<sub>1</sub> and X<sub>2</sub>

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	23,233	2	11,617	112,706	,000 <sup>b</sup>
Residual	14,121	137	,103		
Total	37,354	139			

a. Dependent Variable: KM\_Process

b. Predictors: (Constant), Org\_Culture, Org\_Structure

Based on Table 2,  $F_{count}$  is 112.706.  $F_{table}$  with  $\alpha = 0,05$  and  $V_1 = k$ ,  $V_1 =$  total independent variable = 2 and  $V_2 = n - k - 1$  with  $n =$  total sample so  $V_2 = 206 - 2 - 1 = 203$ . Considering Table 2 and with reference to  $F$  distribution,  $F_{table}$  is 3.04, thus resulting in:

$$F_{count} (112.706) > F_{table} (3.04)$$

The result of  $F$  test above showed that  $H_0$  was rejected and  $H_a$  accepted, it meant that the research hypothesis "Organizational culture and organizational structure simultaneously had significant influence on the implementation of KM process in Corporate University of PT. XYZ" was accepted.

## The Influence of Organizational Culture on Organizational Commitment (t test)

**Table 3 Result of t Test of Variables X1 and X2**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	,524	,209		2,512	,013
1 Org_Structure	,167	,065	,164	2,568	,011
Org_Culture	,709	,066	,684	10,726	,000

a. Dependent Variable: KM\_Process

With error rate ( $\alpha$ ) 5% or 0,05 and  $dk = n - k = 140 - 2 = 138$ , referring to  $t$  Table, then  $t_{table} = 1,9715$ . The interpretations of Table 3 are below:

- $t$  test calculated the influence of variable Organizational Culture ( $X_1$ ) on variable KM Process ( $Y$ ). Based on Table 3, it's determined that  $t_{count} X_1 = 10.726$  meaning  $t_{count} > t_{table}$ , so  **$H_0$  was rejected  $H_a$  was accepted**. In other words, **Organizational Culture had significant influence on KM Process in Corporate University of PT. XYZ**. The path coefficient value of variable Organizational Culture ( $X_1$ ) is shown in column *Standardized Coefficients* (Beta) as 0,684 or 68,4%. It showed positive or parallel direction. It meant Organizational Culture had 68,4% significant and parallel influence on KM Process in Corporate University of PT. XYZ.
- $t$  test calculated the influence of variable Organizational structure ( $X_2$ ) on variable KM Process ( $Y$ ). Based on Table 3, it's determined that  $t_{count} X_2 = 2.568$  so  $t_{count} > t_{table}$ , meaning  **$H_0$  was rejected  $H_a$  was accepted**. In other words, **Organizational structure had significant influence on KM Process in Corporate University of PT. XYZ**. The path coefficient value of variable Organizational structure ( $X_2$ ) is shown in column *Standardized Coefficients* (Beta) as 0,164 or 16.40%. It showed positive or parallel direction. It meant Organizational structure had 16.40% significant and parallel influence on KM Process in Corporate University of PT. XYZ.
- The vale of residual variable or error factor ( $\rho_{y\epsilon}$ ) can be obtained by the following equation:

$$\rho_{y\epsilon} = 1 - R^2 = 1 - 0,622 = 0,378$$

## Conclusion

Organizational Culture and Organizational Structure simultaneously had significant influence on KM process. Organizational Culture partially had significant and positive influence on the implementation of KM process. Organizational Structure partially had significant and positive influence on the implementation of KM process.

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## The Formulation Strategy Of Hotel Rumah Tawa, In Order To Enhancing The Competitive Advantages, Using Resource - Based View Approached

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### Abstract

**Objectives:** This research aimed to identify the resources and capabilities owned by *Rumah Tawa Hotel* and to design the solution of formulation for business development strategy at *Rumah Tawa Hotel* to increase the competitive advantage especially on resources and capabilities owned by the hotel. This research is also useful for relevant business activity units such as SMEs, to develop their business by maximizing their resources.

**Design / Methodology / Approach:** This research was designed to be a qualitative-descriptive research. In terms of involvement, the researcher did not interfere data. In terms of analysis unit, the research was based on the representatives of *Rumah Tawa Hotel*. The key-informant are the competent sources and understand the condition of *Rumah Tawa Hotel* and hospitality industry.

**Findings:** The results of this research presented 16 resources and capabilities owned by *Rumah Tawa Hotel*, and 8 resources and capability required new strategies for further business development.

**Originality / Score:** This research provided the information for *Rumah Tawa Hotel* to get the internal and external environment affected the hospitality business. Hence, the internal and external aspects would clearly define the state of the hospitality business. In addition, this research would be a consideration for the *Rumah Tawa Hotel* in formulating a competitive strategy to develop its business. Furthermore, this research would be useful for *Rumah Tawa Hotel* to increase the competitive advantage to survive in the high-tensed competition of hospitality business in the present and the future.

**Keywords:** *Strategy Management, Resource – Based View, VRIO analysis, Rumah Tawa Hotel.*

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### 1. Introduction

Tourism as one of the largest industries in the world has become the ultimate booster of a country in generating foreign exchange. In Indonesia, the tourism industry has come up with large employment opportunity as one of leading sectors in Indonesia and contributed in gaining profits for economic progress. Such benefits could raise the local employment and income for Indonesia. In order to attract both local and foreign tourists, local government need to provide fine facilities and infrastructure to support the tourism affairs. In this case, Bandung is one of the most favorite tourism object by both local and foreign tourist for its natural beauty, cultural uniqueness, and social life of the community.

Hospitality industry plays an important role in the tourism development of Bandung as it provides fair accommodation and services for tourists. The increased number of tourist visits has affected the development of hospitality industry as the increasing number of tourist visits will also increase the need for accommodation services, especially for hotels as a means of support.

The rapid growth of the hospitality business generates tight competition among hotels, such as the number of competitors, similar competitors, and the rates-war between competitors. *Rumah Tawa Hotel* is one of the 3-star hotels in Bandung, and joining the tight competition in the realm of the hospitality industry in Bandung. *Central Bureau of Statistics (BPS 2016)* provides the number of hotels in Bandung which is approximately 392

hotels within 16,821 total rooms. Meanwhile, the similar competitors (3-Star hotels) for Rumah Tawa Hotel reach 41 hotels within 3,408 total rooms.<sup>[1]</sup> The data represent the tight competition in hospitality industry.

Rumah Tawa Hotel is a family business. According to the owner's explanation, Rumah Tawa Hotel was established in 1998, the selection of the name "Rumah Tawa Hotel" taken from the location of the hotel which is near Jalan Taman Siswa street. It is chosen to give a unique impression than other hotels. By the initial capital purchase of the occupied location for Rp. 150.000.000, and by the principle of sharia, the owner started to build a sharia-based hotel. The principle of Shariah is not merely for Muslim consumers, but also for non-Muslim consumers. Rumah Tawa Hotel has plenty of resources as the internal factor which would led the company's success among the competitors. The main products covering the lodgement, food, car rental, and meeting rooms. In this case, Rumah Tawa Hotel has started to support MICE program (Meetings, Incentives, Conventions, Events) by providing meeting-room facilities, especially in Bandung. Furthermore, Rumah Tawa Hotel hold complete business licenses, and official award from the Major of Bandung, Ridwan Kamil, for employing disabled workforces.

However, there are some problems faced by Rumah Tawa Hotel. The interview result conducted to the owner of Rumah Tawa Hotel indicated that Rumah Tawa Hotel could only hit 50% out of 100% customers-visit target. In terms of profit, Rumah Tawa Hotel gained most in 2012 and since then experienced a significant decline up until 2017.

Having conducted the RBV-based internal analysis, a company may optimize the owned resources and capabilities. Capability refers to the business activities of a company.<sup>[5]</sup> So that to determine and create the competitive advantage, a proper strategy is required for the company in facing and seizing opportunities from the external environment and gaining benefits. Thus, Rumah Tawa Hotel need to run the strategy to create optimal competitive advantage and lead to an increased business revenues significantly. Competitive advantage is everything to be done by a company in better way than the competitors.<sup>[4]</sup>

The rapid growth in hospitality industry in Bandung resulting tight competition among local hotels in the city. This situation may be disadvantageous for Rumah Tawa Hotel as the number of competitors is getting higher, similar competitors began to emerge and the rates war among competitors.

In addition, the business unit of Rumah Tawa Hotel is not significantly developed in the last five years. It is due to the internal problems such as the available resources are not optimally managed, lack of human resources, limited funds, and limited access of internet as potential marketing strategy. On the other hand, the external problems raised such as lack of awareness of the needs of both customers and prospective ones.

Therefore, this research was conducted to identify the resources & capabilities owned by Rumah Tawa Hotel associated with the opportunities and threats by using *VRIO* analysis to face the competition. Next, to design the appropriate strategy formulation using *Resource-Based View* analysis towards the resources and capabilities owned by Rumah Tawa Hotel to face the competition. This research aimed to determine the condition of resources and capabilities in Rumah Tawa Hotel to face the competition in the present and the future by using *VRIO* analysis, to identify and to design the solution of formulation for business development strategy at Rumah Tawa Hotel, especially in resources and capabilities owned using *Resources - Based View* analysis to face the competition. The determined strategies would lead to the virtue of business development at Rumah Tawa Hotel.

## 2. Literature Review

### Strategic Management

Strategic management is the art and knowledge to formulate, to implement, and to evaluate the cross-functional decisions which enable the organization to achieve its objectives.<sup>[2]</sup> Strategic management is a way of acting to generate a strategy formulation, and to implement the strategy to achieve the company's objectives.<sup>[3]</sup>

### Resource based view

Resource based view is the process of formulating a strategy to build competitive advantage by analyzing the company's internal strength. Resource based view focuses more on proper resource management and capabilities as a source of competitive advantage. In addition, the properly-managed resources and capabilities would lead to a sustainable competitive advantage.<sup>[5]</sup>

### VRIO

VRIO is a tool used to measure internal analysis, based on; Value, Rarity, Imitability, Organization. The four questions are required to conduct an internal resource-based analysis of the company in view of the internal strengths and weaknesses.<sup>[6]</sup>

### 2.1 Conceptual Model of the Research

The main objectives of this research are to identify the condition of resources and capabilities at Rumah Tawa Hotel by using VRIO analysis and to design the solutions of formulation for business development strategy required at Rumah Tawa Hotel by its owned resources and capabilities using Resource-Based View analysis to improve the competitive advantage to face the high-level competition in hospitality industry. The framework model in this research presented as follows :

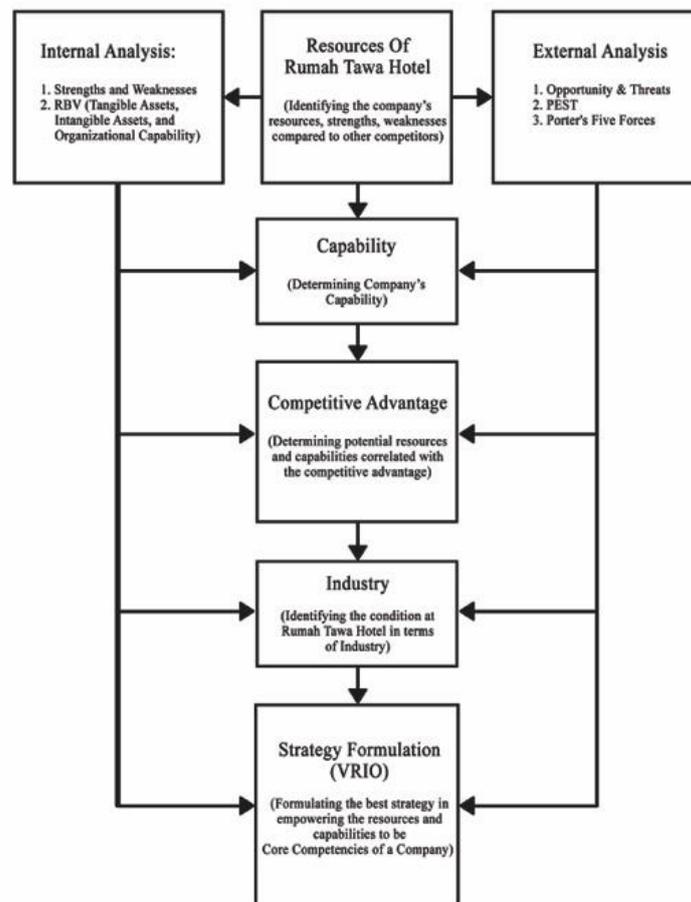


Figure 2.1 Conceptual Frameworks

Source: Modified Hitt, et al. <sup>[7]</sup>



### 3. Methodology

This research was designed to be a Qualitative-descriptive research. Definition of qualitative research methods, is a research method that involves the analysis of data in the form of description and the data is not directly quantifiable, qualifying data qualitative is done by giving the code or category.<sup>[8]</sup> Qualitative research is selected to explore deeper information on the internal environment and the external environment of the hospitality industry, especially at Rumah Tawa Hotel.

In terms of involvement, the researcher would not interfere the data. The representative of the Rumah Tawa Hotel was taken as the analysis unit. Qualitative researches do not use population or sample, as a they come up from certain cases exist in certain social situations and the results of the research would not be applied to the population, yet transferred elsewhere in social situations within similarities in social situations of the studied case.<sup>[9]</sup> In terms of sample, qualitative research use key-informant or participant, friend, and teacher.<sup>[9]</sup>

The key-informants in this research are the business owner and two business managers. They were selected to explore more internal information especially for Resource and Capabilities. In addition, the researcher took a lecturer of the Postgraduate Program of Hospitality Management as key informant to explore external information in hospitality industry especially in the contemporary phenomena. This research was conducted in September 2016 until April 2017. The data collection technique was done through interview, observation and gained the secondary data. This research focused on the internal condition of Rumah Tawa Hotel, as well as external condition to identify the contemporary phenomena in hospitality industry.

Having the data collected in form of interview results on the internal and external variables from the key-informants of Rumah Tawa Hotel, then triangulation technique was used as the research come up with the data from the interview results. Source triangulation analysis was used to test the credibility of the data by checking the data obtained through various sources. Data from all sources (observations, interviews, documents) were described and categorized based on specific differences from all those data sources. The data analyzed by the researcher then proceed to have a member check.<sup>[9]</sup>

### 4. Findings and Discussion

Based on the interview results with the key-informants of Rumah Tawa Hotel, the resources and capabilities found through VRIO analysis presented as follows:

Table 1. The Analysis Result of VRIO, *Resources* and *Capabilities* of Rumah Tawa Hotel

No.	Resource / Capability	V	R	I	O	Category
1.	Internet Access/ Wi-Fi	√				<b>Competitive Parity</b>
2.	Capability of R&D	√				
3.	Human Resource	√				
4.	Capital	√				
5.	Strategic Location (center of the City)	√	√			<b>Temporary Competitive Advantage</b>
6.	Characteristics of Sharia	√	√			
7.	Company's Image	√	√	√		
8.	Knowledge of consumers' purchasing capability	√	√	√		
9.	Tendency for innovation	√	√	√	√	<b>Sustained Competitive</b>
10.	Relationship with suppliers	√	√	√	√	

No.	Resource / Capability	V	R	I	O	Category
11.	Relationship with consumers	√	√	√	√	<b>Advantage</b>
12.	Consumers Experience	√	√	√	√	
13.	Quality of Products and Services	√	√	√	√	
14.	Company's Vision - Mission	√	√	√	√	
15.	Branches	√	√	√	√	
16.	Company's Brand	√	√	√	√	

Source: Processed Data

VRIO analysis results provided the alternative strategies to maximize the resource and capability of Rumah Tawa Hotel, especially in the category of competitive parity and temporary competitive advantage to be sustained competitive advantage. Then the resource and capabilities in sustained competitive advantage category would not require a specific strategy or new strategy yet required to be maintained.

Benchmarking analysis towards resource and capability in Rumah Tawa Hotel provided 8 (eight) resources and capability included in the category which require the new strategy for business development, which consists of 2 (two) competitive parity; (1) WIFI internet access and (2) Human resources, 2 (two) temporary competitive advantages; (1) City location and (2) Sharia Characteristics. Then 4 (four) resource and capability from sustained competitive advantages; 1) Tendency for innovation, (2) Consumer relationship, (3) Quality of product and service, and (4) Vision and mission of a company. Here's the explanation:

Table 2. Alternative Selection of Strategy Formulation

No	Resource / Capability	Alternative Strategy Formulation	Selected Strategy	Remarks
1.	Internet Access/ Wi-Fi	a. Marketing and Branding.	√	The optimization of internet access may be beneficial for marketing promotions
		b. Hotel's research facility	-	
		c. Cooperate with Internet Provider	-	
2.	Human Resource	a. Employees with educational; hospitality background	√	Rumah Tawa Hotel have a few employees with non-hospitality background.
		b. Payroll and commission systems	-	
		c. Joining Seminar/Training for Employee	√	
3.	Strategic Location in the center of the City	a. Raise the hotel price due to strategic location	-	Rumah Tawa Hotel is located near tourism objects and shopping Centre, so its potential need to be exposed well.
		b. Cooperate with tour & travel agents	√	
4.	Characteristics of Sharia	a. Use the tagline	√	Rumah Tawa Hotel is now using the characteristic of Sharia only in terms of regulation
		b. Highlight the distinctive characteristic of Sharia.	√	

No	Resource / Capability	Alternative Strategy Formulation	Selected Strategy	Remarks
5.	Tendency to innovate	Hold the <i>sustained competitive advantage</i>	-	The Resource & capability hold the <i>sustained competitive advantage</i> , Thus, Rumah Tawa hotel need to keep it up and maintain the strategy well.
6.	Relationship with consumers	Hold the <i>sustained competitive advantage</i>	-	
7.	Quality of Products and Services	Hold the <i>sustained competitive advantage</i>	-	
8.	Vision and Mission of the Company	Hold the <i>sustained competitive advantage</i>	-	

Source: Processed Data

The above table provides an alternative formulation strategy created to increase the resource and capability at Rumah Tawa Hotel. The selected alternative strategies are the strategies considered as the most potential strategy. The first potential strategy to conduct is optimizing the internet access as the promotion and branding tool for Rumah Tawa Hotel. It is due to Rumah Tawa Hotel hold the facilities and resources required.

The second potential strategy is involving human resources in the workshop event, seminars or training regarding hospitality industry as well as increasing the number of employees who have competence in the hospitality industry. It is possible to be realized soon according to Mr. Pan Supandi, the owner of Hotel Rumah Tawa, as he has been preparing for this strategy by far.

The other potential strategies such as cooperating with the tour-travel agents and expose the characteristics of sharia, are also possible to do as Mr. Pan Supandi would be the means of promotion and branding for Rumah Tawa Hotel. The owner has set this promotion budget from past earnings.

## 5. Conclusions and Suggestions

The analysis result of VRIO (Valuable, Rarity, Imitability, and Organization) through interviews with key-informant provided 16 resources and capability for Rumah Tawa Hotel. Having analyzed the resources and capabilities, some are considered to require new strategy: (1) Internet Access/ Wi-Fi, (2) Human Resource, (3) Strategic Location, (4) Shariah Characteristics.

Based on the interview, discussions and objective observations conducted in this research, the researcher suggests Rumah Tawa Hotel to make an enhancement related to the results towards external and internal analysis by improving the company's management system in making the organizational structure of the business, conducting research to go after present modern lifestyle and trends to increase the competitive advantage.

It is expected that Rumah Tawa Hotel to realize the recommended strategy that has been formulated for business development by the selected alternative strategies, such as: (1) Optimizing the internet access as a means of promotion and branding, (2) Increasing number of employees with hospitality-industry background (4) Cooperate with travel agencies and tour agents in Bandung, (5) As well as increasing the characteristics of hotels especially on the concept of sharia.

In terms of research, the researcher pointed out a weakness that the researcher did not find any Competitive Disadvantage category in VRIO analysis results. It is due to the authors focused on the internal Resource and Capability. Therefore, the researcher suggest further researches to conduct the similar topic and then to find the Resource and Capability in Competitive Disadvantage category. Furthermore, the researcher suggests adding *Balance Scorecard* analysis so that the result of the strategy formulation of the selected resource and capability can be more comprehensible

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## Increasing Service Quality By Improving Workload Distribution Case Study: PT. Bank Persaudaraan

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### ABSTRACT

As one of the G-20 major economies country, Indonesia has powerful economic development. Banking industry operation in Indonesia in recent years has significant growth and contribute to Indonesia's economy. PT. Bank Persaudaraan is one of the bank in Indonesia which headquartered at Bandung. The bank offers variety of products and offers credit for retired people. Recently, one of the bank's branch in Cimahi is facing number of customer and outstanding decline. Through preliminary research, the employees felt the distribution of workload they received is not balance. Hence, Their service quality is decreasing and causing the decline. In order to maintain competitiveness and service quality, it is important for Bank Persaudaraan Cimahi to evaluate their current workload distribution. Researcher conducted workload analysis towards 11 employees using work sampling method. The result of workload analysis shows the workload distribution in Bank Persaudaraan Cimahi is not balance. Moreover, this research explains how such distribution might occurred. At the end, researcher gives recommendation to improve the workload distribution in Bank Persaudaraan Cimahi.

*Keywords : human resource management, workload, workload analysis, work sampling*

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### INTRODUCTION

Banking core business is to gather funds from the people and distribute the fund in the form of banking products to the people. In recent years, Indonesia's banking industries has promising growth rate. The growth affected mostly by the variety of banking products offered to people. Nowadays, bank is not used by the people to make savings only. There are more factors that makes people used bank. The most important factor is effective and efficient service, along with the varieties of services offered (Siddique, 2012). Additionally, people considering the interest rate and service charge in order to gain benefits from the bank. Apparently, these bank selection factors may vary from area to area due to differences in demographic characteristics (Siddique, 2012). A good service from competent and highly motivated employee can be maintain by improving human resource management (Dessler, 2015). One way to ensure a company or organization has competent and highly motivated employees is by considering following factors, they are deciding what position to fill, job analysis, personnel planning, and forecasting (Dessler, 2015). Those factors will generate a job description and workload distribution for the employees. In Bank Persaudaraan Cimahi the workload distribution is felt not balance. Some employees said the workload distribution is not balance even in the same job position. This situation made their service quality decreasing since employees are pushed and overwhelmed by the workload. However, the bank cannot make any decision since it is not based on analysis. Therefore, it is important to know how much the workload distribution each employees has in the bank and improve it based on the analysis.

Workload is the amount of work that has to be done by a particular person (Bennaars, 1994). Amount of work is determined based on job description that entails with job holder. To know how much workload that job holder has, workload analysis should be conducted. Workload analysis is the process of gathering information of how much an employee used resources to accomplish their job (Hidajat, 2004). It is important to conduct workload analysis in order to look for the needs of human resource in terms of quality and quantity whether for short-term or long-term period (Bangun, 2012).

## LITERATURE REVIEW

Workload is part of human resource management. According to Dessler (2015), to ensure a company or organization has competent and highly motivated employees is by considering what position to fill, job analysis, personnel planning, and forecasting. Those factors will generate a job description and workload distribution for the employees. Workload is the amount of work that has to be done by a particular person (Bennaars, 1994). Distribution of work is determined based on job description that entails with job holder. Workload could be divided into three types of workload, which are physical, mental, and time workload. Physical workload is physical effort applied to task (Brumbach, 1988). It refers to employee activities that can be seen, particularly how they do such activities. This type includes eye movement, heart rate, and other movements. To measure physical workload, motion sensors can be used to detect body movement and estimate physical activity (Spruijt-Metz, 2009). The next one is mental workload, Mental workload is the demands placed on the human information processor (Niebel, 1998). Mental workload is relatively difficult to assess since every tasks and individuals have variability of mental strain. Measuring mental workload can be using various method, one of the method is by recording physiological signals such as electroencephalogram, electrocardiogram, and electrooculogram to track mental arithmetic (Kilseop & Rohae, 2005). The last one is time workload, Time workload is a particular length of time for accomplishing a particular task (Bennaars, 1994). This type of workload assess how much time for employee to do tasks given by the company. Time workload is much easier to determine since it has a standard time measurement. In this study, researcher analyzed the time workload that each employees has in the bank.

To know how much workload that job holder has, workload analysis should be conducted. Workload analysis is a process of gathering information of workload (Hidajat, 2004). It is important to conduct workload analysis in order to look for the needs of human resource in terms of quality and quantity whether for short-term or long-term period (Bangun, 2012). The analysis formed through particular stages and methods. There are two methods to conduct workload analysis, stopwatch method and work sampling method. Both of them can be used in particular working system. Stopwatch or known as time study is a method to determine proportion of total time with repetitive cycles, wide variety of dissimilar elements, and process/machine controlled element (Niebel, 1998). It is often to use stopwatch timing to make the standards. This method is perfectly suitable with the working system such as factories that have blue collar worker or labor. To use this method, each employee activities are measured by how much time needed to do the activities. For example, if the employee activity is knitting, then the activity will be measure by using stopwatch to know how much time needed until the activity ended. The next method is called work sampling, Work sampling is a technique used to determine the proportion of total time devoted to the various activities that complement job or work (Niebel, 1998). Work sampling method produce information about personnel utilization. This method is considered faster and less cost than stopwatch method. Analyst may not spent a long time observation, yet the information provided is relatively the same. This method is suitable if the condition of working system is not a routine such as in an office. Employees that work in office are working based on job description and responsibilities that not required employees to work on them sequentially.

In work sampling method, there are three important aspects to consider. They are work sampling activities, standard time measurement, and rating factor.

- Work Sampling Activities

Since the work sampling method is different from stopwatch or time study method, there is a need to separate activities that considered as productive. In work sampling, various activities that may occur but does not include in the job description considered as non-productive activities. Job description is a written list of what job entails (Dessler, 2015). It consist tasks, responsibilities, and authorities. Job description made to clearly identified someone's job so that company could determine whether someone is doing good or bad towards their job. Each of activities are mutually exclusive and cannot be blend in the measurement. However, all of these activities occurred while work in progress

- Standard Time Measurement

Time measurement is done when all activities has been performed with conformity and the amount of work has fulfilled the level of accuracy and confidence desired (Sutalaksana, 2006). In order to get standard time measurement, there are some measurement that needs to be done:

a. Cycle Time measurement

Cycle time is the total time from the beginning to the end of activity process. This measurement will inform the average workload of employees.

b. Normal Time measurement

Normal time is the normal time used by employees to do their job.

- Rating Factor

Rating factor is the assessment of employee’s skill and effort (Hidajat, 2004). Rating factor form is filled by employee’s supervisor. The rating range from 50 to 150, where 50 is the lowest score, 150 is the highest, and 100 is the average. Rating factor will affected the process of workload calculation. Rating Factor used to determine the normal workload.

**METHODOLOGY**

There are two methods to conduct workload analysis, stopwatch method and work sampling method. Both of them can be used in particular working system. Stopwatch or known as time study is a method to determine proportion of total time with repetitive cycles, wide variety of dissimilar elements, and process/machine controlled element (Niebel, 1998). This method is perfectly suitable to be used in factories. However, the bank activities is different since it is more dynamic. Therefore, this research used work sampling method. Work sampling is a technique used to determine the proportion of total time devoted to the various activities that complement job or work (Niebel, 1998). This study focused on answering what kind of improvement that can be applied in the bank. Prior to that, a workload analysis should be done in order to know the actual workload distribution. There are two methods that can be used to conduct workload analysis as stated before. In this study, researcher conducted workload analysis using work sampling method. Researcher used observation to gather data about workload distribution in the bank. The analysis design is shown in diagram below:

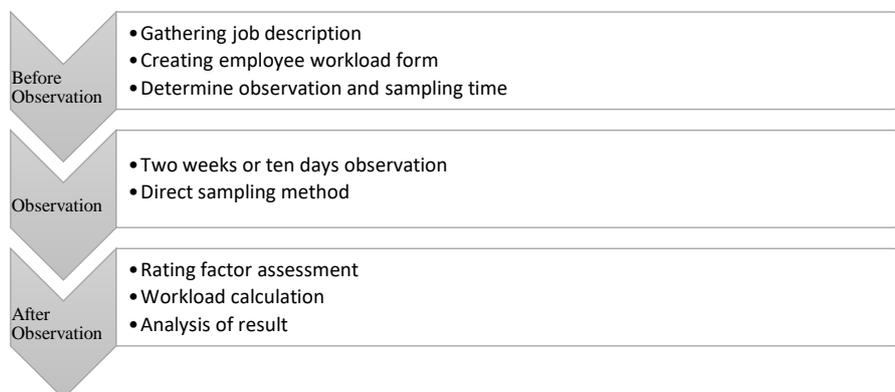


Figure 1 Workload Analysis Design

Researcher gathered the job description of each employees in Bank Persaudaraan Cimahi by asked the human capital division and confirmed by the branch manager. The job description was analyzed and resulted in separation of work sampling activities, they are divided into three activities. Productive activities (A) based on

the job description, allowances (B) or activities that is considered as not employees choices to do such as waiting for next assignment, system error, and others., the last one is non productive activities (C) including personal activities such as eating, praying, chatting, and others. As continuation, researcher created employee workload form to make the observation efficient. The form was checked and confirmed to be used by the human capital division and branch manager. Lastly, researcher determined the observation and sampling time. Researcher decided that two weeks of observation is enough to gather data for workload calculation since the formula supports to convert it to a month and a year. The bank has five working days a week, hence the total observation time is ten days. The sampling time is adjusted with the working hour of the bank each day. The bank operates from 8.00 AM to 5.00 PM. Researcher decided to retrieve data per 15 minutes. The first data will be gathered 15 minutes after the bank operates or 8.15 AM and 15 minutes before the bank closed or 4.45 PM with an adjustment with the break time. Hence, there are total of 31 data population each day, except for Friday that has 29 data population. Researcher collected the data in random sampling time to make the data more reliable. The formula used is also sufficient for the data that collected 75% each day or 24 data population. Therefore, researcher decided to get at least 75% of the data each day.

Researcher conducted observation in the bank for two weeks or ten days. Researcher observed each employees activities in the bank. Each activities that employees did in each sampling time is noted by the researcher by making “tallys” in the employee workload form.

After the observation takes place, researcher collected additional data for the calculation by asked the branch manager. The additional data consist of current condition of the bank in terms of workload such as when the highest workload occurs, what challenges that employees face while working, and others. It will resulted as allowances factor. Rating factor assesment is also filled by the branch manager. Each employees skill and effort is assessed and resulted as rating factor.

All the data that has been collected were inputed to the formula in excell worksheet. The form resulted as productive activities (A), and non-productive activities (B & C). The form result shown the percentage of productive activities each day. The rating factor and allowances factor is also inputed. The calculation converted the two weeks workload to one month workload and then to one year workload. The calculation also resulted data sufficiency. In this study, the data sufficiency is enough and the processs is continued to analysis of result.

The result is then analyzed by the researcher as a basis to make improvement for workload distribution. All of the data collection process such as interviews, questionnaire, and the observation itself that has been noted also used for consideration.

## FINDINGS AND ARGUMENT

The study has shown result. Workload distribution in the bank is not balance. The result shows that employees has different workload distribution even in the same job position. There are low, high, and normal workload distribution based on provision adjusted with the bank’s human capital division. Amount of workload in one year below 80% is very low, below 95% is low, between 95% and 105% is normal, above 105% is high, and above 120% is very high. In this research, there are total of 11 marketing employees with 4 different job position which are branch manager, relationship officer, funding officer, and marketing support. The result of workload calculation and rating factor assesment is below:

Table 1 Workload Distribution and Rating Factor Assessment

No.	Employees	Workload	Average	Status	Skill Score	Effort Score
1	Branch Manager	115.99%	115.99%	HIGH	140	140
2	Relationship Officer 1	95.66%	98.99%	NORMAL	90	140

No.	Employees	Workload	Average	Status	Skill Score	Effort Score
3	Relationship Officer 2	91.46%		LOW	140	90
4	Relationship Officer 3	108.18%		HIGH	130	130
5	Relationship Officer 4	100.30%		NORMAL	110	130
6	Funding Officer 1	95.44%	102.27%	NORMAL	120	120
7	Funding Officer 2	109.09%		HIGH	120	140
8	Marketing Support 1	89.56%	100.40%	LOW	140	140
9	Marketing Support 2	104.82%		NORMAL	130	130
10	Marketing Support 3	98.55%		NORMAL	130	110
11	Marketing Support 4	108.66%		HIGH	120	140

From table 1, there are four job position with following average, branch manager with 115.99%, relationship officer with 98.99%, funding officer with 102.27%, and marketing support with 100.40%. The range between those job position workload are not far between each other except the branch manager. It is because the branch manager only entails in one person. The branch manager job position also cannot be compared between branches since it might not relevant due to differences. If the average workload status defined with the provision adjusted with the branch manager and human capital division, then three job position which are relationship officer, funding officer, and marketing support would considered normal or the workload of the job position is not high. Hence, the status of workload of each employees is because the unbalance distribution within job position rather than among job position. The lowest workload is 89.56%, which is Marketing Support 1 (MS 1) result. MS 1 is holding marketing support job position. However, according to branch manager in his daily activities he is also working as a report and documentation support. MS 1 actual job position is marketing support, hence the activity that is not related to marketing support job description is treated as non-productive activity. This makes his workload lower than his colleagues in the observation. As for the branch manager, the high workload probably because he is responsible for all the branch activities which includes authorization of decision making, revised reports, and others.

All 11 employees also has been assessed by the branch manager and supervisor. The score range between 50 to 150 for both skill and effort score. Almost all employees are considered have good performance in terms of skill and effort. However, there are two employees that have score below 100 which are relationship officer 1 (RO 1) in skill and relationship officer 2 (RO 2) in effort, both have score 90 in those assessment. This indicates that their performance is not good enough compared to other employees. Branch manager as the assessor probably seen RO 1 have outstanding effort but the quality of her job is not good enough or too many errors occurred, hence RO 1 have low score in skill. In the opposite, RO 2 probably good in delivering her job but showing less effort than the others. Branch manager might assume that RO 2 should ordered to do something and pushed her to finish her job. Those two employees needed a treatment to increase their skill and effort in order to have a better assessment. There are also two employees that have very high score in both skill and effort, branch manager and marketing support 1 (MS 1). The one which assessed branch manager is the his supervisor. The supervisor probably seen branch manager as workaholic since his effort and quality of the job nearly perfect, although in term of Cimahi branch performance is showing the decline. Another employee that have high score in both skill and effort is MS 1. Branch manager assessed MS 1 with high score might influenced by the fact that MS 1 is reliable, even for doing other tasks. However, as stated before MS 1 have a low workload because of it. The high score of each employees should be treated as well by the bank in order to maintain the good performance or even to increase their performance.

The purpose of this research is to identify current workload and give improvement to workload distribution at

Bank Persaudaraan Cimahi so employees will not feel their workload is not balance, so, it will lead to highly motivated and competent employees which can improve the branch performance and competitiveness. Hence, researcher gives several treatments recommendation that can be applied in the bank the treatments that can be applied in Bank Persaudaraan Cimahi which are compensating employees, giving trainings, giving motivation programs, supervising, and evaluating the job description.

Each treatment has different effect to the workload distribution of each employee. Compensating employees is suitable for employees that having high workload (105.1% until 119.9%). This treatment is a form of compensation for their hard work and effort in delivering their job. This treatment might not decreasing the percentage but can build motivation for employees who work hard and prevent them from stress and depression. However, Bank Persaudaraan Cimahi can give better supervising for employees. For example, in funding officer job position, there are two employees. Funding officer 2 (FO 2) is having high workload because funding officer 1 (FO 1) is not doing his job. Therefore, if there is supervising from their superior, it might influence FO 1 to doing his job and FO 2 workload can be decreasing. The branch manager could also monitor and make more wise decision, for example, prevent the relationship officer employees to rely on particular employee for challenging works. Giving training is suitable for employees who have low score on skill in rating factor assessment. RO 1 should be given trainings related to her job in order to boost her performance. Giving motivation program is suitable for employees who have low score on effort in rating factor assessment. RO 2 should be given motivation programs such as seminar, mentoring, or others that can boost her motivation and giving a good impact on her effort. Lastly, an evaluation for job description is necessary for some employees. Branch manager is having the highest workload and it might destructive for him. Maybe giving compensation is not enough to prevent him from stress and depression. So, evaluating job description including the target given to Cimahi branch is important. MS 1 who have the lowest workload is also should be evaluated since he is doing other job outside his job description.

## CONCLUSIONS

Banking industry is showing its potential with its recent growth. Meanwhile, Bank Persaudaraan Cimahi is facing a decline in number of customer and outstanding. Based on the questionnaire result and interview, it is known that the root cause of the decline is unsatisfying workload distribution since employees felt the workload distribution is not balance. Workload is an important aspect in human resource management, especially human resource planning and in Bank Persaudaraan Cimahi the workload distribution is assumed high and not balance. Hence, the purpose of this research is to identify current workload and give improvement to it so employees will not feel their workload is not balance, so, it will lead to highly motivated and competent employees which can improve the branch performance and competitiveness. The result of the workload analysis will be used as the basis for recommendation. The workload distribution is a little bit different compared to the questionnaire result. Researcher gives several treatments recommendation based on the workload distribution with a little consideration towards the questionnaire result which are compensating employees, giving trainings, giving motivation programs, supervising, and evaluating the job description. There are possible further research in Bank Persaudaraan Cimahi, one of them is conducting additional analysis such as mental workload and physical workload to get the best workload distribution of the bank. Therefore, the most suitable result can be applied in Bank Persaudaraan Cimahi.

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## **Role of Electronic Word-of-Mouth in Determining Destination Place to Visit: A Study in Lembang, Bandung**

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### **Abstract**

Nowadays word-of-mouth becomes an effective marketing communication strategy. Consumers prefer to gather information about their destinations, through electronic word-of-mouth (eWOM). The purpose of this research is to determine the role of electronic word-of-mouth that occurs in tourism in Bandung, Indonesia. Qualitative methodology was chosen and analyzed with case studies. In this research, a new attractive destination in Lembang selected as a case study because many photos that taking in that destination going viral recently. The data are collected by conducting interviews with tourist that visiting an attractive destination in Lembang. In order to decrease the data bias, the interview was conducted in that destination. The findings in this research, electronic word-of-mouth becomes a consideration while tourist choosing destination place, especially if it comes from the people around them as society, friends, and family.

*Keywords: eWOM; destination; tourism; Bandung; marketing*

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### **Introduction**

Nowadays, the tourism sector has gained rank 5th in making a local income in Indonesia (Koestantia et. al., 2014). It makes tourism sectors become one of the potential sectors to contribute to the Indonesian economy. The contribution of tourism will keep running if tourism is also growing, and tourism development is largely determined by movements in tourism. In the tourist movement, there are five stakeholders that involved. They are tourist, travel agent, transportation providers, accommodation providers, and tourist destination providers. In this tourism movement, the important key is tourist.

Bandung is now ranked four of the most favorite destinations in Asia after Bangkok, Seoul, and Mumbai by CNN (2015). This brings up several new tourist attractions. Moreover, since all the information becomes digital. The result of the APJII research in 2014 is approving, there are around 88.4 million internet users in Indonesia. The tourists can easily search for information about the desired destination over the internet.

Since the development of the Internet in the early 1990s, the way consumer search for information is changing. Currently the Internet has facilitated the interconnection of consumers. The occur of word-of-mouth face to face interaction between consumers is no longer needed. The Internet allows consumers to share information much easier than before. Changes in information technology introduced consumers to the various applications that can be used for kinds of activities by the majority of internet users, the applications that develop are social media.

Along with the advancement of internet technology, word-of-mouth based on the World Wide Web, or better known electronic word-of-mouth (eWOM) has become increasingly widespread. A visitor from a destination can publish their thoughts, opinions, feelings and can also upload a photos or videos of the destinations. The visitors can also send it directly to the intended company or companies will be able to know from publications made by these visitors (Schindler and Bickart, 2005).

Unlike traditional word-of-mouth, electronic word-of-mouth can spread more widely and more quickly. As a result, the potential impact of electronic word-of-mouth on consumer behavior can be more powerful than traditional word-of-mouth. In addition, the electronic word-of-mouth referrals are usually unsolicited

information providers, namely the information providers can provide information to recipients who are not looking for information or to recipients who have no interest in such information.

This gave rise to several new popularity destinations in the city, especially Bandung. Through the internet a destination can become viral and attract the attention of tourists.

One destination that becomes the talk on the internet is "European Village" in Lembang. According detik.com, this destinations become popular because it is considered one of the destinations that instagenic. Instagenic itself means to produce gorgeous photos for upload on Instagram. Destination that instagenic can provide their visitor to take more selfie.

"European Village" is one of the sights in Lembang, Bandung. European Village offers several spots by the beautiful scenery to take pictures like European-style home, gardens, artificial waterfalls, padlock of love, and the most famous one is the view of the "European House". The spot is unique because it has a view like a house in the popular Hollywood movie with the surrounding scenery in Europe titled "The Lord of The Rings". In addition to the European House, visitors can feed and take pictures with various animals such as rabbits, goats, and sheep. Tourists can also take pictures while putting on traditional European costumes and buy typical of Europe and Indonesia handicrafts.

Tourism sector plays the pivotal role in Indonesian economic development. Meanwhile, the advancement of information technology changes the way people interact and the spread of information. Electronic word-of-mouth becomes effective marketing tools to introduce or promote a new destination. Thus, understanding how electronic word-of-mouth can be leveraged to introduce or promote tourism destination. This research aim is to describe how tourists' destination place in Bandung can be a content of electronic word-of-mouth.

## Literature Review

Word-of-mouth has been found to exist in interactions between consumers since 1950. The study of Kotler (2012) showed that when consumers check information about the experience of other consumers buy the unknown product. Many consumers see the advertising in the mass media every day, consumers will no longer believe in the ads and prefer to listen to friends or other sources they trust. This happens because the information from friends or people around will be faster trustworthy than information obtained from advertising. Word-of-Mouth Marketing Association (WOMMA, 2012) defines word-of-mouth marketing as permission to talk about products or services, and provide a media to talk about it. This is referred as the art and science of establishing active communication from consumer-to-consumer and consumer-to-marketers. Many marketers have noticed its strength and adopt it as a marketing strategy.

Before the internet era, according Sutisna (2002) most human communication process is by word-of-mouth. Each person every day talks with each other, mutual exchange of ideas, information exchange competitiveness, commented to each other, and other communication processes. The consumer may show consumer confidence. Consumers shared the product-related experiences through traditional word-of-mouth between family and friends by way of private conversations.

In the internet era, consumers are becoming more open about what they want. Through conversations in social media, consumers can easily give feedback or comments about the particular product or service. Information obtained from consumers what was discussed and how the experience of using the product or service with social media can lead to electronic word of mouth and emerges as a new channel of word-of-mouth (Dwyer, 2007).

In his research, Jansen *et al.* (2009) mentions that although similar to the traditional form of word-of-mouth before, electronic word-of-mouth offers a variety of ways to exchange information, many of them in the form of an anonymous or confidential. Online conversations may offer an easy and cost-effective opportunity. It is easier than private conversations that only happen when meet each other. In the last few years, researchers have been actively examining the effect of electronic word-of-mouth on consumer behavior.

Electronic word-of-mouth allow consumers to use information related to a product or service not only provided by people they know but also by a vast network of people who have already experienced the product or service (Jalilvand et al., 2011). The online communication refers to all contents published on the web via different network. Thus, new concepts and appeared to deal with the evolution of the information and communication technology such as viral marketing strategy that became word-of-mouth.

It is important for companies to adapt new communication channels, trends and integrate online networks into their online communication strategy. By taking part in different online communities, in that case for social media that consumers sharing their experiences through testimonials, pictures and videos, companies could communicate in a more effective way as a well as better manage what it is said about them on the internet.

Additionally and since the coming of internet the social media never stopped gaining in importance leading to a new communication accepted point of view (Mangold and Faulds, 2009). Within online communication greatly increased forcing companies to take them into consideration and integrate a new dimension into their online communication strategy. By integrating this dimension into their online communication strategy, companies open up new interesting opportunities to stimulate electronic word-of-mouth as well as then manage and control it.

Many factors can lead to electronic word-of-mouth. Nowadays, people are always taking photos anywhere, from the food they eat to the places they visit. No exception to the tourists. The tourists will immortalize their visit through the photos and then upload them to social media to show where they have been. According Schau and Gilly (2003), it becomes very important for them to build their self-image. To build a self-image they need a media that can be reached easily by the average person, that is social media.

In social media, the most of any uploading for improving their self-image. They will show off what they eat, what they do and wherever they visit. But the tourists do not necessarily upload all the photos they take wherever they visited. Uploads or not a place can also be affected by the satisfaction they get when visiting the place. Things to be generally considered is the uniqueness or the beauty of scenery from the destinations.

Self-image is formed by one person raised the perception of others. These perceptions form a concept of how a person sees the image of the other person. We can control how the perceptions of others towards us through the image that we want to build. The formation of self-image is formed concept called the reflected appraisals of self (Schlenker, 1980). And everyone will choose to show the positive side of them, which want to make an impression in others mind (Ratner and Kahn, 2002). That's the impression given to encourage an electronic word-of-mouth both positive and negative (Holmes and Lett, 1977).

According Kim et al. (2015), there are three factors that consumers themselves can influence the occurrence of electronic word of mouth.

1. Reflected appraisal of self.  
Consumers want to create the image of themselves as what they want to show in front of others. They will showcase any product or service they have purchased, or whichever destination they have visited to gain recognition from others.
2. Conspicuous.  
Consumers feel if they buy a particular product or service and show it off to others, then their value will increase.
3. Self-image congruity.  
Consumers find products or services they buy is suitable to them or even reflect how they are.

## **Methodology**

This research aims to describe how tourists' destination place in Bandung can be a content of electronic word-of-mouth used qualitative methods. The data collection was conducted by interviewing the 13 interviewers who

all were visitors the attractive destination in Lembang that has been selected. That destination selected as a case study because this destination was discussed in social media. The target population in this study was visitors of the attractive destination in Lembang that has been selected. In this study used primary data obtained from interviews. The interview last for about 20 minutes each.

One attractive destination in Lembang selected as a case study. The data collection conducted using the interview method. Interviews consisted with some questions about the reasons how they obtain the information about destination and whether they would recommend that destination to others. The interview was conducted by semi-structured with open questions. This was done in order to obtain an in-depth understanding of the interviewers.

## **Results and Discussion**

Based on interview that conducted with 13 respondents, this is the results that get by elaborate from 13 interviews. Most of the interviewees are female with age about 18 until 35 years old. Most of them are college student that who study around Bandung and were on vacation with their friends. Meanwhile, there are also interviewees that vacationing with family.

### *How tourists obtain information*

According to the interviews conducted, most of interviewee to get information about the destination from social media. Most of interviewee mentioned that their information search on that destination comes from Instagram. Among social media used, interviewee said that Instagram easier for them to get information because Instagram is social media to share photos. They say that with the photos they can instantly be able to see the view of the destinations they will visit. Meanwhile, there are other visitor that gets information from the newspaper or on others social media such as Facebook and What's App Messenger.

According the interviewee that on Instagram, they can see photos of others that they do not know in many ways. If they already know the destination that they seek, then they only need to include the name of the destination in the search field. They can also find photos from other people who have been loved by their friends or the photo will appear in explore column if the destination is following their preferences. In addition, tourists can also find a destination from Instagram account that does contain destination in Bandung.

Several interviewees mentioned that they got the information from Instagram account on tourism in Bandung, namely @explorebandung. The account is created with the aim that anyone who wants to surround Bandung, can see the photos from destinations in Bandung as a reference. The account also facilitates tourists who have surrounded Bandung to share his experiences through photos on the account. Tourists who upload their pictures of a destination can be included #explorebandung in the caption column, then the @explorebandung will re-post the photo to be seen by other travelers who may not know each other. On that account, the tourists are also allowed to leave comments or ask each other about their experiences at a particular destination. By including #explorebandung in caption column, then the @explorebandung will have the right to re-post the images to others.

The interviewees said that by looking at the number of posts photos of that destination, making them more curious how that destination. Curiosity is what makes them seek further information as reference and decided to visit their own. This can be interpreted if photographs of destinations appear frequently on Instagram, it can stimulate the curiosity of tourists to visit it directly.

### *Trigger of the electronic word-of-mouth*

Curiosity is what attracts them to visit these destinations. After visiting this place and see the famous spot directly, the interviewee said they would take photos on that spot and then upload it to their own social media. More and more tourists want to take photos on the site meet one of electronic word-of-mouth dimensions

mentioned by Goyette et al. (2010), namely intensity. The number of photos uploaded it creates an intensity and create electronic word-of-mouth.

Kim *et al* (2015) states that there are three things that trigger an electronic word of mouth based on the self-tourists. That destination may encourage tourists to meet these three factors.

1. Reflected appraisal of self.

The higher the intensity of tourists who upload photos with background in that destination, someone who has never taken a picture of that destination be not up to date. A interviewee stated that the second visit was only for taking photos at the same spot. Because on his first visit, a photo that is not good, then he would not be able to upload photos to social media. So to be able to upload it, he took the time to go back to that destination just to take a photo once again on the spot. Other interviewees said that they definitely upload their photos to Instagram. Their goals upload those photos to show off themselves that they never visited that destination.

2. Conspicuous value.

The interviewees said that they upload their photos to let others know that they visited this destination. By visiting these destinations, they feel their value increases due to have visited a destination that is trending topic.

3. Self-image congruity.

All respondents indicated that the destination is a comfortable and suitable for them. Because location of this destination place in Lembang where a plateau, most of interviewee feel comfort with the cool air and it is brings up enjoyable.

#### *Information circle*

All the interviewees mentioned that they get information about that destination from friends. The interviewees said that the friend is a source that can be trusted, especially if the friend had visited the place. The information exchange could be through online and direct conversation. Direct conversation happened when they met in college and the workplace or while they hang out in cafes with their friends. They usually talk about vacation and destinations that have never visited. Most of interviewees said that they also talk about that topic in social media such as Blackberry Messenger, What's App, and comment in friend's photos in Instagram. In Blackberry Messenger and What's App, they talk private from one user to another user. They asked to their friends who has visited Bandung about popular destination. In other condition, Blackberry Messenger and What's App provide to make small group conversation, interviewee said that their friends who has visited this destination and tell about their experience. Different with Blackberry Messenger and What's App, in Instagram, interviewee said that they see their friend's photo. If they want to seeking for another photos, most interviewees said that they search through hashtag that follow with name of this destination, meanwhile some interviewees said that they search through @explorebandung.

Not necessarily all the friends they can trust. A interviewee said that initially a group in What's App was give him information. But the interviewee feels the information is less reliable because there are no photos as evidence and he was not very familiar with the person providing the information. The next moment he received the information from a close friend, so the interviewee ended up seeking further information on Instagram. Whatever user posted in What's App, their friend can not see it because confidential. In What's App, the user only can send to another user, only one user to another one user. What's App allow the user to create a group, which is one user can share to many people, but that group has capacity limit. Different with What's App, in Instagram, all photos that upload can be seen with all people either following or not, except the user make it private that make only friends who follow that can see but quantity of people who follow has no limit. This is following Beerli and Martin (2004), which the information obtained from informal sources such as friends and relatives will be more influential than ads in determining a person's decision to come to a tourist destination or not.

For summary, tourist who has visited a destination and feel satisfied, will notify information about these destinations to which another friend who had never visited. It is forming a circle of information (Figure 1.) that



ultimately created the electronic word of mouth if that circle occurs over and over. Where a tourist who had never visited that destination view photos from a friend who uploaded to Instagram, then it raises curiosity and made the tourists seeking additional information. After getting the desired information, the tourists will visit these destinations. That stage when a tourist raises their curiosity, seeking information then decide to visit the destination is inclusive in decision making process.

If tourists are also felt satisfaction when visiting these destinations, then the tourists will upload their pictures while in these destinations and viewed by other friends, and that friends will experience the same phase. This is following Sernovitz (2006) who said that one of the things that became the basic motivation of word of mouth is their satisfaction on his experience when visiting the tourist destinations place.

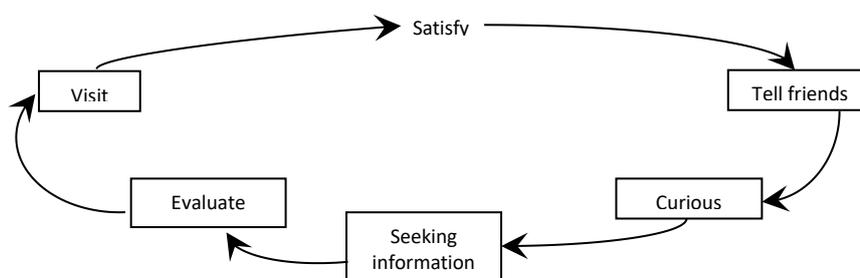


Figure 1. Information Circle

## Conclusion

The aim of this research is to describe how tourists' destination place in Bandung can be contain electronic word-of-mouth. Tourists would consider visiting a tourism destination they had not yet visited by electronic word-of-mouth which electronic word-of-mouth has experience of other visitors. The electronic word-of-mouth emerged a curiosity, and they search more information in social media, especially Instagram. In Instagram they can find a lot of selfies which taken in that destination. Based on the photos, they want to visiting that destination themselves. They want to take photos and upload it in Instagram too. Word-of-mouth would be more trustworthy if sourced from the people nearby like community, friends, and family.

Information circle can be used as part of a marketing strategy especially in Instagram. Destination places that have had a unique concept and instagenic, can create unique hashtag that is specific to the destination by way repost photos that have been uploaded and added the caption with the hashtag. But it also can take advantage of the cooperation to be promoted through @explorebandung account. This can help photos of this destination places more often appeared on Instagram and finally into electronic word-of-mouth.

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## **Workload Analysis For Improving Employee Motivation Case Study: PT Lintas Indonesia, Tbk.**

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### **ABSTRACT**

In this era of globalization, communication is one of the most important thing. Communication can go through internet and telephone and create an easier life. Telecommunications have a big impact on the world. Telecommunication also has a big impact in Indonesia. Indonesians nowadays tend to rely on the easier way of telecommunication and the usage of cellular phone is keep increasing year by year. It means that a telecommunication company in Indonesia has a big chance to keep growing and developing their business. PT Lintas Indonesia, Tbk. as one of the telecommunication company in Indonesia has a big opportunity to utilize the current condition. Yet, there is an uneven workload distribution between employee and decreasing motivation for several employee. This research objective is to conduct workload analysis to solve the uneven workload distribution between employees. The research methodology used in this paper is work sampling with direct observation where the researcher directly saw the company's activity to provide an accurate data. The result of the workload calculation shows that there is an uneven distribution of workload in PT. Lintas Indonesia, Tbk. In order to prevent worse situation, there are some recommendations for the company that probably fit, based on each employee current workload.

*Keywords: : workload analysis, human resource planning, human resource management*

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### **INTRODUCTION**

Telecommunication industry is part of service industry who has a lot of customers and needs to serve the customer well. In order to give the best service to its customer, company has to pay attention to the human resource system. Because, human resource has an important role, because by having a good human resource management, the company will have bigger chance to sustain and lead the market. Human Resource Management is the organizational functional function that focus on several issues related to people such as compensation, hiring, performance management, organizational development and training (Bhalla & Giri, 2014). By having an effective human resource management, employees tend to give a lot of contribution and become more productive in doing their responsibilities for organization's goals and objectives (Bhalla & Giri, 2014). One of the human resource practice is human resource planning. Human resource planning is inseparable with human resource management (Bhattacharyya, 2002). Human resource planning is a process in forecasting quantity and quality of people needed in order to fulfill the short-term and long-term demand and also integrated with human resource program and development (Manzini, 1988).

PT Lintas Indonesia is one of the telecommunication company in Indonesia. This company also needs a proper human resource management and human resource planning, to help this company compete with others. Therefore, the research was conducted in this company to know the current situation of its human resource management. Based on the distributed questionnaire, the division that need attention especially on workload distribution is Business Government and Enterprise. This study aims to analyze the workload then identify which division has low, normal, and high workload as an input in calculating number of human resources needed in regional enterprise and government & business service division (BGES), PT. Lintas Indonesia, Bandung. There are three kinds of workload; mental, physical, and time workload. This research focus on calculate time workload which is the most suitable one with the company current condition. Furthermore, the method to calculate workload is also diverse. There are stopwatch and work sampling. Because stopwatch method is not suitable

with white collar job, therefore the method that is used is work sampling method. Based on the observation that has been done, the workload distribution is definitely uneven. There are employees who have low workload and also high workload.

## LITERATURE REVIEW

Human resource management is one of the most crucial system that company should take care of. According to Byars & Rue in Cania (2014) human resource management is defined as a system of activities and strategies that focus on managing employees at all level of an organization to successfully achieve its objective. One of the human resource management practice is human resource planning. Where it is important for a company in order to achieve their objective. According to Dale S. Beach in (Phutela, 2016) it is a process of defining and ensure the organization has a proper number of qualified persons available at the time that has been assigned, performing job based on the organization performance standard, and the individual involved also satisfied with their works. It relates to human resource management and should be done. Human Resource Management (HRM) is the function in the organization that relates on the recruitment, management and providing direction for the importance of people in the organization (Heathfield S. M., 2016).

In order to conduct workload analysis, job description is needed. Job description is a document includes each task and responsibility that must be done for the entire organization to function efficiently, it may be writer by the personnel department or the department where the employee works (DeLapa, 1989). Job description will help in designing workload observation form. Later, when the categorization of productive and non-productive activities, the activities that mentioned in job description will categorized as productive activities.

Workload itself means the amount of responsibilities that has to be done by a particular individual or organization (Mbunda, 2006). Generally, workload refers to the intensity of doing a job and how it affect to the employee satisfaction in their current workload. There are three types of workload; physical, mental, and time. Physical workload means how many activities that individual did when working, these activities examples are pushing, pulling, lift up, and put down weight (Hima, Faikhotul, & Umami, 2011). Meanwhile, according to Gopher and Donchin in Cain (2007) mental workload can be viewed as the difference between the capacities of the information processing system that are required to finish the task to satisfy performance expectations and the capacity available at a given time. The last is time workload. Bennaars, et al (1994) stated that time workload is particular length of time that needed by an individual to finish certain job.

Workload analysis is a methodology that used to determine the time, effort, and resources needed to overcome the job in product department's operations, the output is identify the organization's actual needs of human resource both in quantity and quality (Dasgupta, 2013). Workload analysis data further will be processed to calculate each employee workload. Then, it will be categorized as very high, high, normal or low. International Labor Organization describes it is a technique to measure work for determine the times and rates of working for the elements of a certain job in current conditions (International Labor Organization in Hartanti, 2016. Workload analysis can be done with two methods, there are stopwatch, and work sampling method.

In this research, work sampling method is used. Work sampling is an activities related to observation with a random time in certain interval that has been chosen before to observe particular employees (Hidajat, Gustomo, Widyanti, & Putro, 2004). Work sampling method related to time measurement. According to Sutralaksana et al. (2006) time measurement is done when all the activities have been done with conformity and the amount of it can fulfill the level of accuracy and confidence desired. The next step is data management to get the standard time measurement that including cycle time measurement and normal time measurement.

In order to create a proper workload analysis, rating factor is needed. Rating factor is as a complementary in calculating workload. Rating factor is a form which including a score given by manager to his subordinate. It is divided into two categories. Skill and effort. The manager has to assess their subordinate's skill and effort based on his perspective. The score interval is between 50-150.



## METHODOLOGY

There are several methods to conduct the workload analysis. For this research, work sampling method is used with direct observation. In order to conduct work sampling method, the researcher go through several steps as stated below:

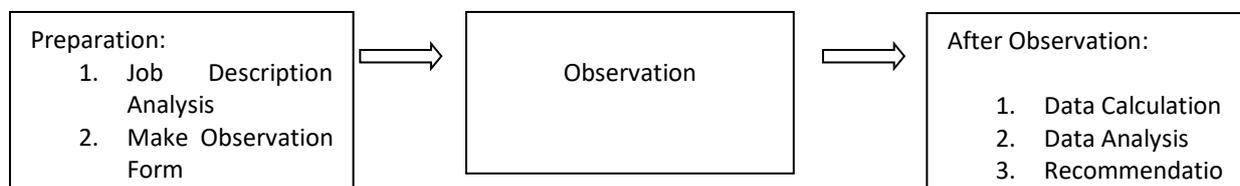


Figure 1. Research Methodology

Work sampling method was chosen because based on the company activities, work sampling is the most suitable one because it also relates to blue collar job. Meanwhile, the stopwatch method is not suitable because it is for white collar job. The steps of work sampling method are: job description evaluation, create observation form, observation, data calculation, data analysis, and conclusion and recommendation.

To create the observation form, job description is required. Job description is categorized as secondary data because it already made by the human resource division. Yet, to make it more valid, the interview between researcher and division manager was done. It is important to make sure, whether the job description that already made is the real job that the employees do everyday.

After that, the observation form was created. The observation form consist of productive and non-productive activity. The productive activity is represented by job description. Productive activity is the activities that relate with employee's job description. In other hand, non-productive activity is the activities that unrelate with the job description such as: go to toilet, sleeping, or waiting for an error system. The non-productive activity categorization is approved and said by the manager division.

When the observation form is ready, the next step is observation. Observation was took place at the office for two weeks. In one day, this research required 24 samples on Monday until Thursday, and 22 samples on Friday. During that period of time, the researcher was directly observe and saw every employee activities. Every employee activities is noted in the observation form by wrote tallys.

The next step is data calculation. The data was calculated with excel formula worksheet developed by Gustomo et al. (2006). In the calculation step, it will be known the result of each individual workload. The component that involve in the calculation is observation result and also rating factor assessment from each division manager to his subordinate.

At the end, when the calculation result already occur, the researcher can conduct an analysis. In analysis process, the current employee workload will be categorized as low, normal, high and very high. Afterwards, based on the current condition, the researcher gave the most suitable recommendations to PT. Lintas Negara, Bandung. The recommendation could be hiring, training, motivation or additional compensation depends on current condition and manager will decide the next action to improve employee current workload.

## FINDINGS AND ARGUMENT

Position	Workload	Status	Skill	Effort
Officer BGES Integration	125.85%	Very High	High	High
Officer Account Team Support	108.25%	High	High	High
Officer Service Delivery & VAT Support 1	97.17%	High	High	High
Officer Service Delivery & VAT Support 2	93.23%	Normal	High	High

Position	Workload	Status	Skill	Effort
Officer Service Delivery & VAT Support 3	90.39%	Normal	High	High
Officer Service Delivery & VAT Support 4	107.50%	High	High	High
Officer Service Delivery & VAT Support 5	100.17%	Normal	High	High
Officer Bidding Support 1	88.76%	Low	High	High
Officer Outbond Logistic Support 1	87.89%	Low	High	High
Officer Sales Support 1	58.74%	Very Low	Low	Low
Officer Sales Support 2	45.81%	Very Low	Low	Low
Officer Solution Integration 1	124.57%	Very High	High	High

Table 1. Workload Distribution

Based on data calculation, there is an uneven workload distribution between employees. From table 1, it can be seen that there are three employees who have normal workload. Meanwhile, there are four employees who have low workload. Three employees who have high workload, and there are two employees who have very high workload. Based on the workload calculation result, the workload distribution among employees is uneven. The factors that probably caused this situations are: amount of responsibilities on each employee, error system, number of manpower in each sub division, period of work in the company, and level of bustle each year.

Based on manager's assessment in rating factor, there are two employees who are lack of skill and motivation. This situation makes their workload considers low. The employees who need a treatment to increase their skill and effort is officer sales support 1 and officer sales support 2, who are in the same division. Since their skill score are low, they need a proper training to increase their skill and at the end their workload will be considered normal. In order to increase their effort, a motivation is needed. For employee who already has high skill and effort, company needs to maintain it by giving a good treatment such as reward and give a proper amount of job responsibilities, so their workload would not be considered low in the future.

Workload distribution for each sub-division is needed in order to compare and analyze the possible factors that causes of the differences. Thus, workload distribution for each sub-division was made by calculated its average, as stated below:

Sub-Division	Average Score	Workload
BGES Marketing and Account Team	113.77%	High
Bidding and Outbond Logistic	88.33%	Low
BGES Sales Support	52.28%	Low
Service Delivery	102.44%	Normal
Solution Integration	124.57%	Very High

Table 2. Workload Average

According to table 2, two divisions have low workload, meanwhile there is one division who has very high workload, and one division with high workload, and only one division with normal workload.

It can be seen that Solution Integration has a lot of job descriptions. From manager's perspective this division also tends to busy in the whole year and month. The only month that does not as busy as the other months is January. This situation is also occurred because Solution Integration only has one employee to do the entire responsibilities. The other thing that probably makes workload is different among sub-division is, level of bustle in the whole year and month. As can be seen on the table, Bidding and Outbond Logistic has low workload. This situation happened because this division has a fewer months with high workload for the entire year if it compared to another sub-divisions. Meanwhile, both of the employees have a good skill and effort which can help them finish their jobs well. Thus, the high skill and effort and fewer months of bustle probably is the main reason of the low workload in Bidding and Outbond Logistic.

BGES Sales Support also has low workload because based on the manager's assessment, both if employees in this division have low score in skill and effort. Thus at the end, they cannot do their jobs that require certain skill and effort. They also feel their workload is high, but in the reality it is because they did not have an enough skill and effort.

For service delivery, there are three employees who already got normal workload. The rest have high workload. It is probably because, their manager assessment result and also this division bustle that can be overcome by the employee's current condition. They also tend to be given more responsibilities by the manager since they already worked there longer than the others and seem have higher skill. Yet, the other workload is normal. So, when it comes to the average, the employee who got normal workload can balance it.

BGES marketing and account team has high workload since the employees have high workload. It is because they have so much responsibilities to do, especially BGES integration position, meanwhile she is alone. The level of busyness in this division also quite high although not as high as the others. Both of the employees have the high score skill and effort which probably can increase the average division workload.

The purpose of this research is to make each employee has normal workload, thus the employee motivation will increase. Some recommendations could be applied. For very low workload, it is caused by lack of skill and motivation. Therefore, it would be better if company provides a proper training for them. For high and very high workload, the recommendations that could be applied are training, give additional compensation, or if it is possible the company can hiring additional personnel for officer BGES Integration and officer solution integration positions.

Position	Score	Workload	Treatment
Officer BGES Integration	125.85%	Very High	Add 1 new personnel
Officer Account Team Support	108.25%	High	Additional compensation
Officer Service Delivery & VAT Support 1	97.17%	Normal	Maintain the workload
Officer Service Delivery & VAT Support 2	109.19%	High	Additional compensation
Officer Service Delivery & VAT Support 3	95.05%	Normal	Maintain the workload
Officer Service Delivery & VAT Support 4	110.63%	High	Additional compensation
Officer Service Delivery & VAT Support 5	100.17%	Normal	Maintain the workload
Officer Bidding Support	88.76%	Low	Additional jobs
Officer Outbond Logistic Support	87.89%	Low	Additional jobs
Officer Sales Support 1	58.74%	Low	Give training & motivation
Officer Sales Support 2	45.81%	Low	Give training & motivation
Officer Solution Integration	124.57%	Very High	Add 1 new personnel

Table 3. Workload and Treatment

Based on the current situation and also stated in table 3, each employee needs various treatment. For employees who have very high workload, the company needs adding 1 more personnel to help the employee finish their jobs. Then, for the officer bidding support and officer outbond logistic support who have low workload, that is because they have high skill and workload, but their level of bustle is low. Thus, company needs to add more jobs to increase their workload. For the employee who have high workload, company needs to appreciate their performance by giving additional compensation. Then, for officer sales support who has low workload because lack of skill and effort, company needs to give training and motivation. The other thing company needs to do is maintain the employee workload who already normal.

## CONCLUSIONS

Human is one of the most important thing in the organization. The existence of competent human in organization can help them to reach their objective. Hence, it is a must for organization to have a well-designed human resource management. Human resource planning as one of human resource management has a big impact to the organization itself. Because, it helps them to work based on standard, and also will help in increasing employee motivation. Workload analysis is the practice of human resource planning. The uneven distribution of workload can reduce employee motivation and may lead to decreasing employee performance or even the company performance and also the worst is high number of turnover. Most of the employee in BGES division PT Lintas Indonesia, Bandung felt that their workload is high. To prevent worse effect, this research was conducted to find out the actual workload. The research was conducted using work sampling method and direct observation. This method was chosen since it is match with the company situation. After the observation is done, the next step is workload calculation. After calculated the data, it is proven that the workload distribution is uneven and several employees have high to very high workload. Thereupon, the company needs to act as soon as possible. Give the employee training, additional compensation, additional jobs, and hiring new personnel are needed to do for some positions. If every employee has normal workload or they feel appreciated, it will increase employee motivation and also affect the company's performance.

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# The Effect Of Company Reputation And Business Strategy On Company Performance Of Banking Industry In Indonesia

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## Abstract

The number of offices and assets of go public banking has increased, but their performance have grown unstable. The condition is allegedly related to issues of business strategy and company reputation. So that, this study aims to examine the influence of company reputation and business strategy on banking performance in Indonesia. The research uses quantitative research approach on unit of analysis national banking that has go public. So the population in this study is all national banks both government owned, private and foreign who have go public. The process of observation is cross section / one shot, ie in 2017. Primary data is obtained through questionnaire towards 43 go public banks conducted by a census. Analysis of causality to answer the purpose of research, using Partial Least Square (PLS). The results show that the company's reputation and business strategy significantly affect the performance of banking companies in Indonesia either simultaneously or partially. Partially, business strategy is more dominant in affecting company performance than company reputation.

*Keywords : company reputation, business strategy, company performance, banking industry.*

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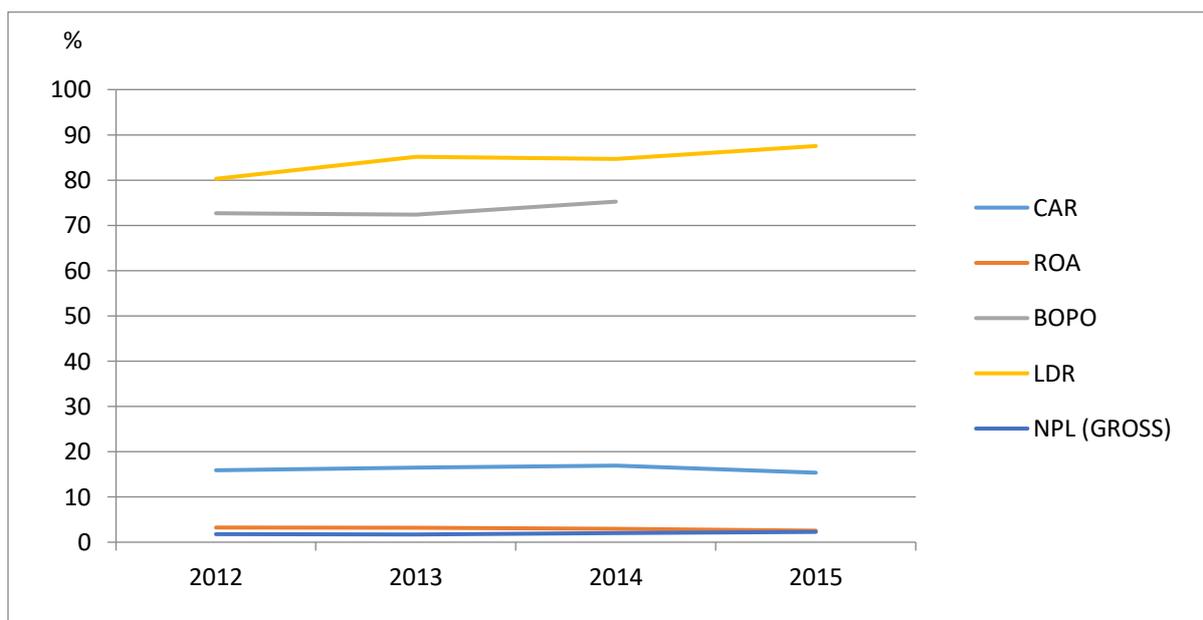
## 1. INTRODUCTION

### 1.1 Research Background

In order to improve the access to bank capital, becoming a bank go public can be one solution for banks in expanding access to sources of Third Party Funds. The transparency of bank go public information increases investment opportunities from investors, thereby expanding access to financial resources through instruments in the capital market. In the period of 2011 s.d 2015 there was an increase in the number of branch offices of go public banks. The number of publicly-owned banks increased from 30 in 2011 to 41 in 2015. The number of public-owned bank offices also increased 23% (5,184 offices) from 22,515 offices in 2011 to 27,699 offices by 2015.

In the period of 5 years from 2011 to 2015, an increase of IDR 1.829 trillion total assets of conventional commercial banks go public. The total distribution of conventional commercial bank funds go public Per December 2011, recorded at IDR 2,633 trillion and increased by 60% growth in five years, to IDR 4,223 trillion. In terms of profit, within the period of 2011-2015 there is an unstable profit growth and tend to slow down, although in total in 2015 there was a profit increase of 49% compared to total profit in 2011.

The following is a description of conventional commercial bank performance based on Capital Adequacy Ratio (CAR), Return on Assets (ROA), Operating Expenses to Operating Income (BOPO), Loan to Deposits Ratio (LDR), and Non Performing Loan (NPL).



Surce : Otoritas Jasa Keuangan, 2016

**Figure 1**  
**Growth of the Performance of Conventional Commercial Banks Go Public**

Based on the data above, it is known that the performance of banking companies in Indonesia has not been achieved high performance. While the concept of performance by Wheelen and Hunger (2015) is the end result of an activity measured by a company with a number of measures defined in the strategy formulation phase as part of a strategic management process. Where in performance measurement, David (2013) uses financial ratios that including Return on Investment (ROI), Return on Equity (ROE), Profit Margin, Market Share, Debt to Equity, Earnings per share, Sales growth, and Assets growth.

Based on observations, preliminary surveys and in-depth interviews with experts in the banking industry, the cause of the unstable performance of banking companies in Indonesia is allegedly caused by business strategy problems. Wheelen & Hunger (2015) explain that business strategy focuses on increasing the competitive position of a product or service from a business unit or company in a particular industry or specific market segment in which they compete. Business strategy in the form of competitive strategy is to compete against all competitors with excellence, and or cooperative strategy is to work together with one or more companies to achieve superiority than its competitors. Based on these opinions, appropriate cooperative strategies and competitive strategies are needed. However, based on preliminary observations, an indication that banking companies are not yet optimal in applying the right business strategy.

On the other hand, Wang (2007) points out through a case study at De Novo Bank that cost efficiency leads to higher profitability. In addition, Banker et al. (2014) also found similar results there was an influence of competitive strategies on performance.

In addition to problems in the implementation of business strategy, the phenomenons are also alleged to be influenced by the phenomenon of company reputation. The company's reputation on service companies according to Zabkar & Arslanagic-Kalajdzic (2013), is directly related to profits (where improvements in the company's reputation are related to an increase in perceived profits) and at the same time related to customer sacrifices (where improvement in corporate reputation is related with reduced costs and sacrifices). Meanwhile, according to Fombrun (2001), there are several key elements in forming a strong and profitable company reputation namely credibility, reliability, trustworthiness, and responsibility. But from the results of preliminary observations it is known that reputation of banking companies in Indonesia has not been high. Meanwhile, Hasanudin and Budiarto (2013) show that the company's reputation has a positive effect on the company's

performance. In addition, Ou and Hsu (2013) also show a relationship between company reputation and innovative performance.

### **1.2 Research Objective**

Based on this background, this study aims to examine the effect of company reputation and business strategy on banking performance in Indonesia.

## **2. LITERATURE REVIEW**

### **2.1 Company Reputation**

There are much researches on the company's reputation. One of the most famous is Fortune's "World's Most Admired Companies Survey". The criteria used to assess the company's reputation in the survey are: product and service quality, management quality, long-term investment value, attracting human resources, the usage of resources, globalization, financial robustness, creativity and innovation (Duygun, Menteş, Cubaş, 2014, p.159). Duygun, Menteş, Kubaş (2014) define the company's reputation as a customer's perception of how well the company is able to safeguard its customers and relate to its welfare. The customer's perception of a company can occur directly through the products and services produced.

Fombrun (2001) argues that there are several key elements in forming a strong and profitable corporate reputation that is credibility, reliability, trustworthiness, and responsibility.

According to Zabkar & Arslanagic-Kalajdzic (2013), the reputation of service firms is directly related to profits (where improvement in the company's reputation is related to an increase in perceived profits) and at the same time with regard to customer sacrifices (where improvement in the reputation of the firm is related to the decline Cost and sacrifice).

In this study, company reputation is measured based on three dimensions namely, credibility, reliability, trustworthiness, and responsibility.

### **2.2 Business Strategy**

According to Hubbard and Beamish (2011), business strategy is an effort to position the company's business to be more competitive than its competitors. Based on Pearce & Robinson's (2013) opinion, it is important to evaluate and select a strategy for successful business. Business will succeed if the company has some relative superiority better than its competitors. There are two sources of competitive advantage found in the business cost structure and the ability to differentiate its business over competitors.

Wheelen and Hunger (2015) explain that business strategy focuses on enhancing the competitive position of a product or service from a business unit or company in a particular industry or specific market segment in which they compete. Business strategy shapes competitive strategy by competing against all competitors with excellence, and / or cooperative strategy by working with one or more companies to achieve excellence over competitors.

Companies can choose five business-level strategies to build and maintain their desired strategic position against their competitors: cost leadership, differentiation, cost leadership focus, focus of differentiation, and integrated cost leadership or integrated differentiation (Hitt, Ireland, and Hokisson, 2015).

In this study, business strategy is measured by the dimensions of competitive strategy and cooperative strategy (Wheelen and Hunger, 2015).



## 2.3 Company Performance

Kaplan and Norton (2010) develop performance measurement based on four Balanced Scorecard perspectives: financial perspective, customer perspective, internal business process perspective, and learning and growth perspective. The BSC perspective includes:

Financial perspective: measured by account receivable, return on capital employed, operating expense.

Customer perspective: measured by customer satisfaction.

Internal business process perspective: measured by rework.

Learning and growth perspective: measured by employee's morale and employee's suggestion.

(Kaplan & Norton, 2010)

Karim, Ameen, and Ayaz (2011) measure bank performance by *Fixed Assets Turn-over, Return on Invest, Return on Equity, Net Profit Margin, Operating Profit Margin, Return on Capital Employed (ROCE), dan Earning per Share.*

Almazari (2012) uses Dupont Model to analyze ROE. The ROE model consists of three components: net margin, total asset turnover, and equity multiplier. While Hahn & Powers (2010) measure the performance of banking companies through ROA.

In this research, company performance is measured by dimension of growth of public fund, lending growth, profitability level, market share.

## 2.4 Previous Studies

Hasanudin and Budiarto (2013) find that company's reputation has a positive effect on company's performance; Ou and Hsu (2013) find that better human capital moderates the relationship between company reputation and innovative performance. Cao and Myers (2015) through a study of 9,276 large US corporations in the 1987-2011 period and reputation ratings from Fortune's "America's Most Admired Companies", find that firms with high reputation scores enjoyed lower costs in capital even after controlling for other factors that determine the cost of equity. The reputation rating provides information about the quality of the company. Reputation changes associated with subsequent changes in the firm's investor base, consistent with reputation ratings that affect investor recognition and increase risk sharing.

Wang (2007) points out through a case study at De Novo Bank that cost efficiency leads to higher profitability. In addition, Banker et al. (2014) also find similar results about an influence of competitive strategies on performance. Hahn and Powers (2010) examine that in particular, banks pursue cost leadership, differentiation, and focus strategies that are consistent with Porter's typology. Banks with cost leadership have an effect on performance significantly higher than those who are not pursuing generic strategies.

Based on the literature study, hypotheses are arranged as follow:

H: Company reputation and business strategy affect the performance of banking companies in Indonesia either simultaneously and partially.

The three variables have not been studied in the unit of analysis go public banking in Indonesia in 2017.

## 3. METHODOLOGY

This study examines the go public banking in Indonesia using a quantitative research approach. Unit of analysis



in this research is national banking that has go public. So the population is all national banks either government private and foreign owned, who have go public. The process of observation is cross section / one shot, meaning that the information obtained is the result of research conducted at a certain time period that is in the year. Primary data is obtained through questionnaire towards 43 go public banks conducted by a census. Analysis of causality to answer the purpose of research, using Partial Least Square (PLS).

#### 4. RESULT AND DISCUSSION

##### 4.1. Goodness of Fit Model

##### 4.1.1 Analysis of Structural Model (Inner Model)

This section will discuss the result of hypothesis testing by using Partial Least Square (PLS). The analysis of structural model (inner model) shows the links between latent variables. Inner model is evaluated by using Goodness of Fit Model (GoF), that show the difference between the values of the observations result with the values predicted by the model.

Table 1  
Test of Outer and Inner Model

Variable	R Square	Cronbachs Alpha	Composite Reliability	Q square
Company Reputation		0,958	0,962	0,598
Business Strategy		0,878	0,908	0,578
Performance of Bank	0,673	0,812	0,865	0,525

Source: SmartPLS 2.0

This test is indicated by the value of R Square on endogenous constructs and Prediction relevance (Q square) or known as Stone-Geisser's used to know the capability of prediction with blinfoling procedure. If the value obtained 0.02 (minor), 0.15 (medium) and 0.35 (large), and only used for the endogenous construct with relective indicator. Refer to Chin (1998), the value of R square amounted to 0.67 (strong), 0.33 (medium) and 0.19 (weak).

The table above gives the value of R<sup>2</sup> on company performance as endogenous variable is in very strong criterion (> 0.6 = strong), and Q square value is in big criteria, so it can be concluded that the research model is supported by empirical condition or fit model.

##### 4.1.2 Measurement Model (outer model)

Analysis of measurement model (outer model) shows manifest variables (indicators) as with each latent variable. It is used as validity and reliability test to measure latent variabel and indicator in measuring dimension that is construct. It can be explained by the value of Cronbachs Alpha that is to see the reliability of dimension in measuring variables. If the value of Cronbachs Alpha bigger that 0.70 (Nunnaly, 1994), it show that the dimensions and indicators as reliable in measuring variables. Composite reliability and Cronbachs Alpha of variables > 0.70 show that all of variables in the model estimated fulfill the criteria of discriminant validity. Then, it can be concluded that all of variables have good reliabilities.

The usage of Second Order in the research model cause loading factor obtained can explains the relationship between latent variables-dimension and dimensions-indicators. The table below shows the result of measurement model for each dimension on indicator.



**Table 2**  
**Loading Factor of Latent Variable-Dimension-Indicator**

Variable-Dimension	Indicator-Dimension	$\lambda$	t-value	Conclusion
Company Reputation ->	Credibility of Bank	0,978	269,588	Valid
	<b>X1 &lt;- Credibility of Bank</b>	0,834	25,226	Valid
	<b>X2 &lt;- Credibility of Bank</b>	0,786	23,958	Valid
	<b>X3 &lt;- Credibility of Bank</b>	0,799	22,002	Valid
Company Reputation ->	Trust	0,984	210,729	Valid
	<b>X4 &lt;- Trust</b>	0,809	23,438	Valid
	<b>X5 &lt;- Trust</b>	0,796	33,010	Valid
	<b>X6 &lt;- Trust</b>	0,827	24,583	Valid
	<b>X7 &lt;- Trust</b>	0,812	26,598	Valid
	<b>X8 &lt;- Trust</b>	0,759	18,956	Valid
Company Reputation ->	Reliability	0,980	157,053	Valid
	<b>X9 &lt;- Reliability</b>	0,839	36,384	Valid
	<b>X10 &lt;- Reliability</b>	0,736	16,309	Valid
	<b>X11 &lt;- Reliability</b>	0,822	31,121	Valid
	<b>X12 &lt;- Reliability</b>	0,793	22,727	Valid
Company Reputation ->	Responsibility	0,979	151,654	Valid
	<b>X13 &lt;- Responsibility</b>	0,819	30,971	Valid
	<b>X14 &lt;- Responsibility</b>	0,778	23,279	Valid
	<b>X15 &lt;- Responsibility</b>	0,758	21,086	Valid
	<b>X16 &lt;- Responsibility</b>	0,815	29,615	Valid
Business Strategy ->	Competitive	0,998	866,531	Valid
	<b>X17 &lt;- Competitive</b>	0,801	24,779	Valid
	<b>X18 &lt;- Competitive</b>	0,810	30,468	Valid
	<b>X19 &lt;- Competitive</b>	0,779	22,484	Valid
	<b>X20 &lt;- Competitive</b>	0,776	23,341	Valid
Business Strategy ->	Cooperative	0,991	210,197	Valid
	<b>X21 &lt;- Cooperative</b>	0,801	28,732	Valid
	<b>X22 &lt;- Cooperative</b>	0,785	24,312	Valid
Performance of Bank ->	Funding	0,696	10,331	Valid
	<b>Y1 &lt;- Funding</b>	1,000	-	Valid
Performance of Bank ->	Credit	0,830	21,327	Valid
	<b>Y2 &lt;- Credit</b>	1,000	-	Valid
Performance of Bank ->	Profit	0,936	112,558	Valid
	<b>Y3 &lt;- Profit</b>	0,779	8,436	Valid
	<b>Y4 &lt;- Profit</b>	0,594	5,895	Valid
	<b>Y5 &lt;- Profit</b>	0,698	6,011	Valid

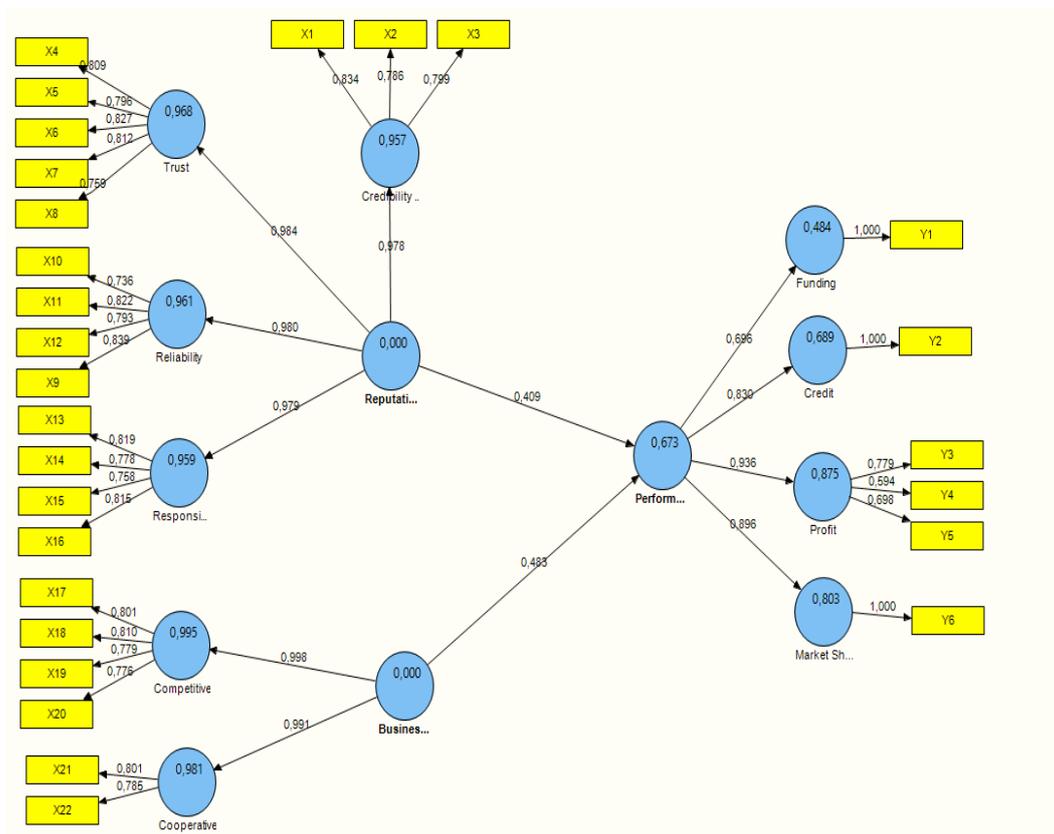


Variable-Dimension	Indicator-Dimension	$\lambda$	t-value	Conclusion
Performance of Bank -> Market Share		0,896	42,777	Valid
	Y6 <- Market Share	1,000	-	Valid

The result of measurement model of dimensions by its indicators shows that the indicators are valid which the value of  $t < 2.04$  (t table at  $\alpha = 0.05$ )

The result of measurement model of latent variables on their dimensions shows to what extent the validity of dimensions in measuring latent variables. Following table shows the result of measurement model for each latent variable on dimensions.

Following figure shows the complete path diagram:



**Figure 2**  
Complete Path Diagram of Research Model

#### 4.1.3 Structural Model

Based on the research framework, then obtained a structural model as follow :

$$Y = 0.409X1 + 0.483X2 + \zeta_1$$

Which are :  
 Y=Performance of Bank  
 X1= Reputation  
 X2 = Business Strategy  
 ζi=Residual

#### 4.2 Hypothesis testing

Below is the result of hypothesis testing both simultaneously and partially.

##### a. The influence of reputation and business strategy on performance simultaneously

Below is the result of simultaneous testing of hypothesis:

**Table 3**  
**Simultaneous Testing of Hypothesis**

Hypothesis	R <sup>2</sup>	F	Hypothesis
<b>Company Reputation and Business Strategy -&gt; Performance of Bank</b>	<b>0.673</b>	<b>36.51*</b>	<b>accepted</b>

\* significant at α=0.05 (F table =3.31)

Based on the table, it is known that within the degree of confidence of 95% (α=0.05) simultaneously there is the influence of **company Reputation and Business Strategy on the Performance of Bank** amounted to 67.3%, while the rest of 32.7% is affected by other factor did not examined.

##### b. The influence of reputation and business strategy on performance partially

Below is the result of partial testing of hypothesis :

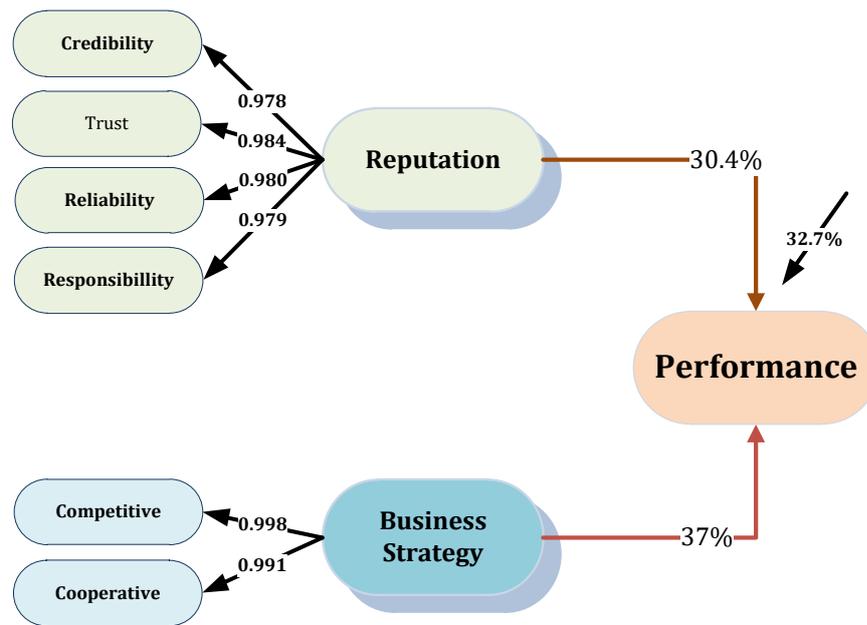
**Table 4**  
**Partial Testing of Hypothesis**

Hypothesis	γ	t	R2	Hypothesis
<b>Company Reputation -&gt; Performance of Bank</b>	0,409	4,900*	0,303	accepted
<b>Business Strategy -&gt; Performance of Bank</b>	0,483	6,280*	0,370	accepted

\* significant at α=0.05 (t table =2.04)

The table shows that partially **company Reputation and Business Strategy** affect significantly to **Performance of Bank**, which is **Business Strategy** has a greater influence (37%).

Based on the results of hypothesis testing, the research findings are as follows:



**Figure 3**  
**Research Finding**

The finding of this study reveals that company reputation and business strategy have significant effect on the company performance, so this result supports the hypothesis. Business strategy has a more dominant effect than the company reputation in improving the performance of banking companies. Where in the development of business strategy, it is revealed that competitive strategy has more dominant influence than cooperative strategy. While reputation development is more dominant formed by trust dimension, followed by dimension of reliability, responsibility, and credibility. So it appears that the improvement of the reputation of banking companies is based on trust development.

These findings indicate that the improvement of banking performance should rely on the improvement of business strategy, especially competitive strategy and supported by cooperative strategy. In addition, the improvement of banking performance should also be accompanied by the company reputation development efforts primarily by increasing stakeholder's trust in banks.

The result of this study indicates the dominance of business strategy in influencing company performance, supporting the findings of Wang (2007) which shows that cost efficiency leads to higher profitability; Banker et al. (2014) also find similar results where about an influence of competitive strategies on performance; and Hahn and Powers (2010) who examine that in particular, banks pursue cost leadership, differentiation, and focus strategies that are consistent with Porter's typology. Banks with cost leadership have an effect on performance significantly higher than those who are not pursuing generic strategies.

## **CONCLUSION AND RECOMMENDATION**

### **5.1 Conclusion**

The results of this study indicate that company reputation and business strategy significantly influence the performance of banking companies in Indonesia either simultaneously or partially. Partially, business strategy is more dominant to affects company performance than company reputation.

## 5.2 Recommendation

The findings of this study can be used as framework for further researchers who are interested to examine the performance of go public banking in Indonesia. It can be examined the influence of the company reputation and business strategy on the performance of both public and go public, or syariah bank, whether the level of influence is the same.

In addition, for practitioners, these findings can be a reference in the preparation of corporate strategy to improve banking performance.

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## **The Effect Of Organizational Environment On Knowledge Management And Organizational Culture And The Implications On Organizational Survival (A Survey Based On Leaders Perception At Private Higher Education In West Java Province)**

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### **Abstract**

The organizations that can not cope with environmental change, Then the organization will not survive and sustainable in the long run. Changes occur due to demands and environmental conditions that will renew the organisations situation as; Authority, work relations, division of duties, values and collective beliefs of members of the organization. Organizational change will change organizational goals and will eventually prosecute members of the organization for adjust their collective values and beliefs towards the intended change. Organizational change will also demand a wider knowledge for the organization as an intellectual asset that can encourage strong organizational survival.

There are several private higher education in West Java with closed status and in coaching, the developed and not yet get research university in 2016. This is as a result of the demands of the organizational environment that is not accompanied by the optimization of knowledge management and organizational culture strengthening. The aim of these study was to describe the influence of organizational environment on organizational survival through knowledge management and organizational culture gradually tested quantitatively and continued with qualitative testing.

The research method used is survey method with mix method research approach with Sequential explanatory strategy. There are two primary data types that are sourced from questionnaires for descriptive and quantitative test and from interviews for qualitative test.

The results showed that the organizational environment is conducive to organizational sustainability through the optimization of knowledge management and strengthening the organizational culture of private haigher education in West Java province.

*Keyword:* Knowledge Managemet, Organizational Enveronment, Organizational Culture, Organizational Survival.

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## Introduction

Violations of the applicable legal provisions are often made by an organization to achieve short-term benefits that would threaten the survival of the organization. Unhealthy competition between organizations also often creates problems with violations of the law which are not only the legal consequences of the organization, but there are others who are disadvantaged, such as consumers and other partners of the organization that will hold the responsibility. The changing environmental conditions also threaten the survival of the organization, ie if the organization does not have the ability to cope with changing environmental demands. This is in parallel with the view Keister (2002:459) "An ability to adapt to radical is a key determinant of competitive advantage and organizational survival".

Organizational environmental problems also result in an organization unable to survive except by changing cultural and management practices, This is in line with the view Bennet, Alex & Bennet, David. (2004:363) "Environmental forces demanded specific actions for survival, leading to the development of culture via the need and propensity to cooperate." There are higher education in West Java Which violates the rules of management, is not reporting academic activities, lecturer-to-student ratio problems, problems with violations of remote classes, class compaction, study programs or illegal private higher education and conflict or disputes that resulted in the high unemployment being closed. In addition to private higher education closed status There is also a status in coaching, if in a certain period does not meet the provisions set by the government, it is also threatened to be revoked its operating license and the closed status. Based on the higher education data base <http://forlap.dikti.go.id/> 2016, private higher education in West Java of KOPERTIS IV Closed status Increase from the beginning of the year 2015 One being seventeen by the year 2016; two universities, eight high schools, six academics and one polytechnic.

Most private higher education in West Java Including at the developed, which still have to work on developing research capacity to be able to manage the research so as to produce good research outcomes. And New cultural changes in accordance with the demands of environmental change in 2016 that is the culture of research university can't be implemented at private higher education in West Java. The closure of some private higher education above because it has not been able to manage the environment and create a new organizational culture in accordance with the demands of the environment. Implementing good environmental and organizational practices is good organizational survival can give organization a competitive advantage and help foster goodwill toward organizational survival (Farahmand, 2013:88)

Not having a common perception of stakeholders in high private sector has often resulted in interest attraction which resulted in less optimal use of resources and weak values that became the basis of rules and employee confidence in building the organization. Therefore, appropriate steps in optimizing the management of resources, especially intellectual resources and strengthening the values and beliefs of employees.

This study aims to provide an overview and explain the relationship between variables on the organizational environment, knowledge management, organizational culture and organizational survival of private universities in West Java, either directly or indirectly with quantitative stages first qualitative.

## 1. Literature review

### 2.1 Organizational Environment

According to Jones (2010:24) that is what is meant by organizational environment the set of forces and conditions that operate beyond an organization's boundaries but affect its ability to acquire and use resources to create value. Further views Uha (2014:57) that the organizational environment is "the pattern of all conditions or internal and external factors that influence or lead to opportunities or threats to the life and development of the organization." From the above view it is clear that the organizational environment can be a force or weakness and threats or opportunities that can affect the state of organization.



Robbins et al. (2014:76) "Any constituencies in the organization's environment that are affected by an organization's decision and actions." The stakeholders who interact with the organization include; customer, social and political groups, competitors, trade and industry associations, government, media, supplier, communities, shareholders, unions and employees. While Guo (2013:19) Institutional theory holds that a company's institutional environment is made up of the norms and values of its stakeholders, which include customers, investors, guilds, trustee councils, governments, and partners. So the organizational environment is a state of interaction of stakeholders that can affect the organization. If an organization wants to survive by Guo (2013:19) Then what the organization should do is "in order to survive organizations should first be recognized by other organizations or stakeholders."

## **2.2 Knowledge Management**

Knowledge is stored in individual minds or encoded in organizational processes, documents, products, services, facilities and systems. The view that knowledge is still stored in the mind is intended with tacit knowledge, while the views of knowledge have been given code intended with explicit knowledge. Knowledge as an intellectual asset of an organization of course to be useful for the organization must be in management, as for understanding knowledge management according to Cricelli et al. (2013:368) "KM consists of managing corporation knowledge through several systematic processes, in order to acquire, organize, apply, and renew both tacit and explicit knowledge" while Zyngier (2011:58) Knowledge management definitions, the tools and techniques in the management of knowledge as an asset, cultural aspects of knowledge management.

Different views from Gupta et al. (2008:3) There are many definitions of knowledge management. At a generic level, it can be defined as the collection of processes that govern the creation, dissemination, and utilization of knowledge. Knowledge management can be implemented through the process of creation, dissemination, acquire, organize, apply utilization, and renew of knowledge. The knowledge in question is the workings and organizational values that can be used to develop the organization.

The organizational environment can have an effect on the knowledge management it has been investigated by: Smith & Lumba (2008); Sun (2010); Sharabati & Hawajreh (2012)

## **2.3 Organizational Culture**

Culture is not created only by individuals but by a group of people, this is in line with opinion Griswold (2013:48) "culture and cultural works as collective, not individual, creations." This underlies the notion of organizational culture as the norm and value created and embraced by all members of an organization that can distinguish one organization from another. The definitions of organizational culture according to Jones & George (2013:61) "organizational culture comprises the shared set of beliefs, expectations, values, norms, and work routines that influence how members of an organization relate to one another and work together to achieve organizational goals". Robbins & Judge (2015:497) "organizational culture shows how employees perceive the characteristics of an organization's culture, not whether they like them." While Luthans & Doh (2015:177) defines organizational culture "Shared values and beliefs that enable member to understand their roles in and the norms of the organization."

The organizational culture dimension according to Robbins & Coulter (2014:78) consists of; innovation and risk taking, attention to detail, outcome orientation, people orientation, team orientation, aggressiveness, stability and Agility.

Organizational environments can have an effect on organizational culture that has been investigated by: Herningsih et al. (2013); Reginato & Guerreiro (2013); Behram & Özdemirci (2014)



## 2.4 Organizational Survival

Organizational survival defined as surviving over possible setbacks and organizational deaths accordingly; Reker et al. (2002:137) "Organizational Survival is dependent on knowing how to rebound from decline and avoid death." and then, the same view is Robbins & Judge (2015:61) "The survival of an organization depends not just on how productive the organization is, but also on how well it fits with its environment."

Organizational survival defined as the ability of the organization to adapt to its environment accordingly Tsoukas & Chia (2002) in Sun & Zhang (2013:270) "further treat change as a normal condition for organizational survival and argue that in today's increasingly turbulent environment, organizations must adapt to change openly and maintain high performance consistently." And then according to Espinosa & Porter (2011:58); "As with an ecosystem, survival and success are equated with timely perception of key external changes and the adaptation of internal elements and processes that successfully respond to those changes."

From the two different views above complement each other about the definition organizational survival As the ability to adapt to changing environments that persist in the long term. Organizational survival Of an organization can be seen in the growth of the organization, Organizational productivity, survival skills, agility, adaptability and organizational learning abilities.

Knowledge management and organizational culture can have an effect on one dimension of organizational survival rather than on organizational survival seen from Research: Mathews (1992); Kim (2004); Sun & Zhang (2013); Shiva & Suar (2011).

Based on previous research above it is clear that the organizational environment has an effect on organizational knowledge and culture and its implication to organizational survival by using Mix Method Research method has not been studied. This is as a novelty form of this research.

## 2. Method

The method in this research is survey (survey methods), Because the study studied samples from a population with a mixed method approach with Sequential explanatory strategy. Mixing in this research is done gradually begins with quantitative and qualitative with the view or paradigm of pragmatism. Pragmatism because the research was born from the actions, situations and consequences of Private Universities in West Java. Combination stages are done at the data collection stage, data analysis phase and data interpretation phase and discussion.

Primary data source obtained from Private University in region Kopertis IV West Java as population become entire of unit analysis, that is as many as 368 private universities active. To determine the sample size is divided into two parts namely; for a quantitative approach used formulas from Slovin result 79 responden And for a qualitative approach with metode purposive, Namely in the select from each type of Private Higher Education two as many as eight informants consist of; two universities, two high schools, two academics, one polytechnic, and one institute. Questionnaire is used as a source of frimer data acquisition to be processed for quantitative research and in-depth interviews are used as sources of acquisition of frimer data to be processed for qualitative research.

Descriptive data analysis using weighted means score, quantitative analysis using Partial Least Square (PLS) approach and qualitative analysis is done by drawing conclusion or verification.

## 3. Results and Discustion

### 3.1 Organizational Environment, Knowledge Manajemen, Organizational Cultur and Organizational Survival

The organizational environment of high private higher education in West Java can include strengths or

weaknesses for internal organization and threats and opportunities from external organizations. Each respondent's answer to the organizational environmental dimension is described as follows:

**Tables 1. Organizational Environment**

No.	Dimension	Result	Score					Score Total	Average
			5	4	3	2	1		
1	Internal Environment	F	116	172	21	7	0	1345	4.26
		%	37	54	7	2	0	85	
2	External Environment	F	163	535	73	19	0	3212	4.07
		%	21	68	9	2	0	81	
<b>Total</b>		F	<b>163</b>	<b>535</b>	<b>73</b>	<b>19</b>	<b>0</b>	<b>4557</b>	<b>4.3</b>
		%	<b>21</b>	<b>68</b>	<b>9</b>	<b>2</b>	<b>0</b>	<b>83</b>	

*Source: Results of Data Processing, 2016*

The value of the internal environment is greater than the external environment, the internal environment can be a force for the existence of an organization and the external environment can drive organizational change. The internal environment and the external environment of private higher education interact together into one system that is the organizational environment that can affect the private higher education. Conducive organizational environment provides opportunities for private higher education to grow and develop in improving education indices in Indonesia.

Knowledge management is how to organize and share intellectual resources and organizational creativity resources at private higher education in West Java. Knowledge management is done through knowledge creation, knowledge sharing, knowledge utilization and knowledge renewal. To know the views of respondents about knowledge management of private higher education in West Java can be seen from the results of respondents' answers as follows:

**Tables 2. Knowledge Management**

No.	Dimension	Result	Score					Score Total	Average
			5	4	3	2	1		
1	Creation of Knowledge	F	110	189	11	4	2	1349	4.27
		%	35	60	3	1	1	85	
2	Dissemination of knowledge	F	85	142	10	0	0	1023	4.32
		%	36	60	4	0	0	86	
3	Utilization of knowledge	F	73	81	2	2	0	701	4.44
		%	46	51	1	1	0	89	
4	Renewal of knowledge	F	19	131	8	0	0	643	4.07
		%	12	83	5	0	0	81	
<b>Total</b>		F	<b>287</b>	<b>543</b>	<b>31</b>	<b>6</b>	<b>2</b>	<b>3716</b>	<b>4.28</b>
		%	<b>12</b>	<b>83</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>86</b>	

*Source: Results of Data Processing, 2016*

Knowledge management in private higher education in West Java is done optimally, this can be seen from the optimal use of knowledge, knowledge creation, knowledge dissemination and knowledge renewal. Private universities in West Java have improved the quality of the decision-making process and do not repeat the same process within a common framework so that decision-making is more effective. Effectiveness and orientation on the satisfaction of private higher education to the academic community that has been there, as a form of organizational performance.



**Tables 3. Organizational Culture**

No.	Dimension	Result	Score					Score Total	Average
			5	4	3	2	1		
1	Innovation and risk taking	F	50	102	6	0	0	676	4.28
		%	24	51	4	0	0	86	
2	Attention to detail	F	19	195	23	0	0	944	3.98
		%	8	82	10	0	0	80	
3	Orientation on results	F	36	100	16	6	0	640	4.05
		%	23	63	10	4	0	81	
4	Orientation to people	F	45	104	7	2	0	666	4.22
		%	28	66	4	1	0	84	
5	Orientation to team	F	57	99	2	0	0	687	4.35
		%	36	63	1	0	0	87	
6	The aggressiveness	F	12	135	11	0	0	633	4.01
		%	8	85	7	0	0	80	
7	Organization stability	F	38	44	25	47	4	539	3.41
		%	24	28	16	30	3	68	
<b>Total</b>		<b>F</b>	<b>305</b>	<b>772</b>	<b>111</b>	<b>91</b>	<b>7</b>	<b>5135</b>	<b>4.33</b>
		<b>%</b>	<b>6</b>	<b>16</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>87</b>	

*Source: Results of Data Processing, 2016*

The result of recapitulation of organizational culture is in strong category, strong culture of private higher education in West Java is depicted from developed and held firm values, norms, beliefs, symbols, expectations, work routines by members of the organization in the form; The freedom of the organization's members to innovate and take risks, members of the organization have attention to detail, managerial-oriented, organizational-oriented, team-oriented organization, aggressiveness reflected by members of the organization and organizational stability. The strong culture of private higher education in West Java can also be seen from the ethics and behavioral of employees and formalization of rules and laws that apply in private higher education as a reflection of the basic values that are believed together.

Organizational survival deals with how well organizations fit their environment. In private higher education in West Java, organizational survival is characterized by organizational conditions and organizational capabilities. The condition of the organization is illustrated by the state of organizational growth and organizational productivity. The organizational capability is depicted with the ability to survive, agility, adaptability, and the ability of private college learning.

**Table 4. Organizational Survival**

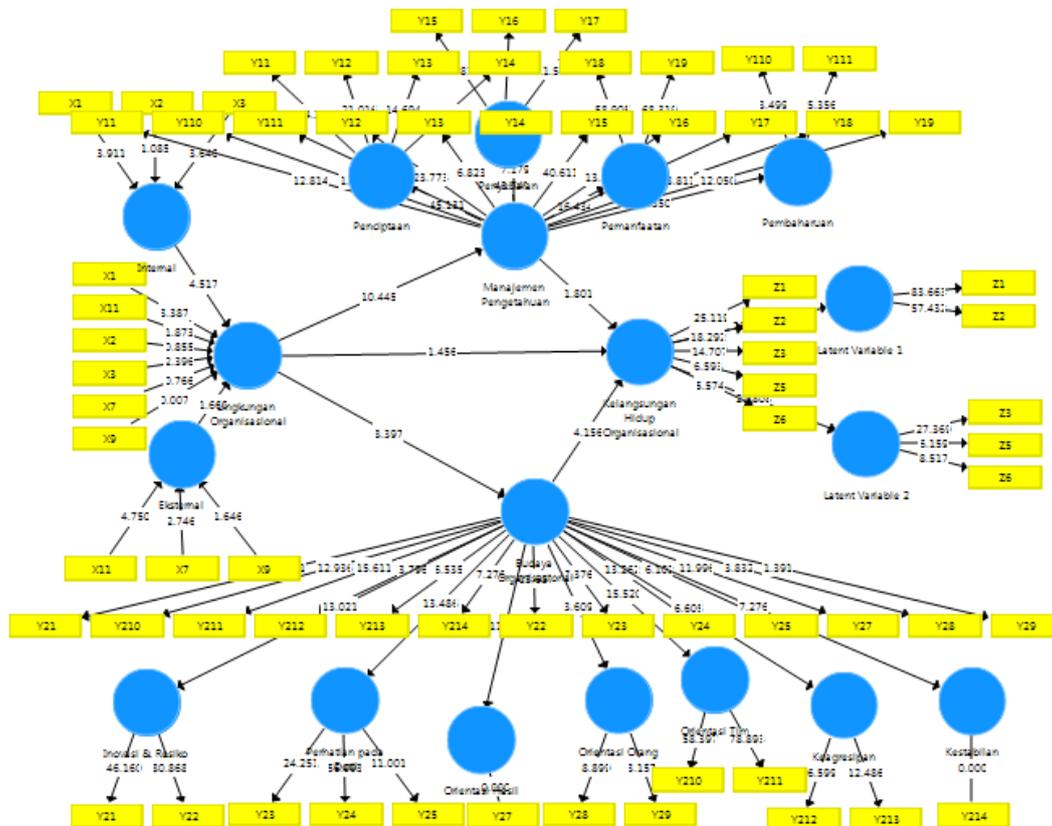
No.	Dimension	Result	Score					Score Total	Average
			5	4	3	2	1		
1	The condition of the organization	F	97	59	2	0	0	727	4.60
		%	61	37	1	0	0	92	
2	The organizational capability	F	57	246	13	0	0	1308	3.98
		%	18	78	13	0	0	83	
<b>Total</b>		<b>F</b>	<b>154</b>	<b>305</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>2035</b>	<b>4.29</b>
		<b>%</b>	<b>32</b>	<b>64</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>86</b>	

*Source: Results of Data Processing, 2016*

The table above shows organizational survival in the very strong category, the strong organizational survival of private higher education in West Java reflected the condition and ability of the organization. Growing and productive private higher education in West Java during this time to describe the condition of organizational survival. The ability of private higher education in West Java to stay afloat, lively and continue to learn in the environment also gives a picture of the condition of its survival.



### 3.2 The Effect Of Organizational Environment On Knowledge Management And Organizational Culture And The Implications On Organizational Survival



Source: Results of Data Processing, 2016

Fig. 1 The Effect Of Organizational Environment On Knowledge Management And Organizational Culture And The Implications On Organizational Survival

The measurement model in the figure above shows how each indicator or manifest variable relates to its latent variables and between dimensions with latent variables as follows;

- Organizational environment variable with internal environment dimension has coefficient value equal to 0,760 and t count equal to 4, 517 bigger than 1,96. The external environment has a coefficient coefficient value of 0.301 and t arithmetic of 1.66 is smaller than 1.96. This means that the internal environment is more dominant than the external environment in creating a conducive organizational environment in private higher education in West Java.
- The most optimal knowledge management variables on the creation of knowledge creation has a coefficient value of 0.931 and t count of 45.131 greater than 1.96, then dissemination of knowledge has a coefficient of 0.923 and t value of 43.747 Greater than 1.96, the utilization of knowledge has a coefficient value of 0.797 and t arithmetic of 16.464 greater than 1.96, and the last renewal of knowledge has a coefficient value of the path of 0.288 and t arithmetic of 2.350 larger From 1.96.
- The organizational culture variable is most strongly seen in the employee dimension of attention to detail of work with coefficient value of 0,767 and t count equal to 13,486 bigger than 1,96, then managerial

oriented to team with coefficient value value equal to 0,762 and t count equal to 15,520 bigger than 1.96, employees innovate and dare to take risks with the value of coefficient path of 0.741 and t arithmetic of 13.021 greater than 1.96, results-oriented organization with coefficient value of 0.725 and t count of 11.996 greater than 1.96, Aggressiveness members of the organization with coefficient value of 0.664 and t count of 6.605 greater than 1.96, organizational stability with coefficient value of 0.609 and t count equal to 7.276 greater than 1.96 and last managerial oriented to employees or oranag with value coefficient of 0,499 and t count equal to 3,609 greater than 1,9 6.

- d) The strongest survival variable of private higher education is the organizational capability dimension with coefficient value of 0,841 and t count equal to 21,808 bigger than 1,96 compared with organizational condition dimension with coefficient value 0,829 and t count equal to 26,773 bigger than 1.96.

The relationship between the latent variables of the picture above can be explained as follows:

- a) The influence of the organizational environment on knowledge management:

**Tables 5 The Effect of Organizational Environment on Knowledge Management**

Relationship Between Variable	Path Coefficients	R-Square	T Statistics >1,96
X → Y <sub>1</sub>	0,636	0,404	10,445

*Source: Results of Data Processing, 2016*

Organizational environmental conditions significantly influence the knowledge management conducted by private higher education in West Java. The magnitude of influence can be seen in the R square value of 0.404 or 40.4% and the rest is influenced by other factors that is equal to 59.6%. The great coefficient of the path is 63.6%, meaning that the organizational environment affects knowledge management in the medium category.

Conducive organizational environmental conditions then knowledge management will be optimal. The internal environmental conditions of private higher education can be a force if their carrying capacity is strong such as the carrying capacity of foundations, university leaders, human resources and physical facilities in ensuring the smoothness of knowledge management. And the external environmental conditions of private higher education can be an opportunity if private higher education are able to adapt to what the demands of their environment. Private higher education are very concerned about the economic conditions of society, technological advances, social conditions of society, government policies, the needs of graduate users, competitors and advice the association in running its operations..

- b) The influence of organizational environment on organizational culture is as follows:

**Tables 6 The Influence of Organizational Environment on Organizational Culture**

Relationship Between Variable	Path Coefficients	R-Square	T Statistics >1,96
X → Y <sub>2</sub>	0,631	0,398	8,397

*Source: Results of Data Processing, 2016*

The amount of organizational environmental influence on organizational culture can be seen in the R square value of 0.394 or 39.4% and the rest is influenced by other factors that is equal to 60.6%. The great coefficient of the path is equal to 63.1%, meaning that the organizational environment has an effect on organizational culture is in the medium category.

The organizational culture of private higher education in West Java as a system of shared meanings embraced by members who can be each characteristic and also can be used as the advantages of each private higher education is influenced by the environment. The internal environment can compel the will to create a values or work rules that all members of the organization as:

- c) The influence of organizational environment on organizational survival through knowledge management is as follows:

**Tables 7. The influence of Organizational Environment on Organizational Survival Through Knowledge Management**

Relationship Between Variable	Path Coefficients	R-Square	T Statistics
X → Y1	0,636	0,404	10,445
Y1 → Z	0,213	0,045	1,801
X → Z	0,193	0,037	1,456

*Source: Results of Data Processing, 2016*

From the comparison results obtained that the mediation path by knowledge management is better 0.213 > 0.193 compared with the direct path. This means that knowledge management mediates the influence of the organizational environment on the organizational survival of private higher education. The magnitude of influence can be seen on the R square value of 0.045 or 4.5% and the rest is influenced by other factors that is equal to 95.5%.

Private higher education that can adapt to what the demands of the environment tend to maintain the survival of the organization. In addition to the ability to adapt to the environment so far, private higher education also take advantage of knowledge management processes in an effort to cope with the demands of organizational environmental change.

- d) The influence of organizational environment on organizational survival through organizational culture is as follows:

**Tables 8 The Influence of Organizational Environment on Organizational Survival Through Organizational Culture**

Relationship Between Variable	Path Coefficients	R-Square	T Statistics
X → Y2	0,631	0,398	8,397
Y2 → Z	0,416	0,173	4,156
X → Y2	0,193	0,037	1,456

*Source: Results of Data Processing, 2016*

From the comparison results obtained that the path of mediation by organizational culture is better 0.416 > 0.193 compared with the direct path of the organizational environment to organizational survival. It means organizational culture mediates organizational environmental influences on organizational survival. The organizational environment is influential through organizational culture significantly to the organizational survival of private universities in West Java. The magnitude of influence can be seen on the R square value of 0.0173 or 17.3% and the rest is influenced by other factors that is equal to 82.7%

The demands of organizational environmental change in private higher education encourage that to strengthen their organizational culture that affects their organizational survival. Organizational culture in a strong private higher education, has been used as the foundation of values generally embraced by all members of the

organization in order to continue to stand and survive or have survival. Openness of private higher education in accepting changes towards a more productive as a manifestation of the strength of superior culture in competing owned during this.

### 3.3 Verification

The quantitative results of organizational environmental influences on knowledge management of private higher education in West Java are in the medium category, this is reinforced and deepened with the results of qualitative data. Demands from stakeholders have encouraged private higher education in West Java to implement knowledge management. The private higher education has been active in documenting information, disseminating information, information-based decision making and continuing to seek new information from environmental stakeholders so far. Private higher education's website in West Java is used as a tool in documenting, disseminating and seeking information from the environment. As for usage and application of knowledge received by private higher education of West Java for this still takes a long time.

Organizational environments provide a variety of information about organizations, where the information becomes a comprehensive knowledge that influences the determination of organizational direction and policy. Knowledge management is done by private universities to improve the organization's ability to manage its intellectual assets. Stakeholder interaction as a social system creates knowledge, this is in line with views Vygotsky (1978) in Yoon & Ardichvili (2012:294) that is "All knowledge comes from social interaction, developed by human beings involved in productive activities, and mediated by tools."

Quantitative results The organizational environment affects the organizational culture of private universities in West Java is in the medium category, this is reinforced and deepened with the results of qualitative data. There are several private higher education's culture in West Java that is influenced by the culture of society organization (NGOs) which shelter it such as private higher education under religious organization, national organization, local organization and other mass organizations. The strong private higher education's culture and directing private higher education have different characteristics from other private higher education to a core advantage. Formalization of activities or the sanctity of a ritual and firm on a basic value made by components that exist in private higher education as a picture of a strong private higher education's culture. A strong private higher education's culture has created the habits, languages, styles, communication and organizational practices that govern the health. A healthy and strong private higher education,s culture will make the people in it very committed to contribute greatly to the progress of the organization. The results of this study strengthen the view Luthas (2005:133) "Sometimes the organization must decide that the slave must change. For example, the environmental context has now undergone drastic changes and even companies have to adapt to the new conditions or fail to survive."

The results of quantitative research indicate that knowledge management mediates organizational environmental influences on organizational survival, is in the weak category, but this is reinforced and deepened with the results of qualitative data. There has been a structured and systematic effort of private higher education in West Java to develop and use their knowledge to assist the decision-making process for improving organizational performance, while activities are carried out through an attempt to acquire, store, process and retrieve, use and disseminate, and Evaluation and refinement of knowledge as the organizational intellectual asset, so far that is based on the demands of the organizational environment. Knowledge management is considered by Zack *et al.* (2009:393) "KM has been regarded as the most strategic organizational resource." Optimization of knowledge management in private higher education has been able to build the strength of the organization to survive the demands of continuous environmental change.

Quantitative research results show that organizational culture mediate the influence of organizational environment on the survival of private higher education in West Java, is in the medium category, it is reinforced and deepened with the results of qualitative data. Maintaining organizational survival is done by strengthening organizational culture such as upholding the principles of academic honesty, integrity, and orientation research university. Most private higher education high-performers in West Java still persist in the principle of academic



honesty in the provision of education and do not pursue short-term gains that in the long term threaten their survival. Responsibility for the survival of the organization. and many private higher education are beginning to adjust their vision to the vision of national education.

Verification results provide reinforcement to the research model illustrated in Figure 1, meaning that to create a private higher education's survival in West Java from an ever-changing environment can be done by optimizing knowledge management and reinforcement organizational culture.

#### 4. Concluction and Suggestion

The organizational environment of private higher education in West Java is conducive, knowledge management of private higher education in West Java is optimal, the organizational culture of private higher education in West Java is strong and the organizational survival of private higher education in West Java is strong. The organizational environment affects the survival of private higher education in West Java through the optimization of knowledge management and the strengthening of organizational culture.

Organizational survival of private higher education in West Java is still strong as Knowledge Management is implemented optimally and Organizational Culture continues to be strengthened, but should the next researchers include organizational commitment variables as mediation variables or other variables moderating relationships among variables. Private higher education di West Java so must;

- 1) Continue to improve physical facilities and human resources to conform to national education standards.
- 2) Optimizing the implementation of knowledge management, so that new knowledge and still tacit or still in the form of ideas, ideas and plans of individuals will be explicit knowledge that can be sharing to all employees so that it can create organizational survival.
- 3) Strengthening organizational culture by continuing to build work teams and fulfilling the obligations of employees' rights in order to maintain organizational stability in order to maintain organizational survival.

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## Factors Affecting The Adoption of E-logistics in Indonesian E-Commerce Industry Using TOE Framework

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### Abstract

This study aims to determine the factors of E-Logistic adoption in E-Commerce industry in Indonesia. Factors in the TOE Framework such as Technology, Organization and the environment are used, with respondents e-Commerce companies included in kateori / sector Classified Ads, Marketplace, Online Retail and Logistics. Analysis and data processing in this research is Partial Least Square (PLS) with unit analysis. The data collects using questionnaires that related to variables and indicators influencing E-Logistic adoption. The results of the analysis of these factors proved to accept adoption of E-Logistic technology with R-Square value of 0.873. With a 95% significance level, each independent variable has a Tvalue > T - table value with the overall path coefficient. The theoretical contribution of this research is to verify the findings of previous studies, most of which qualitative research, in the form of indicators on those factors that could have implications for the adoption of E-Logistics, particularly in the E-Commerce industry in Indonesia.

Keywords: E-Commerce; E-Logistics; TOE Framework; Adoption

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### Introduction

The logistics sector and supply chain management have become important in the complex E-Commerce business operations (Wang, 2006). Logistics on E-Commerce services can improve efficiency, reduce costs and improve customer responses (Molla, 2005). Automated E-Commerce accounts for 20-30% of the total cost of e-commerce in addition to digital marketing, payment and also goods sold (Kearney, 2016).

The use of IT in logistics management can improve efficiency, reduce costs and improve responsiveness to customers and can process information centrally and quickly. E-Logistics is a Technology that automates logistics processes and provides fulfillment *end-to-end* supply chain. E-Logistics can help E-Commerce in many areas such as, helping business functions, partnership, inventory management and warehousing (Amitrajit, 2013). Additionally E-Logistics can also reduce overhead costs on logistics operations by providing visibility (Hwang, 2016).

Studies on E-Logistics are currently quite limited and mostly done in large companies in developed countries with qualitative methods (Gong, 2013). Selection of Indonesia as a place of this research, caused Indonesia now has demographic bonus and high economic development. In addition, since Indonesia is an archipelagic country, the fulfillment of E-Commerce logistics services will be very crucial. However, as is common in most developing countries, E-Logistics adoption in Indonesia is still lagging compared to developed countries (Amitrajit, 2013).

TOE as a model that uses an interactive perspective that assumes organizational change is not only determined by individuals within the organization, and also by the organizational traits (Rahayu, 2015). This interactive perspective can explain the adoption of IT innovation. In this case, there are three factors that face the adoption of technological innovation that is technology, organization, and external environment (industrial environment). Based on the problems, this research is going to verify the findings of previous studies, most of which qualitative research, in the form of indicators on those factors and measure them in order to have implications for the adoption of E-Logistics, particularly in the E-Commerce industry in Indonesia.

## Literature Review

### E-Commerce

E-Commerce can be defined as a process of purchasing, selling, or exchanging products, services or information through a computer network, including the Internet (Rahayu, 2015). The E-Commerce community consists of several related businesses such as a provider of goods, Marketplace, Payment Gateway, Logistics Provider, Delivery/Courier and also Digital Marketer. There are five business models commonly used by E-Commerce businessmen in Indonesia including Classified / classified ads, C2C Marketplace, Shopping Mall, B2C Online Shop, and Online Store in Social Media (Enricko, 2014).

### E-Logistics

E-Logistics is a system consisting of data, hardware, software and information rules that automate logistics processes such as fulfillment, warehousing and transportation of goods and provide data integration, visibility, optimization and information tracking of supply chain management end-to-end (Gong, 2013). The process that occurs on E-Logistics is four which consists of: Request for Quotes (RFQ), Shipping/Transport, Warehousing/Inventory, and Tracking (Wang, 2006). According to Coyle (2003), E-Logistics is a system consisting of several parts within which each process can be run separately. The module of E-Logistics extensively consists of: Planning System, Execution System, Research and Intelligence System, Reports and Outputs System. Other benefits of E-Logistics are reduced operational costs, additional income from advertising and marketing, rapid response to customer needs, and reduced inefficiency. E-Logistics within an E-Commerce company will enable them to be able to determine customized needs estimates in logistics process (Hwang, 2016).

### IT Adoption Model

In contrast to other theories that focus more on individual perspectives, Technology-Organization-Environment (TOE) Framework models provide greater focus on organizational perspectives. Within this framework, there are three aspects of the context that influence the adoption of innovation, the technological context, the organizational context, and the external context of environmental / industrial environments (Oliviera, 2014).

## Research Methodology

In this research, the factors influencing E-Commerce actors in E-Logistics adoption are classified into three factors / latent variables with 12 indicators / manifest variables.

### *Technology*

Technological factors included tools and processes used, both internally and externally relevant to the company. In this research on Technology factor there are five indicators, including Visibility, Complexity, Compatibility, Financing Value Chain, and Optimized Logistics Process. Visibility is the ability to monitor any ongoing process will make the company can make improvements. Meanwhile Complexity is the level of ease in the use of a technological innovation. The implementation of a technological innovation requires resources that may not be available within the company. Then Compatibility refers to the degree of conformity of the implementation of technological innovation to the needs of adopters and systems that have run on an adopter environment (Rahayu, 2015). Logistic service providers have many partners with a various characteristics in each engagement, revenue sharing and SLA. The Financing Value Chain aspect preserves business conformity with the financial aspect of the company. A long series of processes and multiple parties' involvement in the logistics process make many processes difficult to control. The Optimized Logistics Process feature is required to perform much needed resource efficiency to increase competitive advantage (Gong, 2013).

### *Organization*



The organizational context refers to the characteristics, values and resources of the firm, including Firm Size, Perceived Benefit, Top Management Support, and Security as indicators. Firm Size refers to the size of the company, which can be seen from the aspects of financial performance, number of employees, and share in the industry. Then Perceived Benefit is the level of acceptance of an innovation in delivering benefits and benefits to the company relatively well from strategic and operational benefits. The characteristics of E-Commerce companies that are still centralized make the decision still in the top level management. Top Management Support that refers to the level of management acceptance of a technological innovation, becomes crucial (Rahayu, 2015). While Security will provide security of the system to the company in running the business (Oliviera, 2014).

### Environment

Environmental factors are influences that arise from outside the company such as industry competition, macroeconomic conditions, and regional policy. As for this in this research some of the indicators proposed are Customers / Suppliers Pressure, Competitor Pessure, and Government Support. Many of its parties are involved in the logistics process as well as the high SLA makes Customers / Suppliers Pressure an important factor (Molla, 2005). Then a high Competitor Pessure encourages companies to adopt technology to gain a competitive advantage. Meanwhile Government Support is needed to maintaining business climate as well as encouraging assimilation of IT innovations by companies in the field of E-Commerce (Hwang, 2016).

### Research Model & Hypothesis

Based on the previous explanation, this research will use TOE Framework with three variables: technology, environmental and organization with 12 indicators. Below are three hypothesis proposed and research model used:

1. H1: Technology factor affects to adoption of E-Logistics in E-Commerce company
2. H2: Organization factor affects to adoption of E-Logistics in E-Commerce company
3. H3: Environment factor affects to adoption of E-Logistics in E-Commerce company

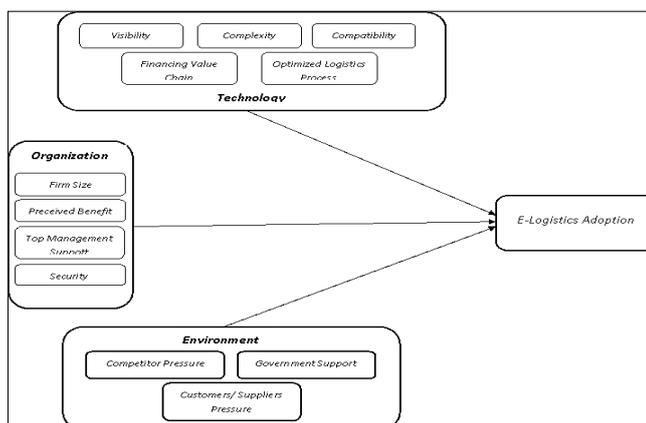


Figure 1. Research Model

### Data Analysis

This study includes the type of causal research using quantitative methods. This research will examine the relationship of variables based on TOE Framework, *Technology-Organization-Environment*, to E-Logistics adoption on companies serving E-Commerce service. To find out the relationship, a survey was conducted by distributing questionnaires to 194 E-Commerce companies included in the Classified Ads category, Marketplace, Online Retail and Logistics. The questionnaire consists of four questions to describe the characteristics of

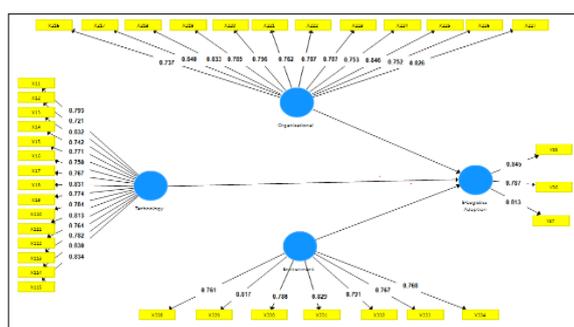
respondents and 37 questions that represent the variables. Technique of analysis and data processing in this research uses Partial Least Square (PLS). Data were collected in the form of scores on the Likert scale.

## Result and Discussion

From the questionnaires distributed, collected data from 194 respondents who are ready to be processed. The total sample collected can be used as input in data processing using PLS with SmartPLS 3.0 software.

### Masurement Model Evaluation

Testing Convergent Validity in this study using the Average Variance Extracted (AVE) & communality and loading factor methods. The results of AVE & communality and loading factor testing are shown in Table 2 and Figure 2 below.



Variables	AVE	Communality	Root AVE
Technology (X1)	0,792	0,792	0,889
Organization (X2)	0,843	0,843	0,918
Environment (X3)	0,806	0,806	0,898
E-Logistics Adoption (Y)	0,712	0,712	0,844

Figure 2. AVE & Communality Factor; Table 2. Loading Factor

Referring to Table 2 and Figure 2 above, each variable in this study has an AVE and communality value > 0.5 and a loading factor above 0.7. Therefore it can be said that this research has good convergent validity.

Discriminant validity test performed with cross loading and latent variable correlation method. Cross loading testing to test the relationship between the indicator and its variables.

Table 3. Cross Loading Among Variables

	Technology (X1)	Organization (X2)	Environment (X3)	E-Logistics Adoption (Y)		Technology (X1)	Organization (X2)	Environment (X3)	E-Logistics Adoption (Y)
X1_1	<b>0.793</b>	0.379	0.488	0.418	X2_21	0.445	<b>0.762</b>	0.421	0.488
X1_2	<b>0.721</b>	0.470	0.491	0.521	X2_22	0.412	<b>0.787</b>	0.446	0.429
X1_3	<b>0.832</b>	0.440	0.416	0.529	X2_23	0.415	<b>0.787</b>	0.412	0.436
X1_4	<b>0.742</b>	0.443	0.479	0.398	X2_24	0.444	<b>0.753</b>	0.414	0.380
X1_5	<b>0.771</b>	0.371	0.518	0.455	X2_25	0.380	<b>0.846</b>	0.448	0.438
X1_6	<b>0.750</b>	0.416	0.344	0.428	X2_26	0.413	<b>0.752</b>	0.516	0.517
X1_7	<b>0.767</b>	0.412	0.404	0.526	X2_27	0.380	<b>0.826</b>	0.467	0.425

	Technology (X1)	Organization (X2)	Environment (X3)	E-Logistics Adoption (Y)		Technology (X1)	Organization (X2)	Environment (X3)	E-Logistics Adoption (Y)
X1_8	<b>0.831</b>	0.457	0.533	0.387	X3_28	0.373	0.441	<b>0.761</b>	0.387
X1_9	<b>0.774</b>	0.334	0.368	0.442	X3_29	0.417	0.373	<b>0.817</b>	0.485
X1_10	<b>0.784</b>	0.398	0.515	0.413	X3_30	0.413	0.438	<b>0.786</b>	0.438
X1_11	<b>0.813</b>	0.397	0.450	0.372	X3_31	0.412	0.465	<b>0.829</b>	0.449
X1_12	<b>0.764</b>	0.531	0.432	0.467	X3_32	0.350	0.425	<b>0.791</b>	0.374
X1_13	<b>0.782</b>	0.372	0.402	0.526	X3_33	0.513	0.471	<b>0.767</b>	0.386
X1_14	<b>0.830</b>	0.482	0.452	0.525	X3_34	0.426	0.460	<b>0.768</b>	0.362
X1_15	<b>0.834</b>	0.342	0.403	0.495	Y_35	0.486	0.421	0.490	<b>0.845</b>
X2_16	0.495	<b>0.737</b>	0.498	0.468	Y_36	0.452	0.393	0.453	<b>0.787</b>
X2_17	0.422	<b>0.840</b>	0.412	0.448	Y_37	0.486	0.460	0.483	<b>0.813</b>
X2_18	0.445	<b>0.833</b>	0.421	0.451					
X2_19	0.479	<b>0.758</b>	0.435	0.463					
X2_20	0.376	<b>0.756</b>	0.448	0.386					

Table 4.8 depict that the value of Cross Loading on the indicator of the latent variable itself has a value greater than 0.7 and also greater when compared with the loading factor of other latent variables. Latent Variable Correlation test is used to see the relationship between variables. The test results are shown in the following table.

Table 4. Latent Variable Correlation

Variables	Technology (X1)	Organization (X2)	Environment (X3)	E-Logistics Adoption (Y)
Technology (X1)	1.000			
Organization (X2)	0,471	1.000		
Environment (X3)	0,337	0,440	1.000	
E-Logistics Adoption (Y)	0,464	0,316	0,428	1.000

From Table 4 it can be seen that the laten variable correlation value is smaller than the AVE root value. This shows that each variable used has a difference compared to other variables. From the above exposure can be concluded that the model used in this study is reliable.

Internal consistency reliability in this research using composite reability (CR) and cronbach's alpha (CA) method. The results show that all variables have values above 0.7 in the following table.

Table 5. Internal Consistency Reliability

Variables	CA	CR	Status
Technology (X1)	0,866	0,898	Valid
Organization (X2)	0,921	0,919	Valid
Environment (X3)	0,932	0,925	Valid
E-Logistics Adoption (Y)	0,968	0,979	Valid

#### Structural Model Evaluation

Structural model test (Inner Model) is used to know the relationship between variables. R-square value to evaluate research model, meanwhile T-value value and Path Coefficients were conducted to test the correlation significance between variables.

The higher R-square value show that the predicted result of the model being studied is better. The results of R-Square in this study is 0.873. It shows that the model is in the "Substantial" category. This explains that the independent variables of Technology (X1), Organization (X2), and Environment (X3) can define the dependent variable of E-Logistics Adoption (Y) of 87.3%.

Using the same bootstrapping method, the t-value and coefficient value for each dependent variable to the independent variable as shown in the following table.

Table 6. Internal Consistency Reliability

	Path Coefficient	Sample Mean (M)	Standard Deviation (STDEV)	T Value ( O/STERR )	Status
X1 -> Y	0,828	0,870	0,283	2,816	Accepted
X2 -> Y	1,354	0,551	0,295	3,499	Accepted
X3 -> Y	1,166	0,259	0,260	2,533	Accepted

## Conclusion

The result and discussion of the research about the influence of the Technology-Organization-Environment factors on E-Logistics adoption shows that:

- a. Technological factors affects to companies in E-Commerce industry in Indonesia to adopt E-Logistics with t-value value  $2,816 > 1,962$  and positive path coefficient. Where the respondents stated that the Optimized Logistics Process indicator is the indicator with the highest percentage of influence value and Compitability is the indicator with the lowest percentage of influence value. This is in line with the research that states that the burgeoning and dynamic business of –E-Commerce in Indonesia requires the company to be able to improve its logistics capability to continue to provide services for customers (Hwang, 2016).
- b. Organizational factors positively affect companies in the E-Commerce industry in Indonesia to adopt E-Logistics with the highest t-value of 3,499 with positive path coefficient values. Respondents stated that Firm Size indicator is an indicator with the highest percentage of influence value while Top Management Support is the indicator with the lowest percentage of influence value. This is also due to the dynamic business environment and growing very fast, making the E-Commerce industry structure tend to be centralized and transformative, therefore changes that occur will be greatly influenced by the structure, value and culture of the company (Gong, 2013).
- c. Adoption of E-Logistics in E-Commerce industry in Indonesia is positively influenced by Environmental Factor. Although this variable is the weakest factor affecting E-Logistics adoption with t-value value 2,533 and also positive coefficient path. Indicators Customers / Suppliers Pressure is an indicator with the highest percentage of influence value. While the indicator with the lowest percentage of influence value is Government Support. A new industry that is developing very quickly still has many obstacles to be solved as well as the support of various other stakeholders in running the company's business operations (Wang, 2006).

There are some limitations in this study that can still be discussed in next research. First, the constructs discussed in this study are limited to the Technology-Organization-Environment factor because of the use of the TOE Framework to verify the previous research which is still small and exploratory. There is a possibility in the future that there are influences from other factors proposed to examine the adoption of E-Logistics. Then the object

of research that is limited to one community can be developed by extending the range to provide more accurate results.

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## Implementation of Genetic Process Mining to Support Information System Audit

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### Abstract

One of the frameworks that can be used to audit information systems is COBIT 5 which offers *process assessment model* (PAM). The process assessment model usually done by collecting and validating random factual data samples, so that the results of this assessment cannot be representative of the overall ongoing process. This research uses *process mining* by using event log to replace data collection and data validation stage in *process assessment model*. *Process mining* aims to describe the ongoing process model of the event log data automatically so that it can be compared with the standard flow process in real time. *Process mining* is applied using a *genetic algorithm* that can recognize less frequent behavior in event log as noise data. This assessment process delivers the rating point level as a result for comparison of the standard process flow with the process model of the process mining and business flow analysis of the event log data. The results of this study show *genetic process mining* able to support corporate information system audit activities.

*Keywords: Process Assessment Model; Process Mining; Genetic Algorithm*

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### INTRODUCTION

Today almost all large companies perform the monitoring function of the company's business processes with an information system audit to ensure the performance and quality of the business process implementation of the company runs in accordance with the planning and business objectives [1]. Information system audit can be done by assessment process in accordance with IT governance standard framework. One of the frameworks that can be used is COBIT 5 which provides a *process assessment model* (PAM) to test the capabilities of IT processes [2].

*Process assessment model* consists of planning phase, data collection, data validation, process attribute rating and reporting. In the data collection stage, the assessor collects data about the process, which includes the input, output and objectives of a process to support assessment [2]. The data collection is done by taking a random sample of factual data, so that a lot of unrepresented data and the data collected are subjective [1]. Then in the data validation stage the assessor ensures that the data is accurate enough and covers the scope of the assessment by validating the collected information [2]. Validation process takes a long time because it needs to be done repeatedly when there are data changes in the running process, so the results cannot be obtained in real time.

We can use *process mining* method which store their event log to handle this problem. *Process mining* can describe the running process model of all event log data automatically so that the results can be analyzed in real time [3]. This study uses a process assessment model that implements *process mining* to replace the data collection and data validation stage [2]. *Process mining* is applied using a *genetic algorithm* [6], which is a process model search technique following the principle of evolution that the quality of the process model is judged by comparing it to all traces in event log [4]. So, the resulting solution is global and can handle the problem of event log data containing noise [4]. The process assessment model in this research is applied to the domain DSS01 (Manage Operations) on DSS01.01 practices (perform operational procedures), because only in this domain allows for the implementation of *process mining* [2].

This research applies to case study of information system audit in distribution company. The result of process

assessment model in this research is level rating point as result of comparison of standard flow process with process model from *process mining* and business flow analysis from event log data.

## THEORY

### 2.1 Process Mining

*Process mining* is one of the techniques developed based on data mining, which is the difference is the process of mining focus on the activities that occur. Processed data is event log extracted from the activity that occurs. Event log are data that contain information that can describe the behavior of processes that occur [3]. Event log can be obtained from information systems and data from the units involved in the process. Not all data can be used as event log, not all information is also required in event log. The data in the event log must contain information that contains a set of events and cases sorted by time so that the data can describe a running process [3].

The main purpose of *process mining* is to process the event log into a model to provide recommendations to the process model. There are three stages of *process mining* namely *Process Discovery*, *Conformance checking*, and *Enhancement* [4] that can be seen in figure 1.

*Process discovery* is a process model stage of the data that can be from event log, so it can describe the process model in accordance with the real process in the field. The process of *conformance checking* is the phase comparison between the process model of *discovery* with all trace event log to see the suitability of the model construction. The latter is the stage of *enhancement*, which is the stage for developing and recommending a process model of an existing process model and has been adapted to process modeling of event log data [3].

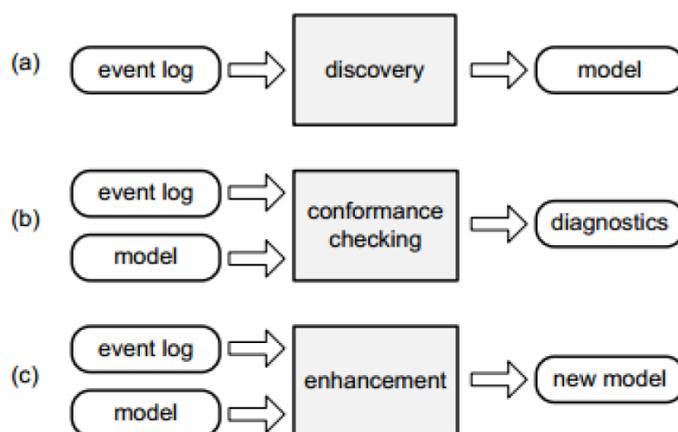


Figure 1. Process Mining Stages [3]

### 2.2 Genetic Process Mining

In *genetic process mining*, the individual is a process model, a *fitness* value (1) that measures how well an individual (or process model) reflects behavior in event log, and genetic operators recombine individuals so that new process model candidates can be created.

$$fitness = 0.40 * \frac{allParsedActivities}{numberOfActivitiesAtLog} + 0.60 * \frac{AllProperlyCompletedLogTraces}{numberOfTracesAtLog} \quad (1)$$

Therefore, the challenge is to define an internal representation that supports all common constructs in the process model including sequence, parallelism, choice, repetition. Genetic algorithms can handle *noise* data such as duplicated tasks, missing heads, missing bodies and missing tail because *fitness* measures are measured by replaying all event log data to individual process models [3]. To assess the quality of process models created (or individually) in each population and genetic operator so that all space searches can be defined with internal

representations can be explored [4].

### Method

An overview of the system can be seen in Figure 2 which refers to the COBIT 5 model assessment process described in the previous section.

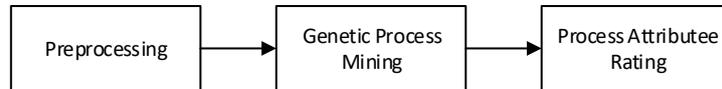


Figure 2. Out Proposed General Flow System

### 3.1 Preprocessing

The event log data will be processed beforehand through preprocessing to simplify and equate the format to fit the system design. The event log data used in this study belongs to the distribution company [7]. Preprocessing is done by removing some unused columns. The data needed by the system is the case id, the name of the activity, and the time and executor of the activity.

### 3.2 Genetic Process Mining

The *genetic process mining* stage is described in detail in the flow chart of Figure 3.

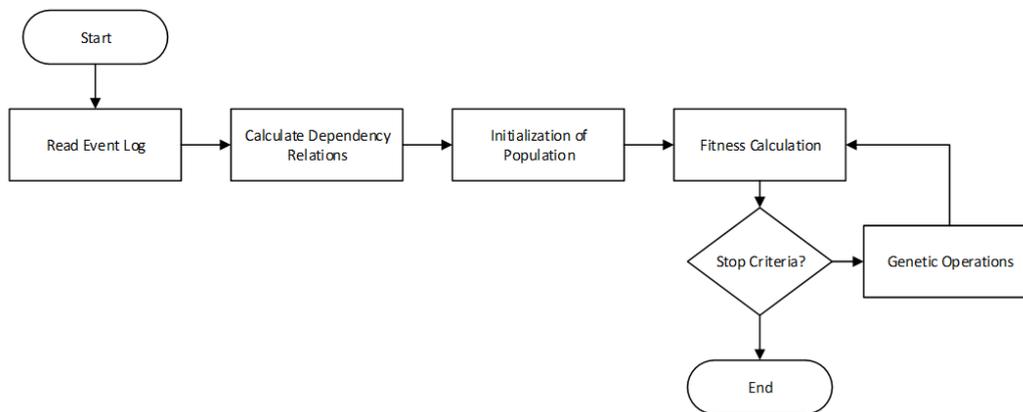


Figure 3. Genetic Process Mining

The results of *genetic process mining* are the discovery model process and bottleneck analysis from event log data. Discovery model process is constructed with genetic algorithm that has four parameters, they are *population size*, *maximum generation*, *crossover probability* and *mutation probability* [6].

### 3.3 Process Attribute Rating

This process attribute rating includes the process of comparing the process models of *genetic process mining* with the standard process model. This comparison is done using set theory, which is the ratio from the number of intersection and number of union between the two model processes. The similarity of two models get the capability level that can be seen in table 1.

Table 1. Capability Level of Process Attribute Rating [5]

Level	Achievement
N: Not Achieved	0 % - 15 %
P: Partially Achieved	15 % - 50 %
L: Largely Achieved	50 % - 85 %
F: Fully Achieved	85 % - 100 %

## Result & Analysis

Based on the result of testing the *population size* and the *maximum generation* then the selected parameter value is at the time of the *population size* = 40 and *maximum generation* = 20, because at this parameter value the *fitness* value reaches the highest before finally entering the saturation period resulting in the increase of the *fitness* value is not too significant. This decision also considers the computation time that will be greater if the population and maximum generation is greater.

Based on the result of *crossover probability* test and *mutation probability* then the selected parameter value is when *crossover probability* = 0.9 and *mutation probability* = 0.1, because at this parameter value the *fitness* value reaches the highest. These results are in proportion to research on genetic algorithms that the odds of crossing should be high in order to exchange solutions between individuals, whereas mutation opportunities should be low in order not to damage the quality of the individual.

### 4.1 Result of Process Attribute Rating

After obtaining the value of the appropriate genetic parameters that is with the value of *fitness* 0.932 on the model 1 and 0.91 in model 2, then the results of both models with the best *fitness* process will be compared with the standard flow process of distribution company shown in Figure 4.

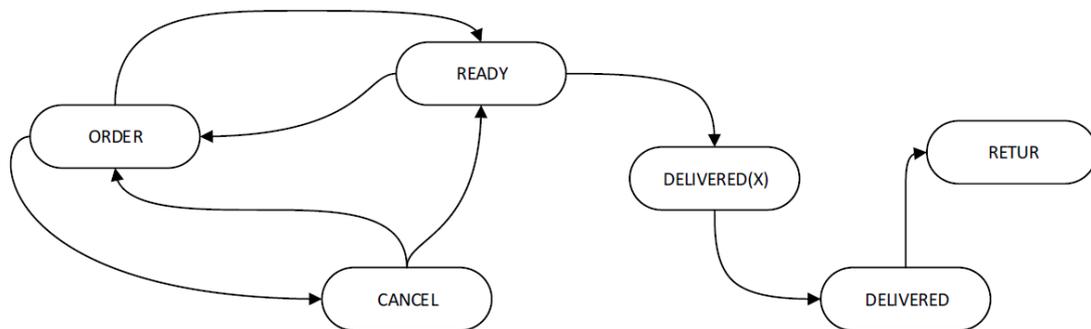


Figure 4. Standard Process Model

The shape of the process flow from model 1 (m1) can be seen in Figure 5. When compared with the standard process model then get the rating point value level of 63.64% to obtain L (Largely Achieved) capability level.

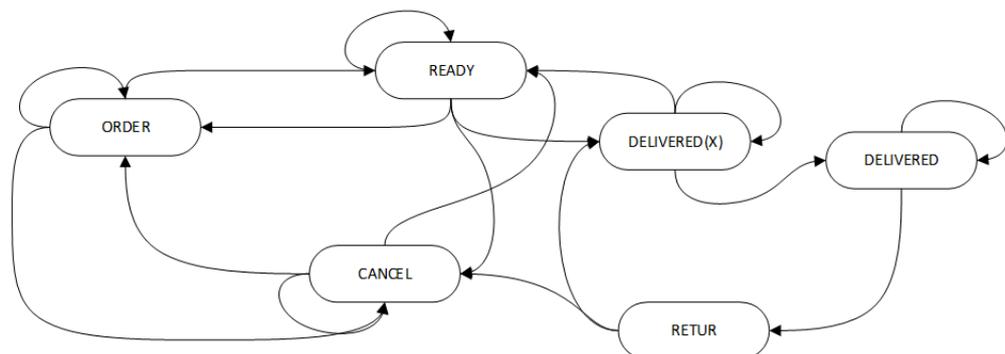


Figure 5. Process Model 1 (m1)

The process flow form of model 2 (m2) can be seen in the figure 6 When compared with the standard process model then get a rating point value level of 70% so as to obtain the level of capability L (Largely Achieved).

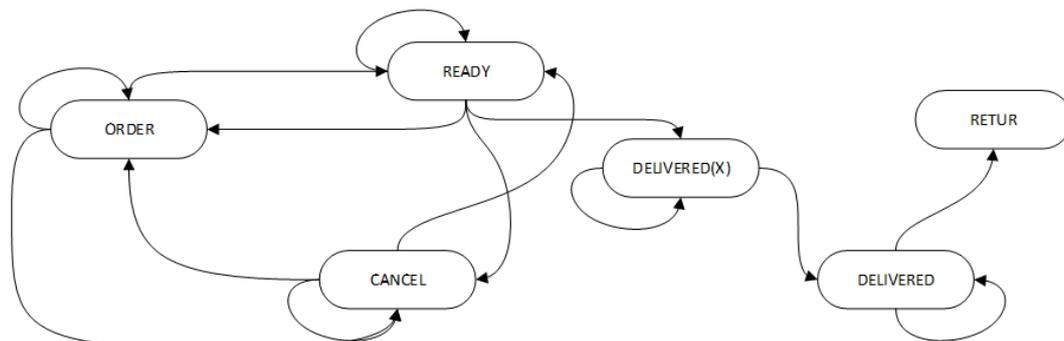


Figure 6. Process Model 2 (m2)

From the result of the attribute rating test on both models, it is found that model 2 has better process matching value than model 1. This is because the second model detects outlier or noise data better, so the trace in the event log Visible is just a common behavior. However, the first model is more representing the actual event log data, it is proved from the *fitness* value obtained by model 1 is bigger than model 2.

#### 4.2 Analysis of Noise Data

The noise data recognized by both models is data that is detected as an outlier or less frequent behavior data. In this study did not specify data suspected of noise as data errors made by the user, because it requires human judgment especially those who understand the actual process flow. Characteristics of noise data itself vary, including missing head, missing tail, and incomplete log. The noise data is recognized from the failed trace replayed by the process model.

From the first model, there are 298 traces that can be replayed, and 39 traces failed to be replayed from a total of 337 trace event log data. Trace recognized as noise in model 1 can be seen in Table 2.

Table 2. Result of noise detection by model 1

Frequency	Trace	Information
11	ORDER	Incomplete
10	READY->DELIVERED(x)->DELIVERED	Missing head
6	CANCEL	Incomplete
2	DELIVERED	Incomplete
1	READY->READY->CANCEL->ORDER->READY->DELIVERED(x)->DELIVERED(x)->DELIVERED(x)->DELIVERED->DELIVERED->DELIVERED	Missing head
1	DELIVERED(x)->DELIVERED	Missing head

From the 39 data traces that failed to be replayed by the first model, there are 31 traces that can be characterized by noise data. The rest needs to be checked again by those who understand the business process to recognize whether the data is noise or not.

From the second model, there are 280 traces that can be replayed, and 57 traces failed to be replayed from a total of 337 trace event log data. Trace recognized as noise in model 2 can be seen in Table 3.

Table 3. Result of noise detection by model 2

Frequency	Trace	Information
11	ORDER	Incomplete
10	ORDER->ORDER	Incomplete duplicated
10	READY->DELIVERED(x)->DELIVERED	Missing head
6	CANCEL	Incomplete
2	DELIVERED	Incomplete
1	ORDER->ORDER->ORDER	Incomplete duplicated
1	ORDER->CANCEL->ORDER	Missing tail
1	DELIVERED(x)->DELIVERED	Missing head

From the 57 data traces that failed to be replayed by the second model, there are 42 traces that can be characterized by noise data. The rest needs to be checked again by those who understand the business process to recognize whether the data is noise or not.

The noise data analysis results show that the second model can recognize more noise data than the first model. This is evidenced in the first model can't recognize the trace of Incomplete duplicated and Missing tail.

#### 4.3 Analysis of Bottleneck process

The analysis was performed on the average time of the longest activity so that it was suspected to cause a bottleneck. Here is the time table 4 for the average of movement activity.

Table 4. Bottleneck between activity

No.	Edge Activity	Frequency	Mean Time (minute)
1	CANCEL – ORDER	56	1445.821
2	CANCEL – DELIVERED(X)	16	700
3	READY – ORDER	53	575.094
4	DELIVERED(X) - DELIVERED	240	565.995
5	ORDER – READY	315	420.396
6	READY – CANCEL	85	367.482
7	ORDER - CANCEL	86	326.186
8	CANCEL – READY	51	318.176
9	READY – DELIVERED(X)	245	309.306

From the calculation of the average time of activity of the activity, it can be concluded that the activity that allows the bottleneck is DELIVERED (X) - DELIVERED, ORDER - READY and READY - DELIVERED (X), due to this activity the amount of frequency is very large event compared to other activities. Then when viewed from the description of the activity in standard operating procedure data that this activity is an important activity, where the customer awaits confirmation of the availability of goods and wait for delivery of goods if the goods are ready.

#### Conclusion

Based on the result, we state that our method can help auditor to test capabilities of IT processes, by replacing data collection and data validation stage in the real-time process assessment model of COBIT 5 to illustrate the ongoing process represented by event log data. The advantage of this method is the discovery model can be more representative to the original process because it detects only the most frequent behavior and reduce data noise in event log.

The discovery model process of the two proposed models both get high *fitness* value, it means that this method represents the whole process. The second process model can better handle noise data than the first model because it detects more noise and from process attribute rating stage, it shows better compatibility with the

standard process model. On enhancement stage, we able to detect which business process that need more time to complete and potentially causing bottlenecks.

This research has some limitations, they are the computation time and resource are very high if the *genetic process mining* handle bigger event log data, so it must be solved by distributed system using parallel computation. And to handle better noise data then required the rule based mechanism. With rule based mechanism then the auditor can be flexible to input rules to detect prohibited process based on their experience.

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## A Comparison of Indonesia's E-Commerce Sentiment Analysis for Marketing Intelligence Effort (case study of Bukalapak, Tokopedia and Elevenia)

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### Abstract

The rapid growth of e-commerce market in Indonesia, making various e-commerce companies appear and there has been high competition among them. Marketing intelligence is important activity to measure competitive position. One element of marketing intelligence is to assess customer satisfaction. Many Indonesian customers express their sense of satisfaction or dissatisfaction towards the company through social media. Hence, using social media data, it provides a new practical way to measure marketing intelligent effort.

This research performs sentiment analysis using naive bayes classifier classification method with TF-IDF weighting. We compare the sentiments towards of top-3 e-commerce sites visited companies, they are Bukalapak, Tokopedia and Elevenia. We use Twitter data for sentiment analysis because it's faster, cheaper and easier from both the customer and the researcher side. The purpose of this research is to find out how to process the huge customer sentiment Twitter to become useful information for the e-commerce company, and which of those top-3 e-commerce companies has the highest level of customer satisfaction. From the experiment results, it shows the method can be used to classify customer sentiments in social media Twitter automatically and Elevenia is the highest e-commerce with customer satisfaction.

*Keyword: e-commerce, marketing intelligence, customer satisfaction, sentiment analysis, naive bayes classifier*

### 1. Introduction

The rapid growth of the internet in Indonesia makes lifestyle changes, one of them is the increasingly popular online shopping activity. Indonesia is one of the countries with the largest e-commerce market growth in Asia Pacific [1]. There is many e-commerce in Indonesia, but *Bukalapak*, *Tokopedia* and *Elevenia* are among the top-3 popular e-commerce sites visited, their business model is Customer to Customer, as known as C2C, with an escrow payment system [2]. The effort to stay competitive among similar e-commerce sites is measured by marketing intelligence activity. Marketing intelligence represents a continuous process of understanding, analyzing, and assessing a firm's internal and external environments associated with customers, competitors, markets and then using the acquired information and knowledge to support the firm's marketing related decisions. Marketing intelligence provides a road map of current and future trends in customers' preferences and needs, new market and segmentation opportunities, and major shifts in marketing and distribution to improve the firm's marketing planning, implementation, and control [3].

One important aspect of e-commerce business is customer satisfaction, while the buyer does not see the goods directly, the experience of other customers who already use the product will become an input during the consideration process before making a purchase. These customer's interaction through web technologies known as social networks, social media or web 2.0 [4] which allows users to interact actively with each other as in everyday social life.

*Twitter* is often used as a place to express facts, opinions, and allow internet users to contribute in spreading information, *Twitter* has provided a new way to disseminate information real-time and effectively. In this research, we use *Twitter* as the data source because it's faster, cheaper and easier compare to other social media. For the customer, they can show what they feel about the product or service as soon as possible, for free, anytime and anywhere, while for researchers, *Twitter* provides convenience because the data can be obtained for free, allows to obtain large amounts of data and more targeted, because the data is taken from customers who already have experience using the service.

The purpose of this research is to know how to process customer sentiment on social media *Twitter* to be useful information for the company and to know the comparison of customer satisfaction using sentiment analysis to e-commerce *Tokopedia*, *Bukalapak* and *Elevenia* on *Twitter* with Bahasa Indonesia.

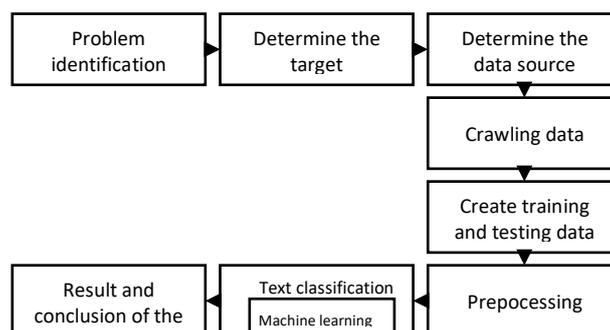
This research classifies customer sentiment into positive and negative based on tweets written by the customer to see the level of customer satisfaction at each company with the service has been received then compare between the three to know the position of each company. There are many methods of classifying text, but the *naive bayes* method used refers to some previous research, it is simple but has high accuracy and performance in text classification [5].

Several studies combine the naive bayes classifier method with *TF-IDF* weighting to obtain good results and performance. A research about social opinion polarization [6] using the *naive bayes classifier* method combined with *TF-IDF* weighting with pruning on attributes with occurrences of less than 0.83% and over 90%, yielding 94 word attributes used as models learning and accuracy of 97.42%. A research to compare *naive bayes classifier* and other methods, which is *support vector machine* is done [7], where *naive bayes classifier* yield accuracy value up to 97,86% and *support vector machine* method yield accuracy value up to 94,17%. From this research, we know *naive bayes classifier* have better performance than *support vector machine* method.

This research also refers to previous paper [8], where the study uses the theory of sentiment analysis to determine and compare the positive and negative sentiments of popular smartphone products in Indonesia, using *sentiment analysis* based on *appraisal theory*, the results can be used as knowledge and consideration for business especially *marketing intelligence* field.

## 2. Research Method

The basic theory of this research is *text mining* concept as it relates to searching patterns in the text by analyzing the text to obtain useful information for a specific purpose [9]. The research approach uses *sentiment analysis* to analyze people's opinions, sentiments, evaluations, appraisals, attitudes, and emotions on e-commerce as a product or services [10]. Text classification method in this research using *naive bayes classifier* with *TF-IDF* weighting, validate and evaluate on text classification using *K-fold cross validation* and *confusion matrix*.



The following list is the analyzing data process:

### a). Create Training and Testing Data

Data is taken from *Twitter* for one week duration period from 10 to 16 October 2016. We crawl data using *Twitter Application Programming Interface (API)* according to relevant keywords to the research. The keywords are "*Bukalapak*", "*Tokopedia*", "*Elevenia*", "*bukalapak\_care*", "*tokopediacare*", and "*eleveniacare*". Then the data is separated into training data and testing data. Training data is divided into positive and negative categories manually. From the data collection process, 69598 tweets were collected. Once the data is collected data processing and data cleaning in pre-processing step to remove irrelevant tweets like advertising, spam and others. We have as many as 2974 tweets, with 1243 tweets about *Bukalapak*, 1178 tweets about *Tokopedia* and

553 tweets about *Elevenia*. The data is used both for training data and testing data. Of the total 2,974 tweets of data, 700 tweets were used as training data taken from each research object. The training data in this study consisted of 350 text data labeled negative and 350 labeled positive.

The following table 1 shows several example training data texts used in model construction in the study

Table 1 Example of text data used in training data

Sentences	Sentiment
tidak ada tanggung jawab jawab	Negatif
layanan baik	Positif
penjual rugi tombol bantuan tidak ada	Negatif
promo pulsa mantap	Positif
cara ribet	Negatif
iklan iklan lucu	Positif

#### b). Cleaning and Preprocessing Data

In the data preprocessing stage content of mined tweets will go through some process of cleaning data from noise as a preparation for basic classification process. Some preprocessing steps were performed to ensure that our algorithm works well with data. In this research, we start with *casefolding*, eliminating repetitive tweets or having duplicates, removing *URL* links and *Twitter* account names, filtering and removing unnecessary punctuation. In addition, also *tokenize*, *stemming* and *stopword*. The whole process shown in figure 2.

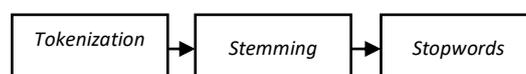


Figure 2 Preprocessing workflow

- *Tokenize* is a process that aims to divide the input data format is still a long text into small units called tokens. Token in the context of a document can be a word, number, or punctuation.
- *Stemming* is a technique used to find the basic word. This is based on the fact that words with the same basic form will describe the same or relatively close meaning.
- *Stopword*, in a document there are many meaningless words, such as hyphens, forward words, and others. These types of words are termed *stopwords*. In order, not to cause confusion in the process of document processing, *stopword* should be discarded.

#### c). TF-IDF Weighting

The *TF-IDF* is a method of weighting which is integrated between the *Term Frequency*, and the *Inverse Document Frequency*. *TF-IDF* will give higher weight to words that have low frequency of occurrence in some documents, and simultaneously, has a high frequency of occurrence in a document. This ensures that words with high *TF-IDF* values can be used as representative examples of the documents in which they originate, and also words like "the" that often appear in documents, will be given a low weight.

The *TF-IDF* weighting process in this study uses attributes that range from 0.99% to 90% to reduce complexity and increase. Attributes are words with high *TF-IDF* values and are used as interpenetration-differentiating features. In this process, the training data model produces 86 word attributes used for the learning process in the test data

#### d). Naïve Bayes Classifier

*Naïve Bayes Classifier* is a classification method that can be used to predict probabilities [11]. The *Naïve Bayes Classifier* method takes two stages in the text classification process, i.e. the training stage and the classification phase. In the training phase, the process of analyzing the sample of documents in the form of vocabulary selection, which is a word that may appear in the collection of sample documents that as far as possible can be a document representation. Next is the determination of the prior probability for each category based on the

sample document. At the classification stage, the category value of a document is determined based on the term that appears in the classified document.

e). *Validation and Evaluation*

To validate and evaluate the *naive bayes algorithm*, several tests were performed using *K-fold cross validation* and *confusion matrix*.

In *K-fold cross validation*, the initial data is divided randomly into a subset or fold, i.e.,  $D_1, D_2, D_3, \dots, D_k$ , each of which is estimated to be of the same size. Training and testing are performed as much as  $k$  times. In iteration  $i$ , the data subset  $D_i$  is used as the test dataset, and the remaining partition is collectively used as training data to derive a classification model to be used in the testing process. The classification model is trained and tested  $k$  times. Each time trained on all but one-fold and tested on the remaining single fold. Empirical studies show a value of 10 is the optimal number of folds, because the bias and variance are relatively low. Thus, in the research will be validated as much as 10 times [12].

*Confusion matrix* provides an assessment of classification performance by object correctly or falsely. It also provides the decisions obtained from data training and data testing [13].

Table 2 Confusion matrix

	Classification	
	Positif	Negatif
Pred. Positif	(True Positive-TP)	(False Negative-FN)
Pred. Negatif	(False Positive-FP)	(True Negative-TN)

### 3. Result and Analysis

#### 3.1 Model Evaluation

After passing the validation phase with *K-fold cross validation* ten times, the data model yields an accuracy value of 94.57%, 94.57% recall, 94.64% Precision and 0.891% kappa value.

*Accuracy* is the ratio of the exactness of the predicted results of the positive and negative classes to the total number of predicted classes. *Precision* and *Recall* are two calculations that are widely used to measure the performance of the system / system used. *Precision* is the level of accuracy between the information requested by the user and the answers provided by the system. While *recall* is system success rate in rediscovering an information.

*Kappa* is used to measure the agreement between each pair of annotators in which the annotator is used for the classification of text classification methods [14]. The *kappa* value shows a number greater than 0.75 then the classification model can be concluded very well [15].

Table 1 The result of confusion matrix

	Classification		Class Precision
	Positive	Negative	
Pred. Positive	338	26	92,86%
Pred.	12	324	96,43%
Class Recall	96,57%	92,57%	

#### 3.2 Sentiment Analysis Results

- In *Bukalapak* data consisting of 993 text data tested on the model, it successfully classified 348 positive text data and 410 negative text data. The results show that 54.1% of customers are not satisfied with the products or services they receive.

- In *Tokopedia* data consisting of 928 text data tested on the model, it successfully classifies 350 positive text data and 408 negative text data. In Tokopedia 54.38% of customers are not satisfied with the products. or services they receive.
- Whereas in *Elevenia* data consisting of 353 text data tested on the model, it successfully classified 163 positive text data and 189 negative text data. That means 53.7% of customers are not satisfied with the products / services they receive.

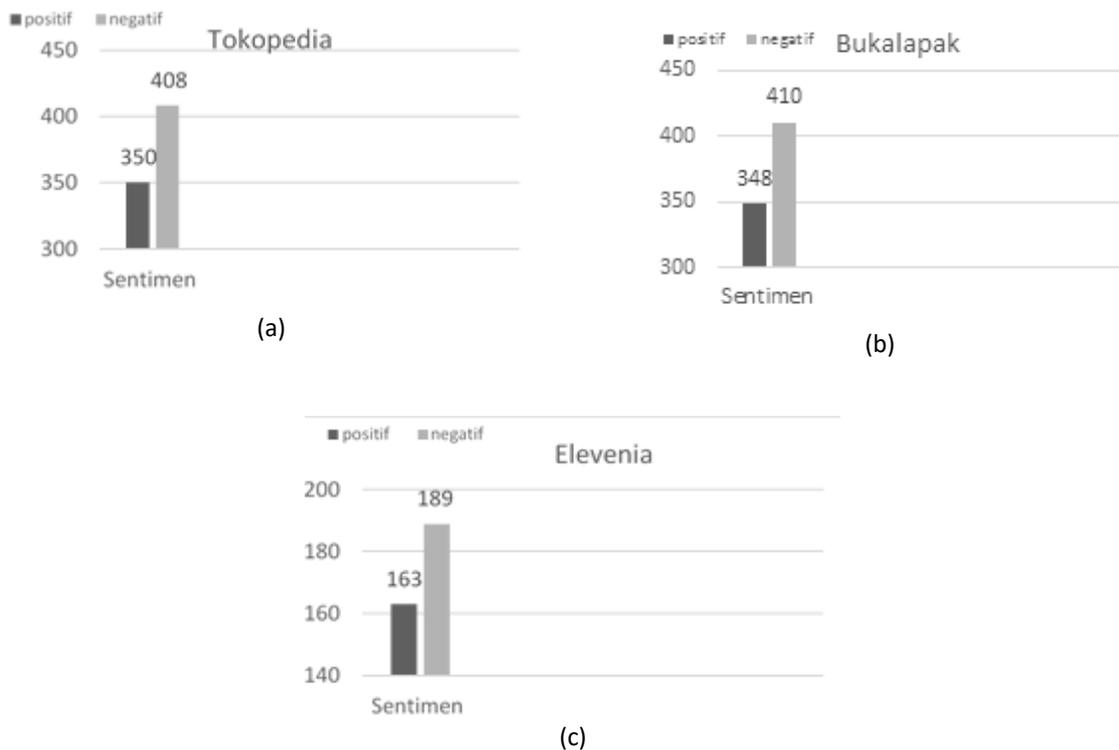


Figure 2. (a) Bukalapak sentiment. (b) Tokopedia sentiment. (c) Elevenia sentiment

From the results of the exposure can be seen that more customers are expressing their dissatisfaction, so that when sentiments are classified the level of negative sentiment is more dominant than the level of positive sentiment in social media *Twitter*. *Elevenia* get the highest positive sentiment level of 46.3% and negative sentiment of 53.7%. It differed slightly with *Tokopedia* which gained 46.2% positive sentiment and 53.8% negative sentiment. While *Bukalapak* obtained the lowest positive sentiment level of 45.9% and negative sentiment of 54.1%.

Table 3  
Comparison percentage sentiment among Bukalapak, Tokopedia and Elevenia on social media Twitter

	Testing Data Number	Sentiment	
		Positive	Negative
Bukalapak	993	348 (45,9%)	410 (54,1%)
Tokopedia	928	350 (46,2%)	408 (53,8%)
Elevenia	300	163 (46,3%)	189 (53,7%)

#### 4. Conclusion

Customer satisfaction is very important aspect for e-commerce business. Nowadays, many prospective

customers search for information before making a purchase through social media, the experience of other customers who already use the product or service will be a valuable input before making a purchase.

*Twitter* gives a lot of convenience because it can be accessed quickly, easily and cheaply. It can be utilized by customers in conveying the facts, opinions and sentiments they feel about the product or service company, but it also provides convenience for researchers in collecting the required data as in this research. In addition, data retrieval through *twitter* is more appropriate because the sentiments that exist on *twitter* is the experience of people who have used the products or services provided by the company, therefore the research can be done more effective and efficient.

Sentiment analysis using *naive bayes classifier* method can be automatically used to classify customer sentiment accurately. It can be utilized in various ways, in this case it uses for *marketing intelligence* in order to know how the level of customer satisfaction to the company or competitors. The result of customer satisfaction based on this *sentiment analysis* can be used as a reference by the company to make decisions in accomplishing strategies to increase consumer loyalty and improve corporate image in social media *twitter*.

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## Sharing Business Model Compass for Indonesian Sharing Economy's Business Entities

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### Abstract

The increasing quality of internet network causes the emergence of internet-based businesses. We witness the emergence of business that provide the way to optimize idle assets to generates new values for both asset owners and users. These business runs sharing economy principle, where they provide two side services for individuals to earn money from their private idle assets and for users who needs to use the assets. Until now, there are no specific model to describe the business elements in this kind of economy. So, we will introduce the tools called *Sharing Business Model Compass* which can be used to describe the business elements in the sharing economy. For the case study, we analyse a creative hub's business model using *sharing business model compass*. After being analysed, it is found that the effective way to charted a business model for businesses within the sharing economy is using *sharing business model compass*. The result is our research object fulfil all the six key elements of the *sharing business model compass*.

Keywords: Sharing Economy; Sharing Business Model Compass

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### Introduction

We witness the emergence of companies that provide the way to optimize idle assets so it generates new values for both asset owners and users. These companies run the principle of sharing economy, where individuals can earn money from their private idle assets. Sharing economy is not simply a new way of buying and selling, but it is a powerful movement where people can fulfill their needs of goods or services from each other instead of buying it from big companies and big brands [1].

There are 16 types of industry in the sharing economy, they are: worker support, learning, wellness & beauty, municipal, money, goods, health, space, food, utilities, mobility services, services, logistics, vehicle sharing, corporations & organizations, and also analytics & reputation [1]. Sharing economy is not a new thing in Indonesia, but several factors such as internet access, mobile devices, and marketplace platform made sharing economy rise lately [2].

The sharing economy have a great and positive impact in Indonesia. It is contributed approximately 60 percent of the Indonesian economy, absorb 80 percent of the Indonesian workforce and play a crucial role in modernizing the economy, helping hundreds of thousands of people access modern financial systems [3]. If sharing economy runs well, the customers will get a lot of benefit, such as lower price, variety of choices, and able to fulfill their needs quickly [2].

For the case study, we analyze a company that runs the principle of sharing economy. This company is and end meet creative hub for communities and industries. They provide high-tech facilities that can be rented by creative communities at an affordable price or free. Besides the facilities, it also has a service as an incubator for the communities so they can develop their skills and help them to meet industry requirements. We analyze the company's business model using *sharing business model compass*. To get the data, we interviewed 3 people who has a crucial role in running the company. After that, we charted the data into six key elements of the *sharing business model compass*.

## Theoretical Background

### Business Model

Business model is the basic structure of business; therefore, every business must have a business model even if it only in a form of abstraction. In general, the business model focuses on the profitable revenue design and delivery required to keep its revenue flowing. Business model is a tool that we use to gain customers, service them, and make money doing so. A business model give a strategic context for both long and short term. It describes and articulates strategic intent, which becomes a common focus and driver among all levels of strategic management [4].

A business model explains the mindset on how an organization creates, delivers, and captures value. A business model can best be described through nine basic building blocks that show the logic of how a company intends to make money. The nine blocks cover the four main are of business: customers, offer, infrastructure, and financial viability. A business model is like a blueprint which represent a strategy to be implemented through organizational structures, processes, and systems [9].

### Sharing Economy

Sharing Economy is an economic model where individuals or organizations can earn money from their private idle assets that are utilized so it can provide services to other people or organizations who don't have such resources through an online platform [5]. Sharing economy contributed approximately 60 percent of the Indonesian economy, absorb 80 percent of the Indonesian workforce, and play a crucial role in modernizing the economy. So, the impact that given by sharing economy for Indonesia are great and positive [3].

The sharing economy makes idle goods available which were formerly purchased mostly individually. There are various activities considered as part of this concept, which synonymously referred to collaborative consumption [7]. A lot of sharing economy activities create value not only products usage-based and satisfaction of individual consumer demands, but also by generating social capital and community relationships [8]. Inspired by this idea, promoters of the sharing economy argue that it may lead to more sustainable lifestyles by creating economic value, saving resources of the environment, and bringing people together to build social capital [7].

The name 'sharing economy' may be defined under different names, such as: collaborative consumption, collaborative economy, on-demand economy, peer-to-peer economy, zero-marginal cost economy, and crowd-based capitalism are just some examples of the different definitions that are currently interconnected to the idea of sharing economy [10].

### Sharing Business Model Compass

Sharing Business Model Compass is a tool which can be used to describe the business elements in the sharing economy. There are six key dimensions in this tool, which are: technology, transactions, business approach, shared resources, governance model, and the platform type. Every dimensions have its own categories to describe the business elements of a companies in the sharing economy[6].





Fig. 1. *Sharing Business Model Compass*

### Methodology

We collect the data by interviewing 3 important persons from the creative hub. They are CEO of the creative hub, program director of the foundation, and chairman of the foundation. We transfer the data from interview into a transcript, and after that we charted the data into six key dimensions of the *sharing business model compass*. Here is the explanation on how these dimensions describe business elements in the creative hub that runs the sharing economy principle.

#### 3.1. Technology

This dimension describes on how companies use technology in their core activities. There are 3 categories in this dimension, which are:

Table 1. Categories of Technology's Dimension

No.	Categories	Description	Indicator
1.	Tech-Driven	The company highly dependable on IT technology to run their operations	The usage of technology in the company are high, so it only need virtual communication to finish their operations
2.	Tech-Enabled	The company does not always depend on IT technology. They use IT technology as a support system to run their operations. Some activities still running without IT technology support	The usage of technology in the company are high, but also require a direct interaction between seller and buyer to finish their operations
3.	Low/ No-Tech	The company does not depend on IT technology to run their operations.	The usage of technology in the companies are low, or not at all

In our case study, the company use mobile app for users to order food or drinks from the food tenant, but it also need an offline transaction to complete it. Therefore, this company is classified into "Tech-Enabled" category.

#### 3.2. Transaction

This dimension describes on what kind of transactions that the companies use to run the business. The categories are:

Table 2. Categories of Transaction's Dimension

No.	Categories	Description	Indicator
1.	Market	The company requires conventional money to complete the transaction	Whether the company use physical money, or virtual money such as balance in the app

2.	Alternative	The company requires points to complete the transaction	Whether end users can exchange their points into another goods or services that the companies provide in the future
3.	Free	The company does not require conventional money or points to complete the transaction	The company does not do exchange money activities

In our case study, the company provide a virtual money service in a form of balance inside user’s apps that can be used to purchase food or beverages, also the company provide point system that can be exchange for another goods or facilities. Therefore, this company is classified into “Market” and “Alternative” categories.

### 3.3. Business Approach

This dimension describes on how the company’s approach to profit orientation when running their businesses. The categories are:

Table 3. Categories of Business Approach’s Dimension

No.	Categories	Description	Indicator
1.	Profit-Driven	The company goal is to find a profit	The company activities put their effort to get a profit
2.	Hybrid	The company goal is to find a profit, but it has another social mission	The company activities put their effort to get a profit and to run a social mission
3.	Mission-Driven	The company goal is not to find a profit but to help each other through social mission	The company activities put effort to run a social mission

In our case study, besides looking for profit, the company has a social mission which is to increase the amount of creative communities in Bandung City. Therefore, this company is classified into “Hybrid” category.

### 3.4. Shared Resources

This dimension describes on how to share the resources. The categories are:

Table 4. Categories of Shared Resource’s Dimension

No.	Categories	Description	Indicator
1.	Optimize New Resources	The company shared resource is brand new	The company buy new resources that can be shared to the end user
2.	Find a Home for Used Resources	The company shared resource is a marketplace	The company provide a platform to let individuals to sell their used or idle resources so another individual who needs it can buy or rent
3.	Under-Utilized Resources	The company shared resource are private under-utilized assets	The company re-utilized assets to be shared to user

In our case study, the resources that the company share such as spaces, high-tech facilities, food & beverages are all new. The company also plays a crucial role in finding a suitable market for the creative community’s product. Therefore, this company is classified into “Optimize New Resources” and “Find a Home for Used Resources” category.

### 3.5. Governance Model

This dimension describes the organizational structure from companies in the sharing economy. The categories are corporate, collaborative, and cooperative. In general, companies in the sharing economy use the corporate category. However, there are also companies that use the collaborative category where companies involve users

and other stakeholder in running their businesses. There are very few companies that are using the cooperative category.

In our case study, besides the organizational structure of the company, it also involving other stakeholder in running its business, such as users and creative communities. Therefore, this company is classified into “Collaborative” category.

### 3.6. Platform Type

This dimension describes the type of platform that the companies use to run their businesses. The categories are:

Table 5. Categories of Platform Type’s Dimension

No.	Categories	Description	Indicator
1.	Peer-2-Peer	The company provide a business platform	The company provide a platform that can be accessed by end user and content developer
2.	Business-2-Crowd	The company define the end customer and communities as their market segments	The company specified their market segments in form of end customer
3.	Business-2-Business	The company define other business as their market segments	The company specified their market segments in form of other businesses

In our case study, besides individuals and organizations as its market segments, the company also provide a platform in a form of a mobile apps so the user can make a product order through the apps. For that reason, this company is classified into all the categories from the “Platform Type” dimension.

### Result and Analysis

Our analysis found that all the six key dimensions in the *sharing business model compass* are used by our research object. The explanation is contained in table 6 and figure 2:

Table 6. Implementation of *Sharing Business Model Compass* on Creative Hub

No.	Dimensions	Categories	Description
1.	Technology	Tech-Enabled	The company use mobile app for users to order food or drinks from the food tenant, but it also need an offline transaction to complete it
2.	Transaction	- Market - Alternative	The company provide a virtual money service in a form of balance inside user’s apps that can be used to purchase food or beverages. The company also provide the point system that can be exchange for other goods or facilities
3.	Business Approach	Hybrid	The company has a social mission which is to increase the number of creative communities in <i>Bandung City</i> , but also looking for profit
4.	Shared Resources	- Optimize New	The company shared resources, such as spaces, high-tech facilities, food & beverages are all new. The



		- Find a Home for Used Resource	company also plays a crucial role in finding a suitable market for the creative community's product
5.	Governance Model	Collaborative	The company's organizational structure runs its business, but also involves another stakeholder, such as user and creative communities
6.	Platform Type	<ul style="list-style-type: none"> <li>- Peer-2-Peer</li> <li>- Business-2-Crowd</li> <li>- Business-2-Business</li> </ul>	The company make individuals and organizations as its market segments, but also provide a platform in a form of a mobile apps so the user can make a product order through the apps

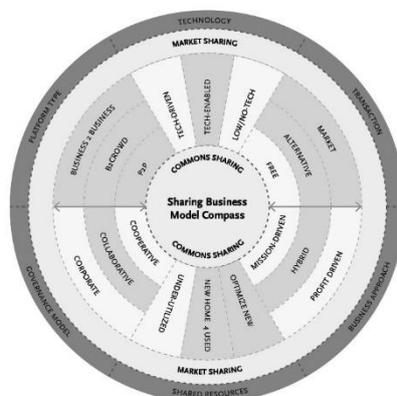


Fig. 2. Implementation of *Sharing Business Model Compass* on Creative Hub

## Conclusion

Our conclusion is that *Sharing Business Model Compass* proven effective to describe business elements for companies within the sharing economy idea. The reason is our research object fulfill all the six key dimensions of the *Sharing Business Model Compass*. For further research, we propose to analyze other form of object research to obtain wider knowledge of the model's implementation. We also suggest checking the validity using another business model that can be used to describe business elements within sharing economy idea.

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## Summarizing Online Conversation of Indonesia Tourism Industry using Network Text Analysis

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### Abstract

Tourism Industry is one of potential revenue and has an important role in economics in Indonesia. Tourism Industry brings job and business opportunity, foreign exchange earnings, and infrastructure development, tourism also plays the role as one of the main drivers in socio-economic progress in Indonesia. The number of foreign tourists visiting Indonesia increase cumulatively and has reached 10.41 million visits or an increase of 10.46 percent from the same period in previous year. Government trying to increase the number of tourists to visit Indonesia by promoting many Indonesia tourist attraction.

To support the government effort, we need a way to understand how people's perception about tourism aspect in Indonesia. The easiest and cheapest way to see that is by extracting opinion from user generated reviews in a form of conversation among the users in social media such as Twitter. This paper proposes a method for extracting and summarizing of opinion or perception expressed by social media users. Our methods based on frequently appeared words and words relations among those dominant words. We call this method as Network Text Analysis, which is based on Social Network Analysis methodology.

As a case study, we conduct experiment against two tourism object aspect in Indonesia: Indoor and Outdoor tourist object. Specifically extracting user opinion regarding museum and nature destination from Twitter. The proposed methodology classifies topics from opinion data. Our method is fast and significantly accurate to summarize dominant topics in tourism industry when implemented in large-scale data.

Keywords: tourism; data summarization; network text analysis; social network analysis; marketing intelligence

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### 1. Introduction

Today, Southeast Asia has entered the era of ASEAN Economic Community (AEC). it means that competition in ASEAN countries increasingly open in all fields, one of them in the tourism sector. Tourism Industry is one of the country's revenue, especially in Indonesia. Indonesia tourism minister state that without a digital approach the tourism industry will die, because 70% of travellers already use online technology and therefore, as many as 50% conventional travel agents out of business [1]. The number of tourist arrivals to Indonesia has increased cumulatively in the period of January-November 2016 compared to the visit in January-November 2015, the number of foreign tourists visiting Indonesia reached 10.41 million visits or an increase of 10.46 percent compared to the number of foreign tourists visiting the same period in the previous year which amounted to 9.42 million visits [2].

Indonesia has many tourist attractions or objects. They contain nature, culture, and museum attractions. Some of nature attractions, for example, are *gunung bromo*, *danau toba*, *labuan bajo*, *mandalika*, and *tanjung kelayang*. Some culture attractions, for example, *kecak dance*, *salma dance*, *cultural ceremony*. Some museum attractions, for example, are *museum sangiran*, *museum angkut*, *museum national*. In this paper, we focus our investigation on indoor object and outdoor object, which contains museum attractions and nature attractions. The reason for the choice is that both object has destination classification, hence it is easier to filter from social media conversations.

Conversation in social media about general tourism, favourite destination, and one's perception play important role in a tourist's destination choice. The conversations contain abundant opinion perceptions, recommendations, and complains. By using network text, it is possible to summarize large-scale conversational data. The capabilities make the proposed method is more effective also efficient compared to natural text mining procedure such as *sentiment analysis* or *multi-class topic identification*. Network text detect frequency appeared words, then finding relationship between word, where one relationship means both words show up together in one sentence. The higher word association means they often appear together in many sentences. In this paper, the method is used to summarize dominant topics in complex conversational social network.

As a case study, we conduct experiments on two aspects of Indonesia tourism, namely indoor and outdoor tourist object. Our objective is specifically to extract public perception regarding museum and nature destination from *Twitter*. The proposed method of classifies topics and qualitatively explore any issues in each topic by giving meaning to each relation between words.

## 2. Theoretical Background

### 2.1. Consumer Behaviour and Perception

Consumer behaviour is the information about how consumers behave, how they make their decision about what they want or what they need regarding a product, service. In this paper context, it could be an organization process to see public choice about tourism object [3]. In this case, we would like to know how Indonesian tourist's behaviour and perception about tourism in Indonesia.

Perception is a process that begins with the consumer exposure and attention to how they feel, think attraction, and experience ends up with the interpretation about tourism object [4]. Each individual could have different perception about the same tourism object, therefore, we need to aggregate that perception information to our own benefit.

### 2.2. Marketing Intelligence

Marketing intelligence is a process to get and analyse information to understand the state of Indonesian's tourism and what can be potential opportunities in the future. The advantage of using marketing intelligence is that we can get information faster, efficient, and effective from external sources such as social media with the aim suits with the needs [5].

By using a marketing intelligence effort, we can see the competitors condition, in this case, we can see how is the tourism perception in another country, thus we can learn how tourism in that particular country is going, hence we can make a better strategy for tourism in Indonesia.

### 2.3. Text Mining

Text mining is a discipline that combines data mining and text analytics using unstructured textual data. Along with structured data involves summarizing the content through text processing more efficient and effectively [6]. The most used application of text mining is sentiment analysis, with the objective to find the negative and positive sentiment towards products or services. Other than that, there is a multi-class identification to classifying data into one of the more than two categories.

In this research, we use text mining to summarize complex conversational data about tourism in Indonesia on social media. By using text mining, we can see the frequent appearance words to know the most talked object tourist. Combining with words association to see the relations between words, we can see the global pattern of topics in the social network. This methodology called *Network Text Analysis*.

### 2.4. Social Network Analytics

Social Network Analysis is a practical solution to model unstructured data in form of actors and their relationship. A network text methodology takes benefit from social network analysis construction [7]. The data source for social network analysis can be obtained from social media such as *Twitter*. *Twitter* provide open conversational



data, this feature lead to high relationship data between actors in social networks. By transforming complex information about people thought and experience into relationship data, we can reduce drastically time needed to process information form social media. Thus, we say that this method is faster, easier, and cheaper

By using social network analysis, we recognize the relationship between tourist object and its perception. One of measurement in social network analysis is *Modularity*. This metric show how groups being formed into a network. *Modularity* is often used in optimization for detecting community structure in networks [8]. We use this metric to find out the topic group of each object tourist to see what the most talked regarding activities or attraction.

### 3. Methodology and Experimentation

We collect unstructured text data from social media *Twitter* by using a set of defined keywords concerning about tourism in Indonesia. The collection period is from *January 2017* to *April 2017*. As the result, we get in total *800.808* data tweets. From that data, we classify data into two groups, that is outdoor tourist object with 30.150 tweets and indoor tourist objects with 14.329 tweets. The workflow of network text analysis is shown in Fig 1.

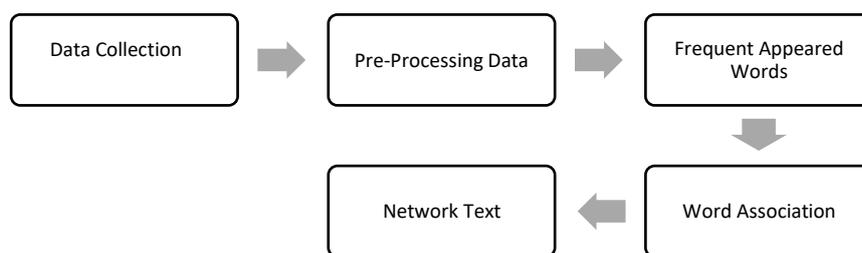


Figure 1. Workflow of network text analysis

The first step is data collection; we crawl twitter data directly about object tourist all around Indonesia. The second step, we filter the data using following procedures such as deleting irrelevant tweets or exclude the object that is not included in the topic we investigate. The third step is to find dominant words by using *the word cloud* applications. The fourth step is to calculate association rules between dominant words. The fifth step is to construct network text of dominant word, which includes weighted edge result for words association rules process. The last step, we analyse the result of the network, by qualitatively creating storytelling, context, and sense of network text. In network analysis, we employ centrality to find the most influential words in the networks and modularity to find words groups in the network. The data descriptions of each tourism object are shown in Table 1

TABLE I. Data Profile of Each Tourist Object

	<i>Indoor Tourist Object</i>	<i>Outdoor Tourist Object</i>
<i>Number of Tweets</i>	14.392	30.150
<i>After Filtering Process</i>	4.952	16.864
<i>Number of Word Groups</i>	15	17

The results after words association rules process for both tourist object indoor and outdoor can be seen in Table II and Table III in the form of words pair list.

TABLE II. Top 10 Indoor Words Pair

<i>Words Pair</i>	<i>Weight Degree</i>
museum_angkut-foto	96

<b>Words Pair</b>	<b>Weight Degree</b>
museum_nasional-museum_gajah	53
museum_tekstil-batik	35
museum_sangiran-purba	34
museum_geologi-murah	32
museum_tsunami-aceh	31
museum_pos-bandung	25
museum_bank_indonesia-rekomnedasi	24
museum_ambarawa-foto	22

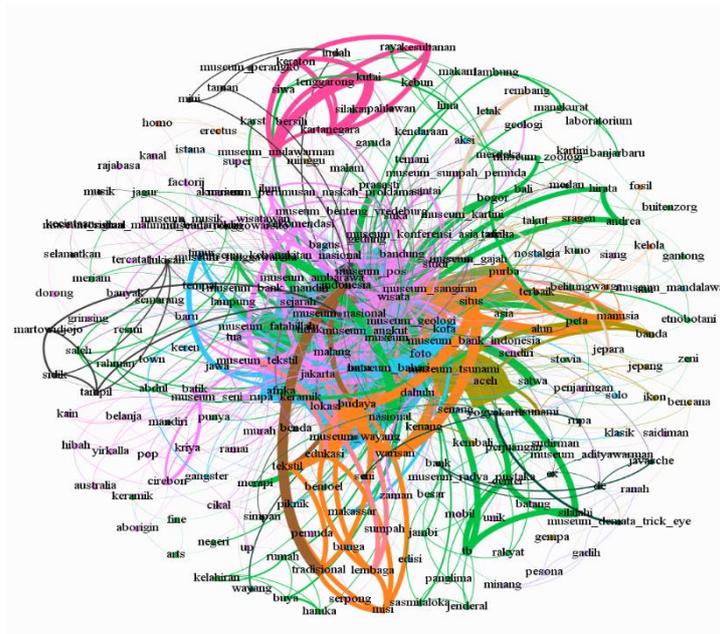
TABLE III. Top 10 Outdoor Words Pair

<b>Words Pair</b>	<b>Weight Degree</b>
Borobudur-Kuliner	108
Bromo-Sunrise	76
Seribu-Berlayar	76
Toba-Dayung	75
Wakatobi-Pelabuhan	75
Mandalika-homestay	70
Bajo-keindahan	68
Morotai-Murah	54
Lesung-Foto	48
Kelayang-Pantai	40

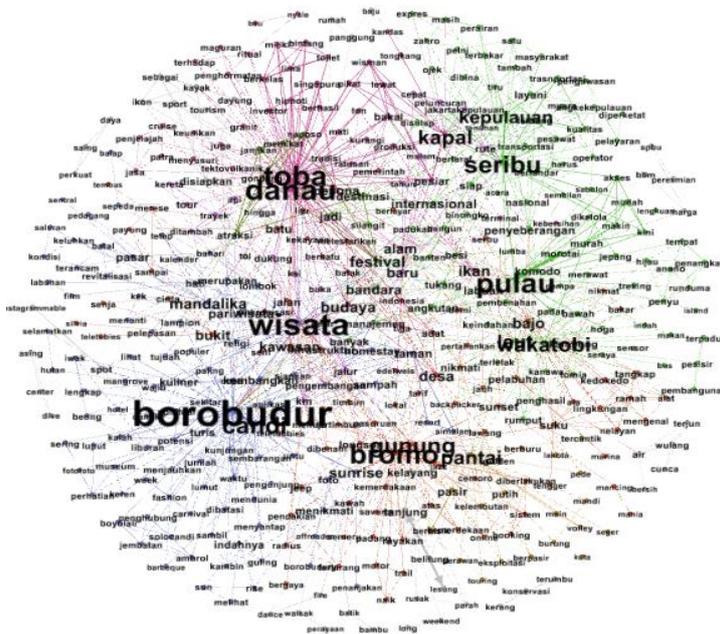
#### 4. Result and Analysis

For the case of indoor object shown in Fig. 2.a, we found that “*museum angkut*” is the most famous museum in Indonesia during data observation and in the words pair of “*museum angkut*” and “*foto*” is the most weighted connection, this refer to the most active and attraction in *museum angkut* is *foto* or in other words, the most popular attraction in “*museum angkot*” is taking pictures activity, or they have picturesque location. The second higher weighted connections word pair is “*museum nasional*” and “*museum gajah*” means that *museum nasional* and *museum gajah* is quite famous, with the indication that this object is often talked and visit. For the rest, we can see how words construct a together different perception about museums in Indonesia.

For the case of outdoor tourist object or nature object shown in Fig. 2.b, we found that “*candi borobudur*” is the most famous outdoor object, with the most dominant words pair “*candi borobudur*” and “*kuliner*” are the most weighted connection, this refer to the most activity and attraction in *candi borobudur* is *kuliner* or culinary activity. From that, we can explore and do more promote about culinary activity in *candi borobudur*. The second dominant topic is “*Gunung Bromo*” and “*sunrise*”, this means that one of popular activity in *gunung bromo* is to see sunrise at the peak of *gunung bromo*. The fourth dominant topic is “*toba*” and “*dayung*” means that the most trending activity in *Danau Toba* is “*dayung*” or boating / rowing around the toba lake.



(a)



(b)

Fig.2 Network text based in word pair and word cluster of (a) indoor object. (b). outdoor object

From network text analysis methodology, we can see the activities and attractions on each tourist object. Furthermore, it also shows the interest of Indonesian people to choose and make the decision to visit tourist object what attract them the most. As the result, we can make a strategy to promote a tourism object. The resulting analysis of two tourist object both indoor and outdoor give us insight into perception about the tourism industry in Indonesia.



## 5. Conclusion

Network text analysis methodology proposed to help us to extract large-complex social network data from social media. We particularly mine the conversational data, which have more complex aspect than just review data, opinion data, or other one dimensional data. In the era where data is easy to gather, public need fast and cheap methodology to summarize and conclude those data. One particular application is in tourism industry, where people have overload information about any tourist object and other related information. Those information is also hard to verify from each source; thus, aggregation information mode is needed.

The proposed methodology can harness public perception, where it leads to marketing intelligence effort. Both end user or tourist and organizations, whether is business or government bodies can analyse to learn about how tourism in that country going and what the perception about tourism. The end objective for both is that we can a better strategy for each need.

As the conclusion, the proposed methodology proven than relevant summarizing content about tourism industry in more effective and efficient way. For further research, we propose to analyse another object from different social media platform to obtain a wider idea of the implementation.

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## Implementation of Process Mining With Flexible Heuristics Miner Algorithm to Support Information System Audit

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### Abstract

COBIT 5 as an IT governance framework provides a Process Assessment Model (PAM) that is part of the information system audit process to assess the capabilities of the IT governance process. In the assessment process COBIT 5 there are two important steps namely data collection and data validation. But both steps are still done by taking samples from factual data randomly to be analyzed. It can not yet represent the whole business process because there may be important data that the auditor does not take because it is not a sample data. As a result, the quality of the results of the assessment process becomes less good because it does not use the overall data of business processes in real time. Already the auditor should be able to use the entire data, as in the present era the important data of all business processes are stored in the event log. In this research, process mining with Flexible Heuristics Miner algorithm utilizes event log to get business process model which will be implemented to support the assessment process. The result of research by using event log distribution company obtained a process model that has fitness = 0.983 with threshold parameters DT = 0.6, L1L = 0.98 and L2L = 0.95. After the process model is implemented in the assessment process obtained the result of a rating level point of 63.6% (Large Achieved) and the results of potential bottleneck analysis of the results of enhancement process that can be used for the purposes of audit information system. Thus, the existence of process mining can be applied to support the information system audit process.

Keywords: Information Systems Audit, event log, process assessment, process mining, Flexible Heuristics Miner.

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### INTRODUCTION

An important activity to ensure that the IT governance process supports business processes is to implement the assessment process [1]. COBIT 5 as one of the IT governance framework has provided Process Assessment Model (PAM) which is part of standardized process information audit process from ISO / IEC 15504-2 to assess the capability of IT governance process [2]. Process assessment model consists of planning phase, data collection, data validation, process attribute rating and reporting. Based on the research [1] there is two important phase of the assessment process that is data collection and data validation. However, both steps of the assessment process are usually still performed by the auditor by collecting sample data from the factual data to analyze the effectiveness of the process, whether it is reliable and in accordance with the expected function [3]. But the randomly drawn sample data can not represent the entire business process because there may be important data that the auditor does not take because it is not a sample data and the data collected are subjective [4].

Consequently, the quality of the assessment process results is poor because it does not use the overall data of business processes in real time [3] [4]. The auditor should be able to use the entire data, as in the present era the critical data of all business processes is stored in event log [4]. Because of these problems then performed a data analysis technique that focuses on the process that is Process Mining. Process Mining is an extraction

technique of information from an event log. Process Mining has three types of discovery, conformance, and enhancement [6]. In the discovery of many algorithms that can be applied to get the business process modeling of the event log, among them is Flexible Heuristics Miner (FHM).

This research uses Flexible Heuristics Miner (FHM) Algorithm in discovery. This algorithm is chosen because it has the advantage of handling event logs that have noise as well as low-structured domains [7]. In this research focus on making process mining as supporting data collection process and data validation in the assessment process and applied to a case study of information system audit in a distribution company [8]. The process assessment model in this research is applied to the domain DSS01 (Manage Operations) on DSS01.01 practices (perform operational procedures), because only in this domain allows for the implementation of process mining [1]. The result of process assessment model in this research is level rating point as result of comparison of SOP process flow with process model from process mining and business flow analysis from event log data which can be used for the purpose of auditing the information system.

## THEORY

### 2.1 Process Mining

Process mining is a discipline that is between machine learning and data mining and process mining is also doing the process of modeling and analysis of a process. The idea of process mining is to find, monitor, and improve the real process by extracting the knowledge of the event logs that are available on the information system. Event logs are data recorded automatically by information systems that describe the series of business processes that are executed within a certain time [6].

Process Mining has three types of discovery, conformance, and enhancement [6] that can be seen in figure 2.1. Discovery is a process for the establishment of a business process model that actually runs based on event logs stored in the information system at the company. Conformance is a process comparison between the process model of discovery with event logs to see the suitability of the model construction. Enhancement is a process for developing and recommending a process model of an existing process model and has been adapted to process modeling of event log data. The usual techniques in enhancement are repair and extension. Repair is to modify the model to better reflect the reality while the extension is to add a new perspective based on the information in the event log [6].

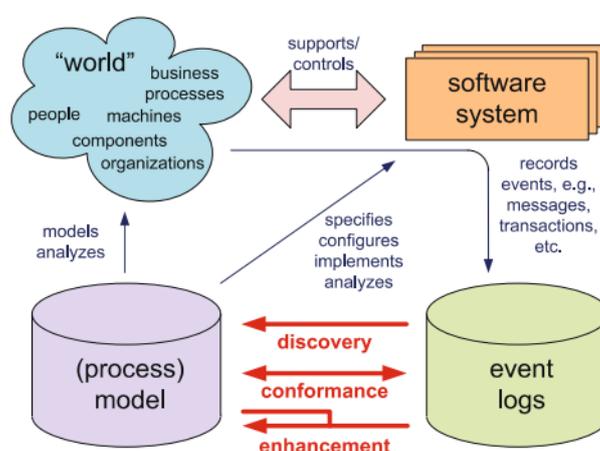


Figure 2.1 Process Mining Overview

## 2.2 Flexible Heuristics Miner (FHM)

Flexible Heuristics Miner (FHM) in building a process model has an approach by identifying the frequency of interconnection between process and process sequencing in building a model process. There are three threshold parameters available in the FHM to indicate that a dependency relation is received that is Dependency Threshold (DT), Length-One Loop Threshold (L1L) and Length-Two Loop Threshold (L2L). To construct the process model of the event log, the event log should be analyzed for the dependency between events. The process performed to analyze the dependency of events in FHM is to build a Dependency Graph. Dependency Graph is a model that represents the dependency between events on the relation there is a value of dependency that is calculated by the dependency measure. Dependency measure consists of dependency event (2.1), Length-One Loop dependency (2.2), and Length-Two Loop dependency (2.3) [7].

$$a \Rightarrow_w b = \left( \frac{|a >_w b| - |b >_w a|}{|a >_w b| + |b >_w a| + 1} \right) \quad (2.1)$$

$$a \Rightarrow_w a = \left( \frac{|a >_w a|}{|a >_w a| + 1} \right) \quad (2.2)$$

$$a \Rightarrow_{2w} b = \left( \frac{|a \gg_w b| + |b \gg_w a|}{|a \gg_w b| + |b \gg_w a| + 1} \right) \quad (2.3)$$

Let  $W$  be an event log over  $T$ , and  $a, b \in T$ . Then  $|a >_w b|$  is a number of times  $a >_w b$  occurs in  $W$ . For Length-One Loop and Length-Two Loop let  $W$  be an event log over  $T$ , and  $a, b \in T$ . Then  $|a >_w a|$  is a number of times  $a >_w a$  occurs in  $W$ . And  $|a \gg_w b|$  is a number of times  $a \gg_w b$  occurs in  $W$ .

There are many techniques performed to perform conformance, one of which is to calculate the fitness of a process model. A process model has good fitness quality if all traces in the event log can be parsed with the process model [9]. In literature [5] there is a way of calculating fitness with the method of Continuous Parsing Measure (CPM) (2.4), where  $e$  is a number of events,  $m$  is a number of missing event and  $r$  is a number of remaining event.

$$CPM = \frac{1}{2} \frac{(e - m)}{e} \times \frac{1}{2} \frac{(e - r)}{e} \quad (2.4)$$

### Method

An overview of the system can be seen in Figure 3.1 which refers to the COBIT 5 model assessment process.



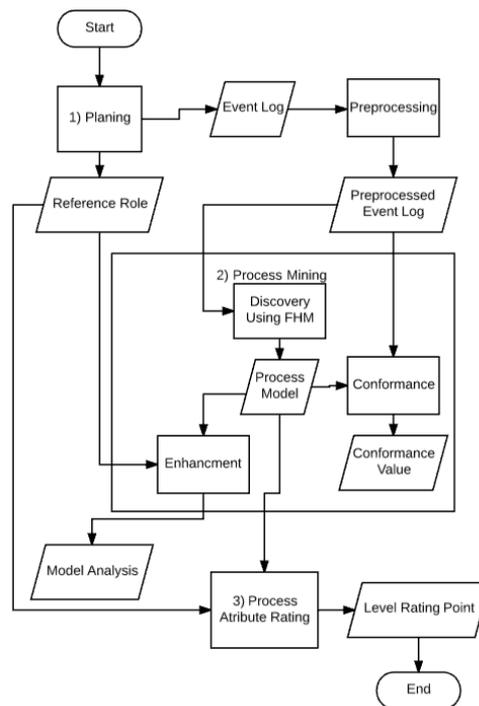


Figure 3.1 General Flow System

### 3.1 Planning

The planning phase describes all activities to be undertaken in the assessment, identifies the scope of the process, determines the information documentation like standard operational procedure document and event log data. In this research applied to the domain DSS01 (Manage Operations) on DSS01.01 practices (perform operational procedures).

### 3.2 Preprocessing

The event log will be preprocessing to simplify and equate the format to fit the system design. Preprocessing is done by clearing some unused columns. The data required by the system is the id of the case, the name of the activity, and the time and user executor of the activity.

### 3.2 Process Mining

For support data collection process and data validation in the assessment process implemented process mining in this phase. On discovery process in this research using Flexible Heuristics Miner (FHM) algorithm. The Event log that has been done preprocessing then formed into a process model. The resulting process model that will be used in the conformance process to see how to fit the model generated in parse the event log. Then the process model will also be used in the enhancement process for bottleneck analysis. The results of process mining are the discovery process model and bottleneck analysis from event log data. Discovery process model is constructed with Flexible Heuristics Miner (FHM) algorithm that has three parameters, they are Dependency Threshold (DT), Length-One Loop Threshold (L1L) and Length-Two Loop Threshold (L2L).

The parameters used will have an impact on the resulting model. The challenge in process mining is that we must optimally use these parameters to avoid overfitting process model (process model is too detailed) and underfitting process model (process model are too general)

### 3.3 Process Attribute Rating

Process attribute rating is the assessment phase and the attribute of the rating point level to all processes in the domain being audited. This rating is based on validated data at the data validation phase in the assessment process. In this reaseach, process attribute rating used to the domain DSS01 (Manage Operations) on DSS01.01 practices (perform operational procedures). The process attribute rating is done by performing a process of comparison between the process model produced by FHM with SOP process model. This comparison is done using Set Theory, which is the ratio of a number of intersection and number of union between the two process modeles. The similarity of two process models gets the capability level that can be seen in Table 3.1.

Table 3.1. Capability Level of Process Attribute Rating

Level	Achievement
N : Not Achieved	0 % - 15 %
P : Partially Achieved	15 % - 50 %
L : Largely Achieved	50 % - 85 %
F : Fully Achieved	85 % - 100 %

### Result & Analysis

Based on the results of tests conducted by entering different threshold ( Dependency Threshold (DT), Length-One Loop Threshold (L1L) and Length-Two Loop Threshold (L2L) ) values to determine the most appropriate threshold value in generating a process model with a good fitness value is DT = 0.60, L1L = 0.98 and L2L = 0.95. The threshold value is taken because with the value of the resulting model has fitness 0.983 which means the model is almost able to parse most of the trace in the event log and represent the model in accordance with the events in the event log. With the threshold values are also obtained a process model that is not too overfitting (model process is too obvious) and underfitting (process model is too general).

#### 4.1 Result of Process Attribute Rating

After obtaining the optimal threshold value that produces the fitness value 0.983, the resulting process model is then performed a comparison of the process flow of the SOP described in Figure 1

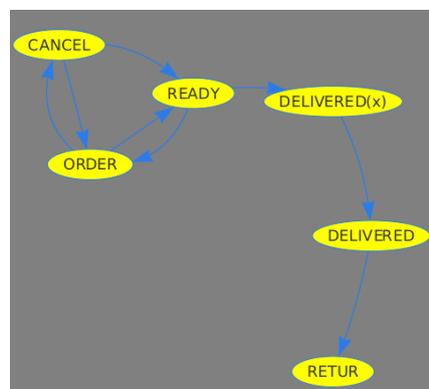


Figure 4.1 SOP Process Model

The result of process model generated by process mining can be seen in Figure 4.2 When compared with the SOP process model then get the rating point value level of 63.6% to obtain L (Largely Achieved) capability level.

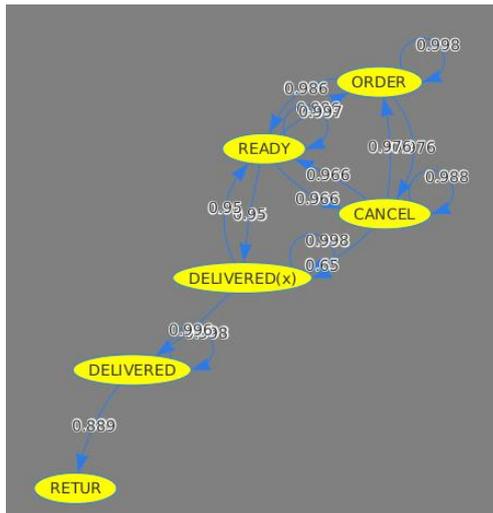


Figure 4.2 The Result Process Model 1

From the result of the attribute rating test, process model and SOP almost have similarities although there are some event dependencies that are not reflected in the SOP when in the event log is executed like dependency event ORDER => ORDER, READY => READY, CANCEL => CANCEL, DELIVERED (x) => DELIVERED (x) , READY => CANCEL, DELIVERED (x) => READY, CANCEL => DELIVERED (x). Because there are findings of process models that are not in accordance with the SOP to eat will affect the value level point value obtained.

#### 4.2 Analysis of Bottleneck Process

The bottleneck analysis was performed on the average time of the longest activity that it was suspected to cause a bottleneck. Here is the time table in Table 4.3 for the average in the main flow process in the company.

Table 4.3. Bottleneck between activity

Start Event	Destination Event	Frequency	Mean Time (Minute)	Mean Time (hour)
ORDER	READY	315	420.39	7,0065
ORDER	CANCEL	86	326.18	5,43
READY	DELIVERED(x)	245	309.3	5,15
DELIVERED(x)	DELIVERED	240	565.99	9,408
DELIVERED	RETUR	8	4240,87	70,68

The dependency of events in flow according to SOP made from the side of the company contained in Table 4-16 consist of ORDER => READY, ORDER => CANCEL will cause the potential bottleneck because the frequency of occurrence is high and the time required by the dependency event is long enough. Likewise READY => DELIVERED (x), DELIVERED (x) => DELIVERED will cause potential bottleneck even though it is likely that many other factors are inhibiting the auditor's need to be discussed with the company. With the analysis of potential findings, this bottleneck will assist auditors in the process of auditing the information system.

#### Conclusion

Based on testing done in this research, it can be concluded that process mining with Flexible Heuristics Miner can support the data collection and data validation phase in the process assessment model. And in this research

is implemented process mining at event log distribution company with parameters used in FHM in the form of Dependency Threshold (DT) = 0.6, Length-One Loop Threshold (L1L) = 0.98 and Length-Two Loop Threshold (L2L) = 0.95 can generate process models that represent business processes in event logs with Fitness 0.983 of total trace = 337 and event count = 3461.

Process attribute rating on COBIT 5 DSS01 (Manage Operations) domain in DSS01.01 management practice (perform operational procedures) with comparing between process model and SOP from distribution company obtained rating point value of 63.6% with level L (Large Achieved) with the use of threshold that has been tested. And then enhancement in process mining with Flexible Heuristics Miner (FHM) can detect business process bottleneck in the form of an inter-process bottleneck which is useful to develop the running business process. These results are useful for auditors in the process of auditing the information system.

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## **Developing ERP in Indonesia: Investigating Social Interaction on Driver's Decisions in Electronic Road Pricing**

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### **Abstract**

Road pricing is one of important policy in regulating road usage in urban area. Road pricing have been using cost of production, externalities, and optimization scheme to construct appropriate price to nudge driver's travel behavior. Social interaction in transportation argued have influence the behavior of decision maker, especially in route choice. This research aimed to inference social interaction in travel behavior in Indonesia using ERP as study context. Experimental economics was employed to mimic driver's state of preference when they commute. Result showed that social interaction on interdependence level significantly drive driver's route choice to use ERP

*Keywords: road pricing; social interaction; experimental economics; route choice*

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### **Introduction**

Pricing of transportation facility such as road fundamentally using cost-benefit analysis based on cost of production and its maintenance cost, which was calculated to be self-sustained and meet investment rate of return (citation). Furthermore, optimization approach were implemented which compute idealistic price incorporate externalities (Tsekeris & Voß, 2009). This approach assumed road is a product to accommodate demand of road usage. On the other hand, from policy perspective, road pricing was an instrument which used as an apparatus to imply incentive or punishment. This kind of policy used macroscopic (Vrtic, Schuessler, Erath, & Axhausen, 2010) and microscopic (Steg & Schuitema, 2007) view of the system to design determine appropriate level of price to achieve its goals.

#### *Road pricing and ERP*

Road pricing basic rationale argue that congested occur in effect of increasing number traveller which used private transportation mode, instead of public transport. This growing number of private mode traveller outgrow road length and width development. On account of land use competition with sustainable development, building new roads become insufficient. Therefore, road pricing policy aimed to reduce road usage in the targeted area.

Policy makers and researchers believed that road users decision are directly affected from the policy they have developed. Thus, similar policy can be replicated to other region as long as the characteristics is relatively similar. Successful case such as Electronic Road Pricing in Singapore is widely studied and examine with purpose to replicate to other region. This external validity holds an important role in disseminating good policy. Few tunes and adjustment further needed to conform for each contextual cases (Vonk Noordegraaf, Annema, & van Wee, 2014). Some successfully implemented congestion charges or Electronic Road Pricing (ERP) along with providing adequate public transport system are road pricing systems in countries such as Singapore, London, New York, and Stockholm (Olszewski & Xie, 2005).

#### *Social interaction in transportation*

Complex scheme of road pricing induced the difficulty of decision maker to decide (Francke & Kaniok, 2013). Simpler model of road pricing was called upon more impactful road pricing policy. Social interaction of the drivers was proposed in this research to construct simpler road pricing scheme (Gaker, Zheng, & Walker, 2010).

Whenever an individual is in an interdependence situation that involves other individuals a social interaction is most likely to happen. Social interaction may contribute to the changes of environment (Sunitiyoso, 2016; Wilton et.al, 2011). The change towards environment will depend on the size of the group (or society). In a smaller scale (e.g. group), actions of a group member will receive higher influence than those in population, since there exists a feeling of belonging and responsibility as a group member. While in population, those feelings may not strongly exist as for an individual may expect others take the action, so that she/he does not need to do anything.

According to Sunitiyoso (2016), there are three levels of social interaction. First, level of social interaction is due to an interdependent situation where none of individuals who engaged in a collective action can be excluded from enjoying the benefits/ costs of their decisions (e.g. a social dilemma of public road users, where the decision of each user affects not only themselves but also the state of the system, hence affect other users). Second, level of social interaction occur when travellers learn vicariously from other people's experiences (observation) of other travellers' choices without involving processes of communication. The last level is through communication between travellers regarding their travel choices.

### *The Mechanism of Social Interaction*

Travellers' choice making and behavior can be considered as dynamic processes, since individuals can do change their behavior over time. The understanding of how travelers learn, develop and change behavior over time is important in order to predict traffic congestion. A traveler's decision may be due to new information gained from their (i) own experience, (ii) information and influence from the experience and behavior of others through social networking, and (iii) official information from the authorities.

While others tried to use different approaches to change traveler's behavior through the implementation of toll roads, or in the case of Indonesia, 3-in-1 scheme in certain hours and providing bus way as alternate public transportation. The of 3-in-1 scheme was partially working but it created negative consequence with the mushrooming problem of 3-in-1 "jockeys". Now the 3-in-1 policy has been eliminated and replaced by odd-and-even number plate scheme, while more proven scheme of ERP is in the pilot stage prior to its implementation.

Thus, this research tries to identify the influence of external information on drivers' through several objectives: (i) to analyze the drivers' decision towards various scheme of variable road pricing, (ii) analyze the influence of external information through various settings of information distribution on drivers' decisions..

### **Literature Review**

Road pricing first initiated by Arthur Pigou using two-road model in which strengthen by Frank Knight by incorporating context in that model. Since then, the discipline of road pricing expanded into mathematics, psychology, economics, management, and engineering (Vanoutrive, 2016). Road pricing could influences road users' choice for transportation method. After the increase of toll charge in Singapore on August 2013, significant increase in bus ridership was recorded especially in the morning and evening hours (Agarwal & Koo, 2016).

Policies related to public transportation services always been viewed as one way to overcome traffic congestion problems. On the other hand, the success of the policy to deal with such problem depends on the support of the users; on this case are the road users. From the study conducted in three major cities in Indonesia, public transportation users support for policy related to improving the public transportation system was significantly determined by users' dissatisfaction, trip-making, negative experience, and last but not least, service importance (Joewono, Tarigan, & Susilo, 2016).

Internal validity enables researchers to gain a complete comprehension of behavioral shifts and changes in aggregate behaviour and what cause them (V.Dixit, Ortmann, Rutstrom, & Ukkusuri, 2017). The use of incentives from Experimental Economics methods would improve the ways of researchers, or experimenters, to gain a more complete understanding about the underlying reason which influences the behaviour of participants to further



inform policies alongside with contextual realism through laboratory (V.Dixit, Ortmann, Rutstrom, & Ukkusuri, 2017)

## Methodology

To see how drivers respond to ERP implementation and how social interactions contributes to their decision in their road using behaviour, an experiment was conducted which adapts the principle of experimental economics where the experiment participants will receive rewards for their participation and for how they perform in the said experiment. Before the experiment, participants were given a pre-experiment survey regarding their travel habit, and after the experiment ends, they were also given a post experiment survey to capture their point of view about the experience they had while doing the experiment.

There are 4 different treatments that were applied in the experiment. The first treatment is the baseline treatment; second treatment is the Social Interaction treatment; the third and fourth treatment were the Official Information treatment where on the third treatment the information was regarding the route capacity and route cost respectively. The experiment treatments will be explained further in the 'Experiment Design' section. From the 4 different experimental treatments, it can be seen that there were 3 hypotheses that the experiment was trying to prove:

- *H1: There are difference in drivers' decision between baseline and treatment with Social interaction*
- *H2: There are difference in drivers' decision between baseline and treatment with Official Information regarding capacity*
- *H3: There are difference in drivers' decision between baseline and treatment with Official Information regarding cost*

## Experimental Design

Dixit et al stated that there are 3 main needs driven behavioral experiment in transportation, technology testing, theory testing and exploring relationship between key characteristics of context or participant (V.Dixit, Ortmann, Rutstrom, & Ukkusuri, 2017). This research focus on how theory and fundamental assumption based on social interaction of road driver. Social interaction proposed to construct road pricing scheme.

The main experiment was developed using z-tree software (Fischbacher, 2007). Basically, in this experiment, the participants were requested to choose the route between pricing applied (ERP) and non-pricing applied (alternative route). A total of 40 respondents from various backgrounds (undergraduate students, master students, employees, and housewives) participated in this experiment. They were all divided into 4 different sessions of experiment which were held in 2 different days, 2 sessions each day. On each session, 10 participants were engaged in the experiment that consists of 4 periods of ten rounds decision-making play. All participants were asked to imagine themselves as car drivers which wanted to go from a hypothetical same starting point to a same destination where there are 2 available routes they can choose, the ERP route and alternative route, in order to reach their same destination.

Each route has different capacity and price. The ERP route will cost each participant 30,000 rupiah if they choose to use it, while the alternative route will cost them nothing. The capacity of the ERP route is 7 cars and the alternative route was limited to only 3 cars. If the capacity of each route were exceeded, it will automatically cost a penalty of 10,000 rupiah per car over the initially stated capacity. The accumulation of total number of cars exceeding the capacity of a route on each round will become the total penalty cost for that said round and will be implied to all drivers which chose that over-occupied route. The formula for the total cost for each driver on each round can be seen below:



$$Total\ cost = fix\ route\ cost + \{(number\ of\ cars\ exceed\ route\ capacity) * 10.000\}$$

All of the participants made the decision regarding the route they will choose simultaneously, and after the decisions of each participant were tallied, the final cost, including the total penalty cost, resulted from their decision will be subjected to all participants accordingly.

Table.1 Experimental design

	Previous round performance	Previous round overall result	Capacity official information	Cost official information
Treatment 1	X			
Treatment 2		X		
Treatment 3	X		X	
Treatment 4	X			X

Throughout the experiment, there are four treatments given to the participants. Every treatment consists of ten rounds. These treatments are related to the information that each participant can use to make their decisions on the next round. The information given to each participant in each corresponding treatment are: (Treatment 1) participant's performance on previous rounds and his/her selected choices, (Treatment 2) participant's performance on previous rounds, and overall players' decisions and costs plus penalty/over capacity cost on previous rounds, (Treatment 3) participant's performance on previous rounds and official information related to the available capacity of route, and (Treatment 4) participant's performance on previous rounds and official information related to the price changes of route. Those settings are applied to both sessions to study the influence of social interaction through various information distribution settings.

Besides the treatment, the experiment also wanted to see if there are any influence resulted from the sequence of the treatments implied to the experiment participants. Therefore, the treatment sequences were differentiated between experiment sessions in day 1 and day 2. This was conducted as a control point to check whether there are factors outside of the treatments that also cause the difference in the responses of the participants. The sequences of the treatments can be seen in the table on the 'Results and Findings' section.

On the beginning of every treatment, each participant was given a 400,000 rupiah of hypothetical transportation budget. This amount of transportation budget, with regards to the price of ERP route and over capacity penalty cost, was a representation of real life situation derived from the approximate ratio between the fraction of a household's income that is being used for transportation and the average daily transportation cost in Indonesia; especially in cities like Jakarta, Surabaya, and Bandung. Furthermore, in the end of the experiment, the average money that each participant able to saves was added to their fix participating fee and was given to them in real money as a reward for their participation in the experiment. This was conducted to stimulate an incentive for the participants to save their money being used for transportation as close to their own real life situation as possible

## Results and Findings

The analysis is using percentage of alternative route chosen by all drivers in each period and treatment. This was intended to simplify the analysis. The averages and variations from the percentages of alternative route chosen were presented in the table 2 below.

Table 2. Mean and average of alternative route choice proportion

Group	Treatment Sequence	Treatment 1		Treatment 2		Treatment 3		Treatment 4	
		Mean	Var	Mean	Var	Mean	Var	Mean	Var



A	1-2-3-4	0.57	0.01122222	0.54	0.011556	0.52	0.030667	0.38	0.021778
B	1-2-3-4	0.53	0.02233333	0.6	0.02	0.58	0.010667	0.42	0.012889
C	1-2-4-3	0.54	0.04488889	0.46	0.018222	0.44	0.022667	0.53	0.015667
D	1-2-4-3	0.57	0.01122222	0.61	0.027667	0.57	0.013444	0.47	0.020111

Proportion between treatments showed that treatment 1, 2, and 3 not have difference especially in group A. This could indicate that treatment 4 which intervene drivers using official information could impacted driver's decision in route choice. Furthermore, more detailed analysis we will using ANOVA in group and treatment difference in route choice.

There were four treatments given to four groups in the experiment. The mean for treatment 1 across all groups is quite similar with the highest mean is 0.57 with variance of 0.01, while the lowest mean is 0.53 with variance of 0.022. The treatment 2 have various mean from 0.46 as the lowest mean from group C with variance of 0.018 and the highest mean of 0.61 with variance of 0.0277. While in treatment 3, the lowest mean showed for group C with 0.44 with variance of 0.023 and the highest mean of 0.58 with variance of 0.011. In treatment 4, group A gain the lowest mean with 0.38 with variance of 0.022 and group C with the highest mean, 0.53, with variance of 0.0157 (see Table 2 for detail)

```

Df Sum Sq Mean Sq F value Pr(>F)
group      3  0.0977  0.03256    1.654 0.17964
treatment  3  0.2827  0.09423    4.786 0.00329 **
group:treatment  9  0.3066  0.03406    1.730 0.08717 .
Residuals 144  2.8350  0.01969
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

. Fig. 1. (a) Group and treatment ANOVA result

Even though the treatment order for group A-B and C-D are different, but the effect of the treatment order is not significant ( $F$ -value 1.654,  $p$ -value 0.17964), means that the order of the treatment do not affect the travel decision toward route choice (see Fig 1 for detail).

```

Df Sum Sq Mean Sq F value Pr(>F)
treatment  3  0.283  0.09423    4.538 0.00444 **
Residuals 156  3.239  0.02076
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Fig. 2. (a) Treatment ANOVA result

Comparing all treatments, there were significant difference among all treatment ( $F$ -value 4.538,  $p$ -value 0.0044). The most significant different treatment was between group 1 and 4 ( $p$ -value 0.0094916), and between group 2 and 4 ( $p$ -value 0.0094916). The other pairs of treatments showed no significant difference for their  $p$ -value were larger than 0.05 (see the Tukey-Kramer table for details)

Tukey multiple comparisons of means  
95% family-wise confidence level

Fit: aov(formula = percentage ~ treatment)

\$treatment	diff	lwr	upr	p adj
2-1	1.110223e-16	-0.08367711	0.083677106	1.0000000
3-1	-2.500000e-02	-0.10867711	0.058677106	0.8652668
4-1	-1.025000e-01	-0.18617711	-0.018822894	0.0094916
3-2	-2.500000e-02	-0.10867711	0.058677106	0.8652668
4-2	-1.025000e-01	-0.18617711	-0.018822894	0.0094916
4-3	-7.750000e-02	-0.16117711	0.006177106	0.0802680

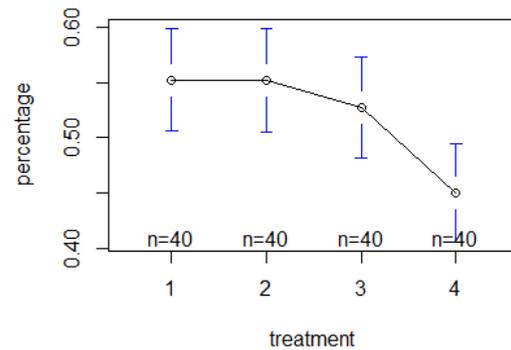


Fig. 1. (a) Tukey-Kramer result; (b) Tukey-Kramer graphics

The graphical average comparison between treatments shown in the figure below corroborates further the results of the Tukey-Kramer analysis. It can be seen that the average alternative route chosen in treatment 4 is far lower than in treatment 1 and 2. Thus this concludes that treatment 4 results in the most significant route choice difference with the base treatment.

From the results of Tukey-Kramer analysis, the first two hypotheses (hypothesis 1 and 2) were failed to be proven where the results of the experiment only responded to treatment 4 (hypothesis 3). Social interaction in interdependent level which diffuses cost information of the route caused changes in driver's decision to use ERP. This result may have been the effect of price elasticity of each driver. Each driver was incentivized by balance remaining on the end of experiment treatment. This was also confirmed by the responses of most participants in their post-experiment survey where they admitted that they feel worried if they lose money by the end of the experiment.

### Conclusion

This research indicates that social interaction holds an important role in developing road pricing policy. Furthermore, constructing road pricing using social interaction could help policy makers to build simpler and more impactful policy. This notion is supported by our experiment that present official information on route cost significantly drives respondents to choose ERP route. The interdependent level of social interaction shows the most promising result compared to observation level. Our post-questionnaire supported this result by showing that they are more concerned about the remaining balance that they will obtain at the end of the experiment. The competitiveness of the respondent must be studied more closely to dissect that this phenomenon is the byproduct of experimental economics or basic human instinct to compete with others.

Social interaction contributes to the versatility of road pricing development process. But on the other hand, these prices must reflect additional and intangible effects from road usage. If the ERP is still in the early stage of development, whereas ERP in Indonesia is still on the discourse stage, it would require extensive study. For further study, communication must be taken into account in the experiment, and combination of interdependent and observation level may take more impactful effect. Our study expects to provide development ERP in Indonesia with important insights into travel behavior.

The results of the experiment show that there are significant differences among treatments for each session, thus showing the effects of difference information distribution settings. It also indicates that drivers are significantly influenced by social interaction in the form of official information regarding price changes.

Road pricing generally can be constructed from a social interaction point of view. In order to form a road pricing policy that can meet the fundamental objective of the policy itself, which is to solve the road congestion issues, social interaction point of view can complement the traditional economic point of view in developing electronic

road pricing policy. A complete understanding on how road users, in this case vehicle drivers, respond to road pricing policy with the addition of how social interaction also influence their behaviour can hopefully help policy maker to design an effective and efficient road pricing policy for the betterment of the future.

Further research and exploration on other level of social interaction and different demographic of Indonesian citizen as experiment participant, and also survey respondent, are needed to further improve the understanding of how social interaction would help in developing road pricing policy in Indonesia.

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## Optimalization of Knowledge Management: Keys To Success In Enhancing Competitiveness of Indonesian Human Resources

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### Abstract

Industrial globalization, technological advances and information lead organizations to change its strategy and business paradigm from resources based business to knowledge based business, and from dominant physical investment become the dominant of intellectual assets.

Knowledge Management is a systematic activity that offers knowledge management in terms of acquisition, utilizing, sharing, storage, retrieval and development. Therefore, it generates new ideas that impact on an innovation. Basically knowledge management involves several components of human resources. Those are technology and organizational processes which are interrelated.

The success of Indonesia's development is measured by the ability of human resources to produce superior performance and high competitiveness, the competency-based organization must position innovation as an instrument to win the competition and answer the challenges of globalization through collaboration, innovation, technological mastery and the ability to manage intellectual assets.

The purpose of this study is to find out the optimalization of knowledge management which is the key to success in improving human competitiveness.

Keywords: Knowledge Management, Human Resources, Competitiveness

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### I. Introduction

In this era of technology and communication, human speech cannot be separated from the context of human capital as a basic asset in the process of building a nation. The issue of globalization becomes the most strategic issue and should be positively addressed as a process of mental development and character to improve the productivity and competitiveness of the nation. Globalization increasingly makes people realize how important the role of human beings as assets or capital for development.

Related to this matter Gaol state that : "...The foundation of economic growth in the future can no longer be done conventionally through the management of natural resources and money capital itself, but increasingly based on knowledge based economy and good human capital". (Gaol, 2014). In a turbulent business climate, where the only certainty is uncertainty, then there is only one resource that can certainly perpetuate the competitive advantage of knowledge. It is because knowledge is the difference between success and failure.

In the era of technological development, the human factor holds a significant role. Drucker as quoted by Budiharjo (2016) argues that knowledge workers have a very essential role. He said : "...knowledge is the key to economic resources. In general, which cover into the category of human capital are the competence, knowledge, values, personality and human experience". The function and role of human resources becomes very important in bringing the organization to excellence amid increasingly complex global changes. Sharp competition and rapid technological advances require organizations to become more intelligent, adept, innovative, adaptive and responsive.

Human capital, especially knowledge is essential for the organization, human needs to be managed effectively in order to produce optimal performance. Therefore, the handling of human resources must be done thoroughly in the context of strategic, integrated, interrelated and unity human resources management system (Raharso, 2016).

According to Tempo.com (Wednesday, April 19, 2017), Indonesia ranks 90th among Asia Pacific countries in the Global Talent Competitiveness Index (GTCI) 2017. The position is still lower than Singapore and Malaysia, respectively sitting positioned to 2 and 28. From this index, Vietnam and Sri Lanka are above Indonesia with rank 86 and 82. GTCI is an annual report measured based on the ability of a country to compete in producing talent and human resource capability.

Meanwhile, based on IMD World Talent report Indonesia's competitiveness index is positioned 48 of 61 countries, while The Human Capital Report 2016 shows the competitiveness of Indonesian human resources is on the order of 72 out of 130 countries. This sequence is far below other Asean countries such as Singapore, Malaysia, the Philippines and Sri Lanka which include into the top 50 category.

Indonesia's low resource competitiveness position is currently a fact that needs to get the attention of all stakeholders by preparing ecosystems that enable the realization of highly competitive human resources. The fact that technological advances are extraordinarily sophisticated can take over the role of humans in work, but innovation and creativity are still needed.

Changing the human resource management system is not as easy as turning the palm of the hand, it takes strategy and wisesteps in its implementation. This paper describes how knowledge management generates new ideas that impact on an innovation involving human resources, technology and management processes to achieve positive performance.

## **2. Literature review**

### **2.1. Knowledge Management**

The knowledge management context known as Knowledge Management is the management, knowledge to produce effective, relevant, value added and far more innovative outcomes than competitors. Innovating effectively fosters a knowledge management process that takes ethics, added value to stakeholders and will certainly build a wisdom for the organization. (Budihardjo, 2016). Knowledge Management is how people from different places start talking to each other known as label learning organization to maintain the existence of the organization (Mulyanto, 2009).

Vision and mission based on knowledge management basically encourages the organization leader to run its activities on the basis of "learning" in order to be able to innovate. Hence, the organization can continue to survive, grow and perform superior. Wiigas quoted by Budihardjo (2016) there are four steps of knowledge management as follow: creation and sourcing, compilation and transformation, dissemination and application and realization.

Meanwhile, knowledge management process consists of three major activities. Those are knowledge creation (development of new ideas through tacit and explicit interaction), knowledge sharing (process of discussion and exchange of ideas), and knowledge reuse (utilize knowledge). The main essence of knowledge management shows the following categories:



Table. 1. The Essence of Knowledge Management

Topic
<ul style="list-style-type: none"> <li>- Main definitions and concepts: type of tacit &amp; explicit knowledge, knowledge management, knowledge economy</li> <li>- Knowledge cycle: knowledge acquisition, knowledge creation, dissemination of knowledge, use and reuse of knowledge</li> <li>- Source of knowledge: best practice, case study, organizational memory, repository</li> <li>- Theory and Model Knowledge Management: Epistemology, Converting knowledge, building and using knowledge concepts</li> <li>- Analysis and identification of existing knowledge (knowledge audit)</li> <li>- Organizational Learning and Learning Organization.</li> </ul>

Source: Rahman in Budihardjo (2016)

## 2.2. Human Capital Management

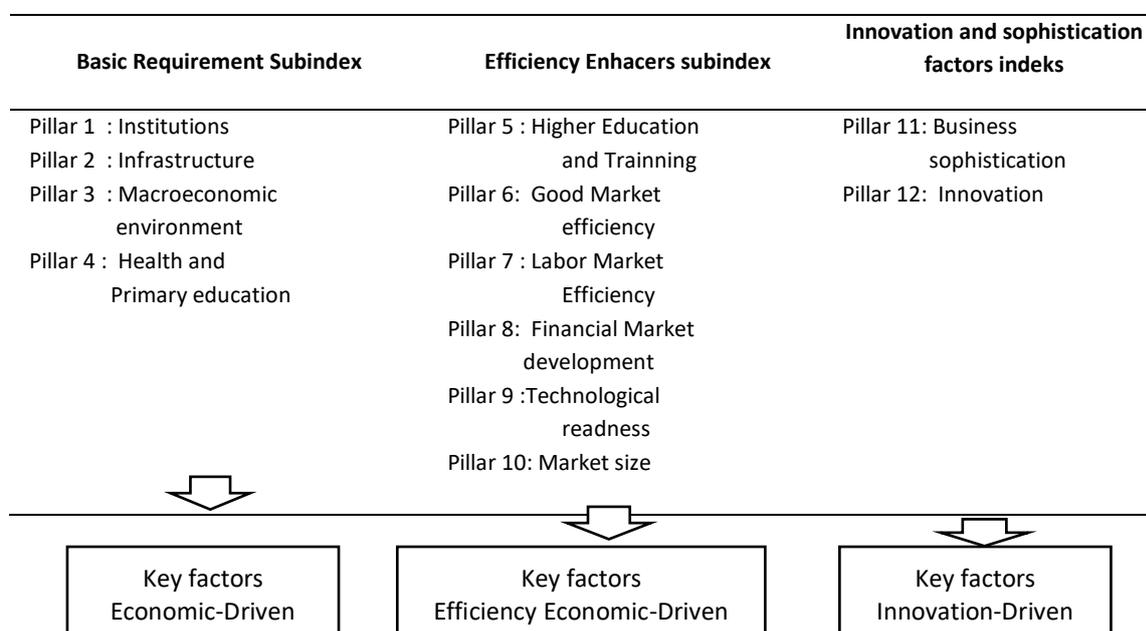
Human resources refer to adult humans functioning in a productive system (Kaswa, 2015) while Gaol (2016) states that human resources are people, individuals and groups that help organizations produce goods or services. According to the OECD as quoted by Budihardjo (2016) human capital is defined as: the knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal. Social and economic well-being.

According to Raymon J. Stone in Gaol (2016) strategic human resources management focuses on the interconnection of all human resource activities with strategic organizational business objectives. In Mayo as quoted Sutisna (2014) human capital has five components: individual capability, individual motivation, leadership, the organizational climate and work group effectiveness.

## 2.3 Competitiveness Indicators

The competitiveness of a country is achieved through the accumulation of the strategic competitiveness of every organization / company, the improvement of competitiveness enables a country's population to improve its life standard

The Global Competitiveness Index based on World Economic Forum data sets the indicator of the competitiveness of the country in the economic field as follows:



Source : World Economic Forum Report  
 Figure 1. The Global Competitiveness Index

### III. Methodology

The research approach used in this paper is to use secondary data in the form report of the survey results of the Global Competitiveness Index based on the World Economic Forum from 2014-2017, and the literature approach in the form of articles, journals and case studies on improving Human competitiveness through good knowledge management Tacit or explicit knowledge. The purpose of this research is to find out the optimalization of knowledge management which is the key to success in improving human competitiveness. This research differs from other studies because it presents a model that describes an integrated system of human resource development as an intellectual capital (input) developed through an organizational process (knowlwdge management) to produce high productivity through innovation (output) that impact on increasing competitiveness.

### IV. Result

The development of the human resources sector has become a concern of the government. One of them through Master Plan Economic Development Acceleration and Expansion Indonesia (MP3EI) 2011-2025. The Master Plan makes strategic plans for the acceleration of regional development by building connectivity between infrastructure, policy development, and human resources. However, the government's plan has not been effective yet, at which Indonesian human resources according to World Bank data 2013 are superior in quantity, with the number of productive workforce of Indonesia aged 15-55 years is 118 million people, this number is much bigger than other Asean countries. But on the contrary the quality of Indonesian human resources is still far below those countries. East Asia and the Pacific is characterized by great diversity. Where the GCI-covered states cover most of the development ladder, from Cambodia to Singapore, and includes three of the world's 10 largest economies: China, Japan and Indonesia. The developing country region, led by China, has taken place Supporting a modest global recovery since the global financial crisis. The condition of Indonesia's low resource quality results in the low competitiveness of the nation's economy. Based on the World Economic Forum Report establishes The Global Competitiveness Index (Period 2014 - 2017) for East Asia countries are:

Table 2. The Global Competitiveness Index Period 2014-2017

Economy	Score			Rangking		
	2014-2015	2015-2016	2016-2017	2014-2015	2015-2016	2016-2017
Singapore	5,65	5,68	5,72	2	2	2
Japan	5,47	5,47	5,48	6	6	6
Hongkong	5,46	5,46	5,48	7	7	7
New Zealand	5,20	5,25	5,31	17	17	16
Taiwan	5,25	5,28	5,28	14	14	15
Malaysia	5,16	5,23	5,16	20	20	18
Korea	4,96	4,99	5,03	26	26	26
China	4,89	4,89	4,95	28	28	28

Thailand	4,66	4,64	4,64	31	31	32
Indonesia	4,57	4,52	4,52	34	34	37
Philippines	4,40	4,39	4,36	52	52	47
India	4,21	4,31	4,52	71	71	55
Vietnam	4,23	4,30	4,31	68	60	56

Source: Report World Economic Forum (<http://www.google.co.id>)

Based on the table, it shows that the economic competitiveness of Indonesia during the last 3 periods are far from Singapore, Malaysia and Thailand, even for the period 2016-2017 even though the average score has a fixed number, but from the rank of Indonesia decreased. Singapore arguably possesses one of the world's most fertile innovation ecosystems, combining a very conducive policy environment and infrastructure, academic excellence, an unmatched capacity to attract the best talent, and large multinationals that are often leaders in their sector as well as a dense network of small- and medium-sized enterprises across sectors that has a reputation for quality and a strive for innovation. Furthermore, intense collaboration between the academic and business worlds yields innovative products with commercial applications. For that, intellectual capital and knowledge management become one of the most important things to spur innovation and improvement of individual performance and ultimately the productivity and rate of innovation can impact on competitive advantage. Below the model Development of competitiveness of human resources through knowledge management as follows:

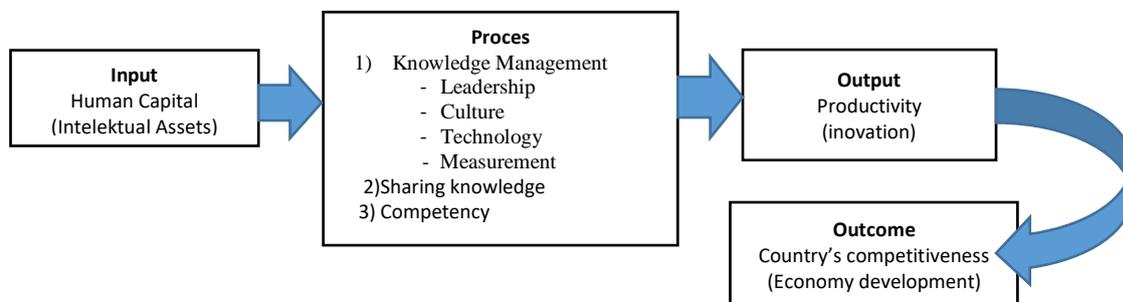


Figure 2. The development of human resources competitiveness through Knowledge Management

## V. Discussion

The aforementioned explanation shows a process of developing the competitiveness of human resources through the optimization of knowledge management which covers 3 things: Human Capital, Capital Structure and Customer Capital. In the process of input organization, the existence of human resources (Human Capital) quality that has a combination of science, skills and ability to complete the task. Processed within the organization (Organizational Capital) through the development of knowledge programs, training policies and procedures. The final result is the ability to add value for the organization (Customer Capital) until the end goal has the ability to compete globally.

## VI. Conclusion

Human resource investment becomes a potential source of competitive advantage. Intellectual capital development is done through knowledge management known as knowledge management. Knowledge management will be more effective if it is developed in a relevant field by considering individual competence, personality and motivation as well as support from the sharing of elements that drive the learning climate to improve individual performance and productivity. Although innovation and technology are gaining importance

as drivers of competitiveness for all countries, advanced and emerging, the results show that all factors of competitiveness are complementary and should be addressed simultaneously. Making sustainable, long-term overall progress requires addressing gaps in all pillars, laying the foundations for more vibrant economies with new productive sectors.

With the increased capacity of learning, the organization has a great opportunity to achieve its goals. Intellectual capital can be useful in several perspectives: human perspectives include skill and attitude, then structural perspective refers to the ability to run a work system process and work system that upholds culture and ethics, and the benefits of knowledge from the aspect of relations is the ability to build networks and communicate knowledge.

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## Optimizing Regional Financial Management by Implementing Good Government Governance

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### Abstract

The paradigm of regional financial management has undergone a very fundamental change since the enactment of regional autonomy in 2001. Law no. 32 of 2004 and Law no. 33 of 2004 which became the main foundation in implementing regional autonomy in essence provides greater opportunities to the region to further optimize the potential of the region, whether concerning human resources, funds, and other resources that are regional wealth. Therefore, in the framework of the management of regional finances is further regulated in Government Regulation no. 58 of 2005 on Regional Financial Management. Basically the thoughts that lie behind the publication of Government Regulation no. 58 of 2005 on Regional Financial Management is the desire to manage state and regional finances effectively and efficiently, the basic idea is certainly to be implemented through good governance that has three main pillars of transparency, accountability and participatory.

This research used descriptive and verifikatif approach, research method used descriptive survey and explanatory survey. In this study, the sample was the Regional Device Work Unit of 180 units of the Working Area. The method of analysis in this study used Path analysis. The results show that the management of local finance in East Priangan can be optimal by applying good governance.

*Keywords: Good Governance, Financial Management*

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### Introduction

By looking at the findings of the Supreme Audit Agency's examination of the Local Government Financial Report and the opinion given by most of them with the exception, it shows that the local government financial performance is not yet optimal in the management of regional finances. As Mardiasmo (2004: 9) pointed out, one aspect of local governance that must be carefully regulated is the issue of local financial management and local budgets. Thomas G Weiss in journal stated that the forces of democratisation and globalisation are pressuring good governance proponents to reorient their priorities from the exigencies of economic growth and efficiency to those governance policies and institutions that best promote greater freedom, genuine participation and sustainable human development.

Related to financial management, in accordance with the mandate set forth in Article 3 paragraph (1) of Law Number 17 of 2003 on State Finance, which requires the State Finance to be managed in an orderly, law-abiding, efficient, economical, effective, Transparent and accountable with due regard to the sense of justice and propriety, can be further embodied. Therefore, in the framework of the management of regional finances is further regulated in Government Regulation No. 58 of 2005 on Regional Financial Management.

Basically the thoughts that lie behind the publication of Government Regulation no. 58 of 2005 on Regional Financial Management is the desire to manage state and regional finances effectively and efficiently, the basic idea is certainly to be implemented through good governance that has three main pillars of transparency, accountability and participatory. The problem formulation in this research is how the management of regional finance is influenced by good governance in East Priangan.

The purpose of this study is to provide an overview and explain the relationship of financial management with good governance. The benefits of this research to develop the field of management science regarding financial

management. Benefits to Dear government are to improve local government financial management by implementing good governance.

**Good Governance.** In the explanation Government Regulation No. 58 of 2005 on Regional Financial Management that good governance has three main pillars: transparency, accountability and participation. It was also mentioned by Mardiasmo (2004: 30) "The three main pillars in implementing good governance is transparency, it means the openness of government in providing information related to the activities of management of public resources to the parties who need information". The local government as regional financial manager must be able to provide necessary financial information accurately, relevant, timely and reliable. Therefore, local governments are required to have a reliable regional financial information system. In Mardiasmo (2009: 18) argued that of the nine basic characteristics of good governance issued by UNDP, there are at least three things that can be played by the public sector, namely the creation of transparency, public accountability, and value for money (economy, effectiveness and effectiveness) .

**Financial Management** includes activities budgeting, financial administration (cash administration procedures cash receipts / disbursements), and reporting or accounting procedures. Ahamad Yani (2013: 348) argues that "Regional financial management is the whole activity that includes planning, implementation, administration, reporting, accountability, and monitoring of local finances". Suhadak (2007: 136) said that "the problem of local financial management and local budgets is an aspect that must be carefully regulated by the local government". Regional financial management is an overall activity that includes planning, implementation, petaniusahaan, reporting, accountability, and financial oversight of the region where a very important aspect in the management of local finances.

Government Regulation Article 4 No.105 of 2000 affirms that the management of regional finances must be conducted in an orderly manner, in compliance with prevailing, efficient, effective, transparent and accountable legislation with due regard to justice and compliance.

From the study of theory and framework of thought can be described the relationship between variables studied as follows:

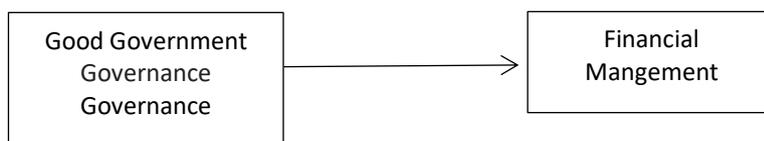


Figure 1. T he Framework of Variable Relation

The picture above explains that to achieve good financial management is determined by the implementation of good governance. Good financial management must be carried out in an orderly, lawful, efficient, effective, transparent and accountable manner with due regard to justice and compliance.

The hypothesis proposed is the application of good government governance has a strong influence on financial management.

### Objectives

This study aims to analyze, examine, know and give an idea of the ability of local government in East Priangan in improving financial management by applying good governance.

## Materials and methods

This research uses descriptive and verifikatif approach, research method used descriptive survey and explanatory survey. Descriptive survey is conducted to get a picture of the variables studied. While the explanatory survey to obtain a picture of causal relationships between variables examined through hypothesis testing based on data obtained in the field.

In this study, the Unit of Analysis is the Local Government and the City in East Priangan with the observation unit of the Head of Local Government Work Unit as many as 180 units of work of regional apparatus. To get the research data is done by questionnaires to 180 respondents and interviews with experts to produce qualitative data.

Analysis method in this research use Path analysis to analyze descriptive and verification data.

## Results

### ➤ Descriptive results

**Good Government Governance** is measured by 15 items of statement with 3 (three) dimensions, namely: 1) Transparency, 2) Accountability and 3) Participatory. The results of the 15 items of the proposed statement to measure the variables of Good Governance. Based on the results of data collection that refers to the questionnaire, obtained score range of data values for Government Governance variables represented by 15 items statement for 180 SKPD. Responses of respondents to Government Governance variables consisted of 15 items statement with frequency details as follows: Number of respondents answer items stated that answering scale 1 of 0.67 percent, answering scale 2 of 1.41 percent, answering scale 3 of 8.44 Percent, answering scale 4 of 26.37 percent, and answering scale 5 of 63.11 percent. This means that the data is scattered from the smallest to the largest with an average value of 3.201 with a standard deviation of 0.905 with the answer category being in the range of 2,296 - 4,106 with the low criterion towards good.

Judging from the average score of each dimension, it is known that: 1) the transparency dimension earns an average score of 2,937 with fairly good criteria, 2) the accountability dimension obtains an average value of 3.504 with fairly good criteria, and 3) the participatory dimension The average value of 3,216 with the criteria is quite good.

From the three dimensions above the transparency dimension earns the lowest average score of 2.937. It can be seen from several aspects, namely: item statement no. 1 is the existence of openness in providing information relating to the management of public activities with an average value of 2,312, the statement no.5 ie transparency in the bidding and the determination of tenders or contracts of local government projects to third parties with an average value of 2,326.

While the dimension that has the highest average value is the dimension of Accountability with an average value of 3.504. It can be seen from several aspects, namely: item statement 18, which is Doing a comprehensive aspect about the aspect of financial integrity with an average value of 3.858 and item statement no. 7 that is the responsibility of the main tasks and functions of agencies with an average value of 3.629.

**Financial Management** is measured by 19 items of statement with 4 (four) dimensions, namely: 1) planning, 2) administration, 3) accountability and 4) supervision. The results of the 19 items of statements proposed to measure the variables of financial management. Based on the results of data collection that refers to the questionnaire, obtained the score range of data values for financial management variables represented by 19 items statement for 180 SKPD. Description of respondents' responses to financial management variables consisting of 19 items of statements with frequency details as follows: Number of respondents answer items that declared answering scale 1 of 1.401 percent, answering scale 2 of 0.96



percent, answering scale 3 of 7.63 percent , Answer the scale 4 of 24.89 percent, and answer the scale of 5 by 91.78 percent. This means that the data is scattered from the smallest to the largest with an average value of 3.326 with a standard deviation of 0.861 with the answer category is in the range of 2,465 - 4,187 with the low criterion towards good.

Judging from the average score of each dimension, it is known that: 1) planning dimension gets average value 2,854 with good enough criterion, 2) dimension of administration gets average value 3,765 with good enough criterion, 3) dimension of accountability gets value Average of 3,681 with good enough criteria, and 4) the dimension of supervision earned an average value of 3,524 with fairly good criteria.

From the four dimensions above, the planning dimension which gets the lowest average score of 2.854. It can be seen from several aspects, namely: item statement no. 5 in the planning is applied the principle of Discipline, yaitu APBD plan must have been submitted in accordance with the time schedule that has been determined so it needs to be considered when the preparation and endorsement with an average value of 2.448, item statement no.7 that In planning is applied Priority principle, yaitu preparation of budget Strived to sharpen the virtue of the use of funds available for financing programs and activities with an average value of 2,517, item statement no. 6 that is in the planning applied flexbel, that is because it is realized that the budget is still basically a plan so that in its implementation it is possible to change with an average value of 2.810 and item statement no 2 that is In the planning applied comprehensive principle, that is all the activities to be done and Have financial results should be included in the budget with an average value of 2.871.

While the dimension that has the highest average value is the dimension of administration with an average value of 3.765. It can be seen from several aspects, namely: item statement no 10 that is every shopping recorded in the bookkeeping with an average value of 3.858 and item statement no. 11 ie every regional kekakyaan recorded in the bookkeeping with an average value of 3.858.

**Table 1. Criteria for Achievement of Scores of Each Variable**

Variabel	N	Mean	Std. Dev	Range	
Good Government Governance	180	3,201	0,905	2,296	4,106
Financial Management	180	3,326	0,861	2,465	4,187

Source: Results of Data processing

➤ **Verifikative Results**

Based on the calculation of correlation value and path coefficient that has been done, then obtained degree of contribution from Good Government Governance to Financial Management, as shown in Table 2 below:

**Table 2. The Effect of Good Government Governance on Financial Management**

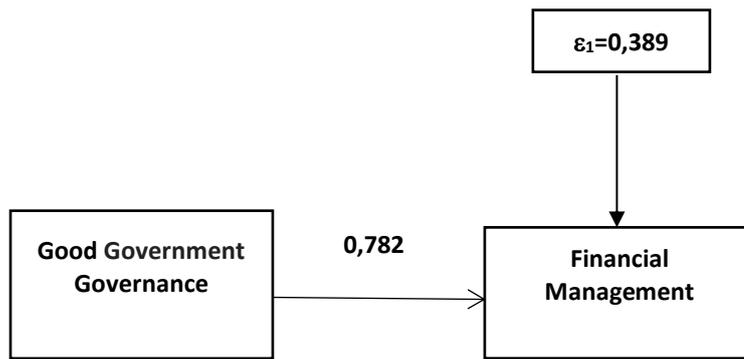
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,782 <sup>a</sup>	,611	,605	3,96354	,611	92,338	3	176	,000

A. Predictors: Good Government Governance

Source: Results of Data Processing

The results of the analysis of the variables of Good Government Governance to Financial Management can be explained in Figure 2 below:





**Figure 2 The Effects of Good Government Governance on Financial Management**

Based on figure 2, we get the following path equation:

$$Y = \rho_{yx}.X + \varepsilon_1$$

➤  $Y = 0,839 X + \varepsilon_1$

Where:

X = Good Government Governance

Y = Financial Management

Based on the calculation of correlation value and path coefficient that has been done, then obtained the degree of contribution from Good Government Governance to Financial Management of 0.782. So the better the implementation of Good Government Governance will be the better Financial Management with a contribution value of 0.782.

The Effect of Governance on Financial Management is 0.611. This indicates that the financial management is influenced by the Governance of 61.10%, meaning that the higher the implementation of Good Government Governance, the better the management of Finance, because with the level of implementation of high Good Government Governance will create a good Financial Management.

## Discussion

### Good Government Governance

Based on the results of data processing descriptive, it can be concluded that the variable Governance is in the criteria of low to good. The Governmental Governance Variable Measurement refers to the theory of LAN and BPKP (200: 6) with three dimensions: 1) Transparency, 2) Accountability and 3) Participatory. When viewed from the average score of each dimension, it is known that: 1). Dimensions of transparency with low criteria, it can be seen that there is no openness in providing information related to the management of public activities and not yet transparent in bidding and stipulating the tender or contract of local government projects to third parties, 2). Dimensions of Accountability with good enough criteria, it can be seen that the responsibility for the main tasks and functions of the institution, including comprehensive aspects of financial integrity, covering the economic aspects, including aspects of the procedure and 3). Participatory dimensions with criteria are quite good, where decision-making involves related parties.

From the results of data processing, it is known that for the variable of Good Government Governance, the highest dimension lies in the dimension of accountability. While the lowest dimension lies in the dimension of transparency, this can be seen from the aspect: the openness in providing information related to the management of public activity is still low and the transparency in bidding and tendering of local government projects or tenders to third parties is still low. As the expert judgment argues that transparency is low due to the first change in the structural and functional but there is no change in the culture and local government still think that the documents on government finance are not public documents. Secondly, the local government still uses the cash register so that the cash base can still play so that the transparency is reduced and added by the big

political elements.

### **Financial Management**

Based on the results of data processing descriptive that the variable of Regional Financial Management is on the low criteria towards good. Measurement of Local Financial Management Variables refers to Ahmad Yani's theory (2013: 348) with four dimensions: 1) planning, 2) administration, 3) accountability and 4) supervision.

When viewed from the average score of each dimension, it is known that: 1). Dimensions of planning with good enough criteria, 2) dimensions of administration with good enough criteria, 3) the dimensions of accountability with the criteria is quite good and 4) the dimension of supervision with the criteria quite well. Among the four dimensions that get the highest average value lies in the dimension of administration while the lowest dimension lies in the planning dimension. This is because there are some aspects in the planning is still low, the application of disciplinary principles is still not implemented, the APBD plan has not been timely in accordance with the predetermined schedule, the implementation of the priority principle in the preparation of the budget has not been fully implemented, nor is the principle of flexible and comprehensive not fully held.

The same thing is expressed by expert judgment Prof. Dr. Sadu Wasistiono, M.Si, that the planning in financial management is still low. According to him, there are several reasons why: 1) inconsistency between long-term, medium-term and short-term planning with national planning, 2) DPRD always ask for out-of-planning allocations on the grounds of community aspirations, and 3) planning is not based on Needs but based on desire. Meanwhile, according to Dr. Iwan Saputra, M.S. that the low planning is due to the fact that the planning has not fully applied the 3 E principle (Efficient, Economical and Effective). In addition to the lack of understanding of the rules.

### **Conclusion**

Related to financial management, in accordance with the mandate set forth in Article 3 paragraph (1) of Law Number 17 of 2003 on State Finance, which requires the State Finance to be managed in an orderly, law-abiding, efficient, economical, effective, Transparent and accountable with due regard to the sense of justice and propriety, can be further embodied.

Therefore, in the framework of regional financial management, it is further stipulated in Government Regulation no. 58 of 2005 on Regional Financial Management. Basically the thoughts that lie behind the publication of Government Regulation no. 58 of 2005 on Regional Financial Management is the desire to manage state and regional finances effectively and efficiently, the basic idea is certainly to be implemented through Good Government Governance that has three main pillars of transparency, accountability, and participatory.

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## Measuring the Influence of Customer Experience on Customer Satisfaction, Loyalty Intention and Word of Mouth Behavior Using Customer Experience Quality (EXQ) Model on Telkom's IndiHome Complaint Handling Process

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### Abstract

Marketing practice and research have undergone a series of large-scale transformations over the past 25 years, shifting focus from creating product brands to building customer relationships through service marketing and now to creating compelling customer experiences (Gordon 2006 in Maklan & Klaus 2011). Thompson (2015) said "Customer Experience Is the New Competitive Battlefield", Greater competition and growing consumer power have eroded traditional product and service based differentiation, forcing firms to seek new, more durable forms of competitive advantage.

Customer experience has become one of Telkom's focus, excelling Customer Experience was one of the spirit in achieving the target of Telkom Group 2016: Assuring Disruptive Triple Double Digit Growth and re-emphasized by Telkom CEO in early 2017 in Telkom Group 2017 theme: "Disruptive for Triple Double Digit Growth by 2017 through Customer Experience, Digital Business and Smart Inorganic ". But how is the perceived experience of Telkom's customers? Do they already have an excellent customer experience from Telkom?

This research was conducted to measure customer experience of IndiHome customers in incident and problem management using Customer Experience Quality (EXQ) model from Maklan & Klaus (2013). The results of these measurements are then analyzed to see which variables of IndiHome customer experience have to be improved to achieve excellent customer experience. The survey respondents are IndiHome customers in Jakarta, Bandung and Surabaya who have reported their IndiHome incident by conducting online surveys.

The results showed that customer experience of IndiHome customers in incident and problem management should be improved. The research results also show that customer experience influences important marketing outcomes, customer satisfaction, loyalty intentions and word of mouth Behavior. Consequently, Telkom must immediately prepare appropriate steps to carry out continual improvement in IndiHome's incident and problem management in order to improve Telkom customer experience.

*Keywords : Customer Behavior; Customer Experience; Customer Relationship Management, Marketing*

### Introduction

Thompson (2015) said "Customer Experience Is the New Competitive Battlefield", Greater competition and growing consumer power have eroded traditional product- and service-based differentiation, forcing firms to seek new, more durable forms of competitive advantage.

PT. Telekomunikasi Indonesia, Tbk. (Telkom) as the most dominant telecommunication players in Indonesia, with the company vision: "Be the King of digital in the region", has been committed to providing end-to-end services with a variety of customer-oriented digital experience solutions and customer experience has become one of Telkom's focus in the last 2 years.

In early 2015, Telkom launched IndiHome, a triple play fiber optic fixed broadband service consisting of home phones, high-speed internet and IPTV. Telkom believes that IndiHome's service prospects are excellent. In the

future, the need for high quality fixed broadband services will be increasingly needed along with the growth of the middle class in Indonesia.

To ensure IndiHome's customer experience, Telkom conducts Customer Satisfaction and Loyalty Survey (CSLS) every year. Indicators measured are Customer Satisfaction Index (CSI) and Customer Loyalty Index (CLI), but Smith & Wheeler (2002) put customer experience as beyond satisfaction. Even according to Schmitt (2003), customer satisfaction is "the devil in disguise" because it often diverts the management's proper focus to the customer.

Measurement of customer experience using academically proven methods has not been done by Telkom. In addition, the key success parameters of Customer Experience has also not been established and it became one of the main concerns of Telkom CEO in early 2017.

### Problem Statement

According Lemke et al. (2006) process of customer's problem solving is one factor that can affect customer experience. Kotler (2016) added that companies that want to form strong relationships with their customers should make it easy for customers to connect with competent company staff and express their needs, perceptions and grievances.

Corporately, Telkom recognizes the importance of customer experience, not only to improve customer satisfaction and maintain loyalty, but also to improve business results in operations and finance. Several strategic initiatives have been taken to provide excellent customer experience. Measuring CSI and CLI, monitoring and evaluating of problem handling achievement, and measuring the performance of IT tools periodically are some strategic steps that undertaken.

Although CSI and CLI of Telkom customers show an increasing, as well as indicators that related to the complaint handling show improvement, but the number of recurring disturbances – gangguan berulang (GAUL) is still above of the company target which can be seen in the following figure.

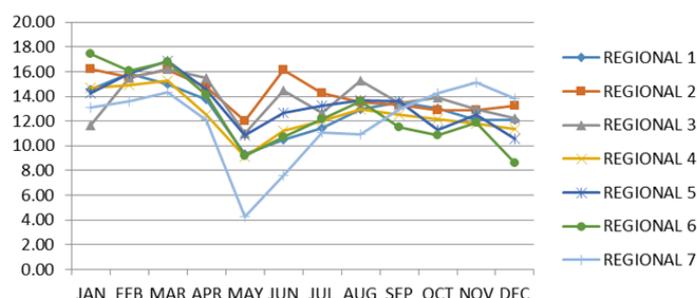


Fig. 1. Number of IndiHome GAUL January – December 2016 (Telkom's internal data)

Customer expression through reader letters, social media, discussion forums on the internet and mailing list also shows there are still feeling bad experience of IndiHome's customer handling. Some of them can be seen in the following figure.



Fig. 2. Customer's expression on several online media

## Research Questions and Objectives

In general, this research aims to measure customer experience of IndiHome customers in the city of Jakarta, Bandung and Surabaya against the complaint handling process that reported through all the Telkom's customer channels using Customer Experience Quality (EXQ) model from Klaus & Maklan (2013). In detail, the research was conducted to answer the research questions as follows:

- How the customer experience of IndiHome's complaint handling process?
- How much influence of customer experience on customer satisfaction?
- How much influence of customer experience on customer loyalty?
- How much influence of good customer experience can make customers do positive word-of-mouth?

Bring up the research questions, the objectives of this research are 1) to measure customer experience of IndiHome's complaint handling process using Customer Experience Quality (EXQ) model from Klaus & Maklan (2013); 2) to know the influence of customer experience on customer satisfaction; 3) to know the influence of customer experience on customer loyalty; and 4) to know the influence of good customer experience on customer word-of-mouth behavior.

## Literature Review

### *Customer Experience*

Meyer (2007) defines customer experience as the internal and subjective response of customers who make direct or indirect contact with a company. Direct contacts generally occur in the purchase, use, and service process and are usually initiated by the customer. Indirect contacts most often involve unplanned meetings with a representative of a company's product, service or brand and take the form of word-of-mouth or criticism, advertising, news, reviews, and so on.

In their research, Lemke et al. (2006) found 8 factors that affect customer experience, namely 1) Accessibility, consumer convenience in product interaction and access; 2) Competence, competencies owned by the product provider; 3) Customer Recognition, consumer's feeling that his presence is known and recognized by the product provider; 4) Helpfulness, consumer's feelings about his ease of asking for help; 5) Personalization, consumer's feeling that they receive the treatment / facility that makes consumer comfortable as an individual; 6) Problem solving, consumer's feeling that their problem is solved by product provider; 7) Promise fulfillment, fulfillment of promise by the product provider; and 8) Value for Time, consumer's feeling that their time is valued by the product provider.

### Customer Experience relation with Customer Satisfaction, Customer Loyalty & Word of Mouth Behavior

Smith & Wheeler (2002) put customer experience as beyond satisfaction. Even according to Schmitt (2003), customer satisfaction is "the devil in disguise" because it often diverts the management's proper focus to the customer. Many studies show that the customer experience has a significant positive effect on customer

satisfaction. Mano & Oliver (1997) show that emotional experience in satisfaction has a significant positive effect. Venkat (2007) proves that the customer experience has a significant positive effect on customer satisfaction.

Oliver (1997) found that experience behavior has a significant effect on customer loyalty. Research Biedenbach & Marell (2010) also shows that the customer experience has a positive influence on all dimensions of brand equity, which means that the customer experience is directly proportional to brand loyalty. Kotler (2016) said that satisfied customers will buy back and tell others about their good experience, while disgruntled customers will switch to competitors and will also tell their bad experiences to others.

### Customer Experience Quality (EXQ) Model

In their article, Klaus & Maklan (2013) asked whether market researchers are using the right steps to help their companies improve customer experience as their research background to find new measurement models for customer experience. They further argue that customer experience is conceptually different from the quality of service and therefore requires a more appropriate new measurement model.

Maklan & Klaus (2013) stated that the core of the measure of customer experience is as follows:

- Customer experience is assessed as an overall perception by customers and not as a gap to expectations..
- Customers' assessment is based on overall value in use and not just a summation of performance during individual service episodes..
- The measure of experience has a broader scope than that proposed by SERVQUAL. It includes emotions and peer influences.
- Experience begins before service encounters and continues after the encounters.
- Experience is assessed against service encounters across all channels.
- An ideal measure should link more directly to customer behavior and business performance than do either SERVQUAL or customer satisfaction.

Maklan & Klaus (2013) introduced a new measurement of customer experience that is Customer Experience Quality (EXQ) as shown below.

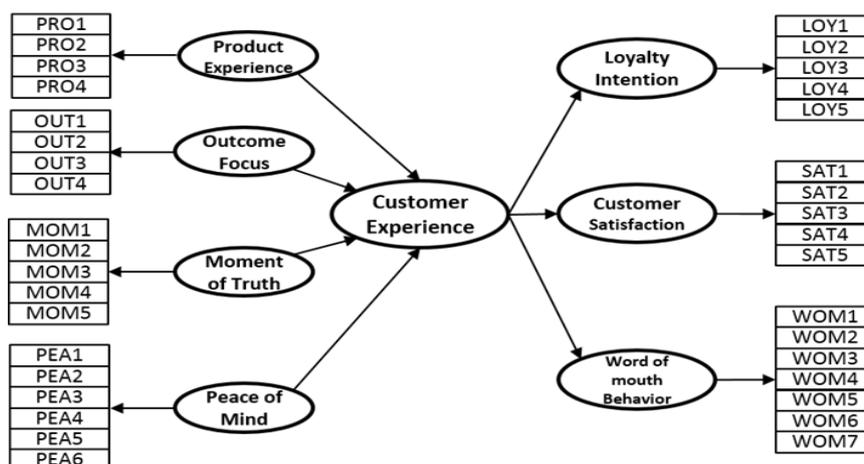


Fig. 3. Conceptual model of Customer Experience Quality (EXQ)

In their research, Maklan & Klaus (2013) measured customer experience with EXQ model using customer from mortgage companies, fuel and service stations, retail banking and luxury goods, that has different condition and situation from telecommunication companies such as Telkom, so it is necessary to test hypothesis before Telkom used EXQ model to measure Telkom's customer experience.

The hypothesis for measuring customer experience of IndiHome's complaint handling as follows:

- H1: Customer Experience has a significant positive impact on Customer Satisfaction.
- H2: Customer Experience has a significant positive impact on Loyalty Intentions.
- H3: Customer Experience has a significant positive impact on Word of mouth Behavior.

## **Research Methodology**

### *Data Collection and Processing*

Primary data in this research are obtained from survey uses an online questionnaire that was sent through Google Form of IndiHome customer in Jakarta, Bandung and Surabaya. Other data is collected using several methods, such as literature study and interview.

The literature study was conducted to collect literature references on marketing theory, especially regarding the concept of customer experience. Interviews with experts were conducted to validate the content of the questionnaire which was the result of translating and enriching questionnaires from Maklan & Klaus (2013). Interview conducted with experts of Marketing Management and experts on Customer Relationship.

In this study, researchers used non-probability sampling, namely quota sampling. The population in this study was IndiHome customers who had complaint their IndiHome's disturbance in Jakarta, Bandung and Surabaya with 400 samples.

Questionnaires are arranged based on items related to the variables studied, using the Likert's Summated Rating (LSR) method, by confronting a respondent with a statement and respondents being asked to provide a response, each of which has a weighted value / score.

### Validity and Reliability

Validity and reliability tests were conducted prior to the questionnaire distributed to the respondents of the study. Content validity or logical validity was done to measure how far the items used were able to logically measure the research variables according to what should be measured.

Related to the content's validity, content of the questionnaire in this study adopted items that have been there from previous research from Maklan & Klaus (2013) which translated into Indonesian language and then validated by experts of Marketing Management and experts of Customer Relationship.

Validity check of pilot data was conducted by calculating Pearson Product Moment is using IBM SPSS version 22. The instrument is valid if the correlation coefficient  $\geq 0.4$  (Guilfort 1956 in Indrawati 2015). The result of calculation of validity test of 40 pilot responder on each variable shown that all correlation coefficient  $\geq 0.4$ .

The Reliability Test was done using Alpha Cronbach measurement. Alpha Cronbach's coefficient should be at least 0.70 to indicate that the questionnaire has a pretty good level of reliability (Hair et al, Kaplan & Saccuzzo Nunnally & Bernstein, Pedhazur & Pedhazur, in Indrawati, 2015). The calculation results using IBM SPSS version 22 shows the Alpha Cronbach coefficient of all variables  $> 0.70$ .

## Research Result & Discussion

### Descriptive Result

In analyzing data with descriptive method, data was computed to get the mean value or the score of respondents' that answered each of the variable. The mean value than translated into several qualities, the mean value which had a score ranging from 20% to 36% is considered to be very low, above 36% to 52% considered to be low, above 52% to 68% considered to be medium, above 68% to 84% considered to be high, and above 84% to 100 considered to be very high. The result of scoring showed on Table 1 below.

Table 1. Summary of Descriptive Result

Variable	Total Index	Category
Peace of mind	66%	Medium
Moment of truth	71%	High
Outcome focus	61%	Medium
Product experience	73%	High
Customer satisfaction	59%	Medium
Behavior of Loyalty intention	64%	Medium
Word of mouth behavior	63%	Medium

The statistical results in Table 1 show that the moment of truth and product experience variables are included in the high category, which indicates the respondent gives a good perception on those variables. While other variables included in the medium category that indicates respondent fill that there is nothing special in the peace of mind, outcome focus, customer satisfaction, loyalty intention and word of mouth behavior related to IndiHome complaint handling process.

#### *Measurement Model Assessment*

To measure convergent validity can be used loading factor and average variance extracted (AVE). The value of loading factor and AVE should be more than 0.50 (Hair et al 2010 in Indrawati 2015) to show an item in a factor having convergent validity. The loading factor and AVE results of PLS in this study fulfilled the requirements, all variable has loading factor and AVE above 0.50.

Discriminant validity can be calculated based on the cross loading value of the manifest variable against each latent variable. According to Ghozali (2012), an indicator is said to be valid if the indicator of a construct has a correlation value to its construct is greater than the value of correlation with other constructs. PLS calculation results show that the indicator loading factor to latent variable itself has greater value when compared with loading factor to other latent variables, so it can be concluded that the model has good discriminant validity.

The value of Composite Reliability and Cronbach's Alpha is used to assess the reliability of each construct of the study. A construct is said to be reliable if the value of Composite Reliability is  $> 0.70$  and Cronbach's Alpha value  $> 0.70$  (Hair et al, Kaplan & Saccuzzo, Nunnally & Bernstein, Pedhazur & Pedhazur, in Indrawati, 2015). The value of Composite Reliability and Cronbach's Alpha in this study based on SmartPLS calculation results greater than 0.70 so it shows that all construct variable is reliable.

#### *Structural Model Assessment*

The structural model represents the relationship between the latent variables used in the study. The structural model in this study involves an exogenous latent variable that is Customer Experience Quality (EXQ) and three endogenous latent variables: Customer Satisfaction (SAT), Loyalty Intentions (LOY), and Word of mouth Behavior (WOM).

In PLS, the accuracy of the proposed model can be measured by using the Path Coefficient (PC) and R-squared ( $R^2$ ) criterion. The path coefficients should have t-values of at least 1.64 to be considered significant at the 95%

confidence level (Chin 2010, Urbach 2010). The t-values are then obtained using re-sampling techniques, such as bootstrapping (Chin 2010, Urbach 2010). The value of the path coefficient and t-statistic of the model as in the following table.

The magnitude of the effect of exogenous latent constructs on endogenous latent constructs is represented by the value of  $R^2$  in each endogenous latent construct. In this research, the value of  $R^2$  obtained from Loyalty Intention (LOY), Customer Satisfaction (SAT) and Word of Mouth Behavior (WOM) construction can be seen in the following table.

Table 2.  $R^2$  value on endogenous latent constructs

Endogenous Latent Constructs	$R^2$
SAT	0.674
LOY	0.654
WOM	0.612

According to Ghozali (2012),  $R^2$  yield of 0.67 indicates that the model is categorized well. The  $R^2$  yield of 0.33 indicates that the model is categorized as moderate. While the  $R^2$  result of 0.19 indicates that the model is categorized as weak. The value of  $R^2$  in the table above shows that the model substantially explains the variance in Customer Satisfaction, Loyalty Intention and Word of Mouth Behavior.

#### Hypothesis Result

Estimated values for path relation in structural model is seen from its significant value. This significance value can be obtained by bootstrapping procedure. Assess the significance of the hypothesis by looking at the value of parameter coefficients and the value of t-statistic significance of the bootstrapping report. Confidential level in this study was 95%, t-statistic should have at least 1.64 to be considered significant. The statistical estimation results are described as follows.

Table 3. Estimation result of Path Coefficient and t-statistic

Path	Path Coefficient	t-Statistic	Conclusion
Customer Experience → Customer Satisfaction	0.82	20.56	Significant
Customer Experience → Behavior of Loyalty Intention	0.81	17.97	Significant
Customer Experience → Word of Mouth Behavior	0.78	18.21	Significant

#### Conclusion and Implication of Practice

Based on the empirical result, this study concluded that The customer experience on IndiHome's complaint handling process shows that respondents feel that the moment of truth and product experience variable provides a good experience, while for peace of mind, outcome focus variables, respondents feel did not provide good experience. Customer Satisfaction is influenced by 67.4% by Customer Experience, while Loyalty Intention is influenced by 65.4% by Customer Experience and Word of Mouth Behavior influenced by 61.2% by Customer Experience.

Referring to the findings, this study suggests that Telkom can use the Customer Experience Quality (EXQ) model from Maklan & Klaus (2013) to measure Telkom's customer experience and base on that measurement Telkom can establish the key success parameters of Customer Experience.

## Limitation of Study

Measurement of customer experience is still for the complaint handling process (assurance process), not to other processes that involve and impact on customers such as customer installation processes for IndiHome subscription (fulfillment process) and billing and payment processes, so it still needed further research in order to know the customer experience for the whole process for Telkom's customers.

Respondents in this research are still in 3 cities that are Jakarta, Bandung and Surabaya, so still need to do further research for other cities in order to get the picture of the customer experience of Telkom customer as a whole.

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# Implementation of Integer Programming to Determine the Amount of General Practitioner for Respon Darurat Kesehatan Program, A Case Study at Layanan Kesehatan Cuma-Cuma Jakarta-Banten, Dompot Dhuafa

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## Abstract

Human resource is one of many resources that needs to be managed well. This includes the amount of human recourse that is considered most efficient and effective for a company or organization. This can be achieved mathematically with various calculations including Integer Programming. The purpose of this study is to determine the minimal amount of general practitioner needed to fulfill the demand of Respon Darurat Kesehatan (RDK) Program from Layanan Kesehatan Cuma-Cuma (LKC) Jakarta-Banten, Dompot Dhuafa using Integer Programming. The expected finding is the amount of people that needs to be hired in order to fulfill the operational demand of RDK program, LKC Jakarta-Banten, Dompot Dhuafa. The result shows that Integer Programming can be used to determine the amount of human resources. The model used in this study could be replicated and used in various cases in many sectors.

*Keyword: Linear programming, human recourse, amount of general practitioner*

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## Background

Respon Darurat Kesehatan (RDK) is a one of the programs initiated by Layanan Kesehatan Cuma-Cuma (LKC) Dompot Dhuafa. This program is a form of mobile health services for poor patients. Activities in this program includes examination and basic management of patients at home (home visit), transportation to and from medical facilities, administrative advocations for patients who do not have proper documentation and to manage new Dompot Dhuafa member applications for patients that need access to free health services. (Uyang, 2016) These services are prioritized for patients in need of emergency services but do not rule out other cases if resources are sufficient.

In carrying out these tasks, the scope of work of RDK is divided according to region. One of the RDK region is the Jakarta-Banten RDK region with a very wide working area covering up to 10,324.5 km<sup>2</sup>. Currently, RDK Jakarta-Banten Region has one doctor, one nurse and two drivers.

The enormous coverage of region with a high number of poor people, large workloads and limited human resources are major challenges in the implementation of the Jakarta-Banten RDK program. Therefore, RDK plans to add human resources in order to expedite the operation of RDK. This includes hiring more general practitioners (GPs). This addition needs to weigh the cost effective of adding more employees.

Various mathematical formulations could be used to determine the most effective and efficient amount of GPs that needs to be hired to meet current RDK operational needs. In this study, we tried using Integer to solve this problem.

## Literature Review

Management decisions are often related to the decision to seek the most effective formulation in the use of various resources. These resources include human resources, raw materials, equipment or machinery, services,

etc. This decision can be taken with the help of various mathematical calculations.

Linear Programming (LP) is a mathematical technique established to assist in planning and decision making on resource allocation. At first, these mathematical calculations were used and developed in the military field but later on was used also by various sectors. Use of LP can be done if the case has the following characteristics. (Render, Stair, & Hanna, 2012)

- The goal to maximize or minimize

All problems have a goal to maximize or minimize such as maximizing profits and decreasing resource use while still obtaining the most effective results. This is called the objective function which must then be formulated clearly in a mathematical form.

- Has constraints

LP can only be used in conditions with constraint or limitations. These constraints can be in the form of limited human resources, limited raw materials, limited funds and etc.

- Alternatives are available

There are several alternative conditions that can be selected as the best condition or scenario. The best conditions are sought using LP.

- Linear mathematical equation

A linear mathematical equation means that all mathematical formulations that are made must be in the first degree.

LP can be used in various scenarios. LP can be used in the field of marketing, production, transportation scheduling, finance, use of raw materials and so forth. LP can also be used to solve the problem of scheduling human resources including in the health field. (Satheeshkumar, Nareshkumar, & Kumaraghuru, 2014).

Unlike certain materials or resources that can be divided, to calculate human resources the end result of the calculations should be an integer. This sometimes could not be achieved using LP and it also incorrect to manually round up the decimal results. This is where another type of programming comes to hand. Integer programming (IP) has the same principles as LP but ensures that the solution is in integer. The formulation of IP can be completed either by manual calculation with the help of graphs or by using computerization. The use of graphs is intended for simple problem formulas such as cases with two variables. In the case of more than two variables, IP can use either Excel's solver or QM for Windows Computer Program. (Render, Stair, & Hanna, 2012)

In this study, IP is used to determine the minimum number of general practitioners most effectively needed to meet the operational needs of RDK.

## Methodology

### Model Description

The demand of GP for RDK operations are as follows.

Table 1. Model Description

No	Day	Number of GPs needed
1	Monday	3 general practitioners
2	Tuesday	2 general practitioners
3	Wednesday	2 general practitioners



4	Thursday	3 general practitioners
5	Friday	2 general practitioners
6	Saturday	2 general practitioners
7	Sunday	2 general practitioners

RDK activities take place seven days a week. Every doctor should have two days of breaks in a row every week.

#### *Objective Function*

The objective function of this study is to determine the minimum number of GPs needed to meet the demand of GPs for RDK program from LKC, Dompot Dhuafa.

#### *Constraint*

Constraints of this model are as follows.

- Monday has to have at least 3 GPs or more
- Tuesday has to have at least 2 GPs or more
- Wednesday has to have at least 2 GPs or more
- Thursday has to have at least 3 GPs or more
- Friday has to have at least 2 GPs or more
- Saturday has to have at least 2 GPs or more
- Sunday has to have at least 2 GPs or more
- Every doctor should have two days of breaks in a row every week.

#### *Total Formulation of Problem*

If:

- X1 = GPs working Monday - Friday
- X2 = GPs working Tuesday – Saturday
- X3 = GPs working Wednesday – Sunday
- X4 = GPs working Thursday – Monday
- X5 = GPs working Friday - Tuesday
- X6 = GPs working Saturday – Wednesday
- X7 = GPs working Sunday - Thursday

#### *Objective Function*

Minimum number of GPs required (Z) =  $X1+X2+X3+X4+X5+X6+X7$

#### *Constraint*

- $X1+ X4+X5+X6+X7 \geq 3$  (Monday)
- $X1+X2+ X5+X6+X7 \geq 2$  (Tuesday)
- $X1+X2+X3+ X6+X7 \geq 2$  (Wednesday)
- $X1+X2+X3+X4+ X7 \geq 3$  (Thursday)
- $X1+X2+X3+X4+X5 \geq 2$  (Friday)
- $X2+X3+X4+X5+X6 \geq 2$  (Saturday)
- $X3+X4+X5+X6+X7 \geq 2$  (Sunday)
- $X1,X2,X3,X4,X5,X6,X7 > 0$

#### **Results**

This model was solved using QM for Windows because its variables are more than two. Results obtained through

the program are as the following table.

	$X_1$	$X_2$	$X_3$	$X_4$	$X_5$	$X_6$	$X_7$		RHS
Minimize	1	1	1	1	1	1	1		
Monday	1	0	0	1	1	1	1	$\geq$	3
Tuesday	1	1	0	0	1	1	1	$\geq$	2
Wednesday	1	1	1	0	0	1	1	$\geq$	2
Thursday	1	1	1	1	0	0	1	$\geq$	3
Friday	1	1	1	1	1	0	0	$\geq$	2
Saturday	0	1	1	1	1	1	0	$\geq$	2
Sunday	0	0	1	1	1	1	1	$\geq$	2
Solution	1	0	0	1	0	1	1	optimal	\$4

Integer programming gave results for  $Z = 4$

### Discussion & Conclusion

The minimum number of GPs needed to meet the demand in RDK LKC Jakarta-Banten, Dompot Dhuafa can be answered using IP. Not only does it answer the amount of GPs needed but it can simultaneously help determine the schedule plan. The solution shows that LKC should hire one  $X_1$  (GP working Monday – Friday), one  $X_4$  (GP working Thursday – Monday), one  $X_6$  (GP working Saturday – Wednesday) and one  $X_7$  (GP working Sunday – Thursday). This formulation can be used with flexibility in many different settings.

### Scope for Future

The use of IP to solve the problem of the minimum number of human resources required to fill certain operational needs can be applied to various human resources in various sectors.

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## **The Role Of Internal Control Sales In Increasing Revenues In Madani Company**

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### **Abstract**

This study aimed at analyzing the implementation of internal control sales, income levels, and analyze the role of internal control sales in increasing revenue at Cikoneng Madani Company. The results of this study are expected to contribute to the development of theory related to accounting and management as a system of knowledge and also as a practice of internal control in a company.

The research method that researchers employed is descriptive method. Data collection techniques are by way of documentation, observation and research literature. While the data analysis technique is done by: 1). Analyze descriptively the implementation of internal control of sales; 2). Analyze descriptively on income level; 3). Analyze descriptively the role of internal control of sales in increasing revenue.

The results showed that the internal control of sales that have been implemented by Cikoneng Ciamis Madani companies play a positive role in increasing revenue.

Keywords: internal control, income level

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### **1. Introduction**

The current economic development and the increasing level of competition in the business world require the company to have competitive advantage in order to continue to compete. Both manufacturing companies and trading companies are required to increase sales as a key element of revenue in an effort to achieve optimal profit. Not a few companies are marginalized in the competition because it is unable to maintain the existence of their companies. Failure in such competition is usually due to very poor control. It demands effectiveness and efficiency in running various activities of the company's operations. The desire to obtain an optimal company profit is a basic intention for the company to move all the existing resources. For the achievement of such profits, then the company management requires a system that is able to control and maintain sales activities to run with the policy specified.

With the development of a company and followed by the development of the environment, the more complex activities and problems faced by the company. Hence, the management company will face difficulties in controlling various activities of the company's operations, coupled with the demands of efficiency, effectiveness and economics of the use of various resources available. It requires the management to conduct the company's operations effectively and efficiently. Therefore, it is required a system that can control from various activities of company operation.

Internal control is one of tool that can help achieve goals and to reduce risk. Implementation of internal control of sales is guided by the policies and procedures established. This requires the management to oversee the implementation of internal control of sales in order to run in accordance with policies that have been set and can achieve its objectives. Concerning well-planned internal sales control system, it is expected to have a big role in increasing the company's revenue. Here is the definition of internal control according to the Commitee of Sponsoring Organization (COSO, 2007):

Internal control is a process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories: (1) effectiveness and efficiency of operations; (2) reability of financial reporting; and (3) compliance with applicable laws and regulations.

By applying internal control, any operating activities undertaken by the company can be controlled with established policies and procedures. Thus, the possibility of risk that will be faced by company can be minimized and can give assurance that assure the achievement of set corporate goals.

Internal control of sales is carried out in the best way done by management and employees in order to achieve maximum sales. Therefore, it will obtain optimal revenue. According to the Indonesian Institute of Accountants (2012: 23.2) states that:

Revenue is the gross inflows of economic benefits arising from the normal activities of an entity during a period if such inflows result in an increase in equity not originating from an investment contribution.

Achieving targeted revenue is one of the goals expected by the company by increasing its sales volume. To increase the sales volume, the company must apply internal control of its sales well. Similarly, Cikoneng Madani Company, at which in conducting its operations must always be in accordance with the rules and policies that have been established. Internal control is very important for the company, because it is one of the critical elements of the company's success in increasing revenue.

From the aforementioned description, this research is considered important because it will be beneficial for the development of accounting and management, and also useful for the company, especially in the implementation of internal control. Therefore, the authors are interested to conduct research by analyzing the role of internal control of sales in improving the effectiveness of income. The research site is conducted in Cikoneng Ciamis Madani Company.

This study aims at: 1). Analyzing internal control of sales at Madani Cikoneng Ciamis Company; 2) Analyzing income level at Cikoneng Ciamis Madani Company; 3) Analyzing the role of the internal control role of sales in increasing revenue at Cikoneng Ciamis Madani Company.

## **2. Literature Review**

The nature of internal control comes from COSO (2007): "Internal control is a process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories: (1) effectiveness and efficiency of operations; (2) reability of financial reporting; and (3) compliance with applicable laws and regulations".

Internal control is defined by COSO (2007) as a process run by boards of directors, management and other personnel designed to provide reasonable assurance about achievement of the following three objectives: effectiveness and efficiency of activities, trustworthiness of financial reporting and compliance with statutory regulations of law.

The definition of sales by Kotler (2008: 120) is as follows:

Sales is business transaction involving the delivery (i.e giving) of commodity, as an item merchandise, in exchange for (the receipt of) cash, apromise to pay of money equivalent, or for combination of these item; it is recorded and reported in terms of amount of it such cash, promise to pay....

The implementation of sales has a close relationship with the company's goal to earn a profit in maintaining its survival. To ensure that sales activities are in compliance with policies and procedures, an adequate internal control system is required.

The purpose of internal control of sales by Arrens and James (2000: 406) is as follows:

1. Recorded sales are for shipment actually made to exiting customer (existence)
2. Recorded sales transaction are recorded (completeness)
3. Recorded sales are for amount of goods and are correctly billed and recorded (accuracy)
4. Sales transaction are properly classified (classification)
5. Sales are recorded on the correct data (timing)
6. Slaes transaction are properly included in the account receivable master file and are correctly summarized (posting & summarization).

According to Skousen et al., (2001: 112) argued that: "Revenue represents income arising from an increase in the sale of goods or services". Meanwhile Smith and Skousen translated by the translation team of Publisher Erlangga (2000: 123) suggested that: "Revenue is inflows or other increments of assets of an entity or obligations (combinations) arising from the delivery of production of goods, service providers or other activities which constitute a major operational or continuous operation of an entity".

Meanwhile, according to the Indonesian Institute of Accountants (2012: 23.2) stated that: Revenue is the gross inflows of economic benefits arising from the normal activity of an entity during a period if such inflows result in an increase in equity not originating from an investment contribution.

The amount of revenue arising from a transaction is usually determined by agreement between the company and the buyer or the user of the asset. The amount is measured at the fair value of the benefits received or received by the company minus the amount of trade discounts and volume discounts allowed by the company.

The measurement of income or revenue according to the Indonesian Institute of Accountants PSAK 23 (2012: 23.2) is as follows: "Revenue should be measured at fair value earned or received".

### **3. Research Methodology**

The method that researchers employed is descriptive method. The detailed description of the methods used include; The research stages, the research site, the observed or measured variables, the model used, the research design, as well as the techniques of data collection and analysis.

In this study, the writers conducted research on Civil Company which is located at Jalan Gegempalan RT01 / RW12, Gegempalan Village Cikoneng District, Ciamis Regency.

Research design employed by the writers is descriptive with the following steps: 1). Data collection; 2). Data analysis; 3). Explain more deeply about the research results; 4). Take conclusions and present suggestions.

Data collection techniques used in this study are as follows: 1). Documentation; 2). Observation; 3). Research Library. Furthermore, in data analysis techniques the writers used descriptive method of analysis. Those are covered: 1). Analyze descriptively the implementation of internal control of sales; 2). Analyze descriptively the level of income; 3). Analyze descriptively the role of internal control of sales in increasing revenue.

### **4. Result And Discussion**

In essence, Madani Cikoneng Ciamis company has been trying to run internal control of sales in increasing revenue with the aim of securing company property, test the accuracy and correctness of accounting data, improve operating efficiency, and adherence to the policies of the company leadership.

Meanwhile, the earnings of madani companies increase each year due to the strategy set by management in an effort to increase revenue from sales went well and smoothly.

The purpose of management creates an internal control is to protect the assets used for the achievement of corporate goals that have been set, streamline operations, produce accurate business information, encourage

employees to comply with policies and regulations that have been established and assist management in decision making.

The main purpose of the implementation of internal control of sales is to manage, secure and control the sales activities to be implemented in accordance with the policy set by management because the sale is the main source of opinion company.

Internal control of sales at Madani Cikoneng Ciamis Company has been well implemented because the elements of general internal control have been well fulfilled starting from the control environment, risk assessment, control activities, information and communication, and supervision.

Internal sales control which can generally be said to be adequate with the fulfillment of general elements of internal controls provide a role to the revenue revenue achieved it is evident that the income of Madani Cikoneng Ciamis company from year to year increased. Average annual increase of Rp. 193,287,500, - or annually increased by 6.43%.

From the results of research and discussion, it can be concluded that the internal control of sales conducted by Madani Cikoneng Ciamis company has been adequate and has helped in making the right decisions so as to provide a role in the increase in revenue achieved by Madani Cikoneng Ciamis company. Therefore, it can be said that the internal control of sales play a role in increasing revenue.

## **5. Conclusion And Suggestion**

Based on the results of research and discussion conducted on Madani Cikoneng Ciamis Company, then the writers can conclude: 1). The implementation of internal controls by Madani Cikoneng Ciamis Company is adequate because of the elements of general internal control that have been fulfilled such as: control environment (commitment to integrity and ethical values, management philosophy and operation style, organizational structure, determination of authority and responsibility, practices and policies concerning human resources) risk assessment, control activities, (adequate separation of liabilities, appropriate authority over transactions and sales activities, adequate documents and records of fiscal control over assets and recording of independent internal checks) information and communications , monitoring; 2). Madani Cikoneng Ciamis Company run the strategy set by the management to increase revenue. The income of Madani Cikoneng Ciamis from 2005 to 2009 continues to increase. The average annual increase of Rp 129,981,250 or annually increases by 7.95%; 3). Internal control of sales that have been implemented by Madani Cikoneng Ciamis companies play a positive role in increasing revenue.

Based on the conclusions that have been done by the writers and based on the description in terms of theoretical then the writers tried to give some suggestions as follows: 1). We recommend internal control of sales that have been applied in the Madani Cikoneng Ciamis Company is maintained and continuously improved, in order to achieve the objectives of the Madani Cikoneng Ciamis Company in accordance with the desired company; 2). It is better to increase revenue even better the company improves its sales strategy and implements new strategies in selling its products to increase sales volume; 3). The company to always provide training for employees, especially for marketing employees who directly communicate with customers so that employees are competent in the field of marketing. Hence, the income generated will continue to increase.

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## Supply Chain Performance Analysis on Small Medium Enterprises Using *Supply Chain Performance Assessment Tool (SCPAT)*

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### Abstract

Global competition that driven by the agreement such Asean China Free Trade Area (ACFTA), impact the small medium enterprise in each group member of ACFTA should compete each other. Indonesia as one of ACFTA member should increase their industry competitive advantage including their small medium enterprise competitive advantage to compete other ACFTA member. Supply chain strategy can be applied to enhance competitive advantage and in order to reassure that the supply chain has been performed well, it is necessary to engage a performance appraisal. This research is a quantitative research, with the confirmatory type of study to evaluate the supply chain performance of Sentra Industri Rajut Binong Jati Bandung using Supply Chain Performance Assessment Tool (SCPAT). There are 60 business units as the research sample. The samples are then grouped into three groups, namely Top Unit Usaha Rajut, Average Unit Usaha Rajut and Small Unit Usaha Rajut. The results showed that the cost dimension performance is above the average level, the time dimension is at the level of the average, while the performance of reliability dimension is low.

*Keywords : Performance; Supply Chain; Supply Chain Performance; SCPAT*

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### Introduction

Since the first time ACFTA has been officially applied, Indonesia's trade balance continues to experience a surplus from oil and gas exports but has a deficit from non-oil and gas sector. As stated in the statistical data released by the Ministry of Trade that the percentage of Indonesian exports mostly came from the non-oil sector of 84.95%, superior to the oil and gas sector <sup>[1]</sup>.

Indonesia's trade balance in the non-oil and gas sector since 2006 continues to show deficits. The condition occurred during 2006-2013, with its deficit peak occurring in 2013 at -8.288.869.8 (in thousand US dollars) compared to China. In the non-oil and gas sector, the majority of the commodities produced are from the Industrial sub-sector where the sub-sector is able to contribute 77.90% of the total non-oil and gas sector exports equal to 66.18% of the total exports Indonesia can afford <sup>[1]</sup>.

Due to the inability of small business units to compete with China which has an integrated textile industry from raw materials, textile machinery to finished products. So the domestic market is flooded with Chinese products with very competitive quality and price. Though domestic market is a potential market for small and medium garment industry which mostly focus only on domestic market <sup>[2]</sup>. As a result of TPT sub-sector include finished garment (non-knitted And knitted), fibers and yarns as well as various types of fabrics. Where apparel is in the form of knitted goods exported 2% of the total export of industrial sector <sup>[1]</sup>.

The decline in textile exports was directly proportional to the continuity of the knitting commodity business. For the amount of export of knitted goods separately, since the year 2011 the number continues to decline. Starting from the range of 3 million US \$ to enter the figure of 2 million US \$ course. This decline occurred sharply at the turn of 2015 to 2016 <sup>[1]</sup>. The impact of this decline in knitted exports was also felt by the craftsmen at SentraIndustri Rajut Binong Jati, Bandung.

Sentra Industri Rajut Binong Jati is one of ten potential industrial areas in Bandung, located in Binong Village, Batununggal Subdistrict, Bandung City. This industrial center produces handmade knitwear such as sweaters, gloves, scarves, jackets, and others.

The implementation of ACFTA affects the business continuity in this industrial center. By the end of 2011 the number of business units constantly around 400 business units with a total workforce of 8000 people. However, this number decreased rapidly in 2012 where there was a decrease of 60 units of business forced to quit the business, so th therefor industrial center is only able to absorb 5100 workers. The number of business units continued to decline until the beginning mid-2016, it was recorded only around 120 business units operating in this center. The decline is indicated as a result of imported products from China <sup>[3]</sup>.

The average problem faced by knitting craftsmen in Binong Jati related to the availability of raw materials according to market demand, cash flow of raw material suppliers - raw material factories, high raw material prices because raw materials come from other countries, the accumulation raw materials in suppliers affecting raw material prices, the possibility of defects in production and capital. The series of problems leads to the inability of domestic knits products to compete from China that have relatively lower selling prices. The advantages of China's imported products occur because the industrial supply chain in the country has been integrated, starting from the procurement of raw materials to the final consumer.

To maximize the competitive advantage of the domestic knitting industry, one strategy that can be apply is the supply chain strategy, to improve the overall competitiveness of partners in the chain<sup>[4]</sup>. This strategy aims to reduce costs, reduce capital and improve service<sup>[5]</sup>.

While supply chain strategies can assist business development and maximize competition, a business unit must prove that its supply chain activities have been performed effectively and efficiently. To finding out this criteria, an audit can be done in form of measurement and evaluation of supply chain performance [5]. This study aims to assess the supply chain performance of Sentra Industri Rajut Binong Jati Bandung using Supply Chain Performance Assessment Tool (SCPAT).

### **Supply Chain Performance Measurement**

A study by United State Agency International Development that describes the measurement of supply chain performance is not applied in this study because of its characteristics made for pharmaceutical and pharmaceutical industries [6]. Research performance (Ahmad & Yuliawati, 2013) using SCOR is considered complex if applied to objects in the form of business units (SMEs) [7]. The previous research which used as the reference base because of the suitability of the tool used is the research of Banomyong & Supatn year 2011a. Banomyong and Supatn (2011a) in a pilot test study aimed at building a supply chain appraisal tool from a variety of pre-existing theories. This research is a theoretical study that the end result is a new method offered to measure performance not implementation of performance measurement. In the study, 43 SMEs in Thailand were drawn from industrial random to wash the methods offered. The result was built Supply Chain Performance Assessment Tools (SCPAT) as a tool offered for performance appraisal [8]. Further research with different purposes was also carried out by Banomyong and Supatn in the same year, both of which examined the 25 SMEs then benchmarked with a Thai company as a SCPAT implementation from the SME's point of view. To see how this tool can be applied. The results of this study indicate that Top Thai Company companies have dimensions of world class equivalent cost different than 25 SMEs are also studied. The time dimension is also surpassed by the Top Thai Company, even the group's reliability towards the SME group has a wide variety. The performance measurement of 25 SMEs is from a variety of industries, whose benchmark is a Top Thai Company, not another group in the same industry so it has not been able to describe the implementation of SCPAT if applied to organizations within the same industry [9].

Research on the performance of SME Binong Jati using SCPAT applied to 60 units of knitting business in Sentra Rajut Binong Jati. Because it is a central unit, the object under study has the same characteristics, in contrast to the research of Banomyong and Supatn that uses industry randomly. This research is an implementation of



performance appraisal using SCPAT instead of theoretical development such as research that has been done first. This study uses primary data from the results of the collection using questionnaires and interviews.

SCPAT aims to assess key activities of small and medium enterprise supply chains (SMEs) at the operational level with different approaches for performance assessment. This assessment framework refers to nine supply chain activities such as; Customer service, demand planning and forecasting, purchase and procurement of raw materials, inventory arrangements, order processing and logistics communications, material handling and packing, transportation, site selection for facilities, warehousing and storage, handling of product returns and reverse logistics<sup>[8]</sup>.

Table 1. SCPAT Matrix

Supply Chain Activities	Cost Dimension	Time Dimension	Reliability Dimension
Customer Service & Support	Customer service cost per sale	Average order cycle time	DIFOT (CS and support)
Deman Forecasting & Planning	Forecasting and planning cost per sale	Average forecast period	Forecast period
Purchasing & Procurement	Procurement cost per sale	Average procurement cycle time	Supplier in full and on time
Inventory Management	Inventory cost per sale	Average inventory days	Out of stocks rate
Order Processing & Logistic Communications	Order processing cost per sale	Average order processing cycle time	Order accuracy rate
Material Handling & Packaging	Value of damaged good per sale	Average materisl hsndling and packaging time	Damage rate
Transportation	Transport cost per sale	Average delivery cycle time	DIFOT (transportation)
Facilities Site Selections, Warehousing & Storage	Facility cost per sale	Average inventory cycle time	Inventory accuracy
Return Goods Handling & Riverse Logistics	Return goods value per sale	Average cycle time for customer return	Rate of returned goods

Source: Banomyong dan Supatn (2011)

There are three levels of supply chain performance: superior, similar, and inferior. The superior level indicates a high performance for a supply chain activity against a predetermined standard. A similar level means supply chain performance is within the average value range of the performance benchmark. Inferior levels represent low performance under the benchmark performance. SCPAT developed in order to understand more deeply about the performance or supply chain performance at the company doing benchmarking to see the differences and compare the assessment results.

### Methodology

Based on the method and purpose of the research, this research is classified as descriptive quantitative research, with exploratory type of investigation. There isn't intervention to the existing data due to the research. Research is done only by collecting data from related sources without any modification. The unit of analysis study analysis is an organizational unit covers number of business units in Sentra Industri Rajut Binong Jati. While the time of research implementation, conducted by cross section. The calculation use several equation such as:

#### 1. Transportation cost per sale

Based on the mode of transportation used by the knitting business unit at Sentra Industri Binong Jati using Small package carriers with average quota of maximum delivery 300 kg using single van truck [10].

## 2. Calculating the Cost of Warehousing Per Sale

Warehousing rental costs include area, price per meter and operating cost [11].

## 3. Calculating Damage Per Sale Value

According to [12] Damage product can affect the cost of goods sold and / or income in accordance with the conditions of when the damage occurred, namely; Damage during production in the form of No finished product or irregular product and damage after production in the form of casualty lost. Damage cost is obtained from the amount of damage multiplied by market price;

$TDC = \text{Damage product} * \text{Price}$

## 4. Calculate the Cost of Return Per Sale

Total consumer goods returned by consumers divided by total sales [8]

## 5. Calculating Order Cycle Time

Order cycle time (OCT) encompasses all time related events that generate the toll time required for customers to receive their orders [5]. So the calculation of total order cycle time as follows:

$TOCT = \text{Order transmittal} + \text{Order processing \& assembly} + \text{Additional stock acquisition} + \text{Delivery time}$

## 6. Calculating Order Processing Cycle Time

Order processing cycle time represents several activities including customer order cycles, especially on order preparation, transmittal order, order entry, order filling and order status reporting [5]. So for kiting the total order processing cycle time knitting business unit in Sentra Binong Jati can be done with the following formulation:

$TOPCT = \text{Order entry} + \text{order filling} + \text{Order status reporting}$

7. Delivery cycle time according to Boldtoff (2003), Gunasekaran et al (2001), and Beamon (1999) in [8] is the time between starting to deliver the product until the product arrives at the consumer's location.

## 8. Calculating Material Handling & Packing Cycle Time.

Material handling includes a short distance movement that usually occurs in a warehouse or building [13]. MH is not applied by artisans in Binong Jati because the production place also applies as storage place of raw material and finished product in process of packaging [3]. While packing cycle time in Banomyong and Supt in 2011 includes the time to start packaging the product.

## 9. Calculate DIFOT Transportation

Transportation DIFOT rate is the percentage of items that have been delivered (delivered) in full and on time to customers [14].

$\text{DIFOT transportation} = (\text{Number of orders delivered to main customers}) * (\text{Number of orders delivered to customer})$ .

## 10. Calculate Damage Rate



Damage rate can be calculated from the number of defective products against the number of orders in a dozen [6]

#### 11. Calculating Rate of Returned Goods

Rate of return goods is the proportion of poor-quality good incurred by damage, misplaced, broken, expired items, etc [11] which can be calculated by:

$$12. \text{Rate of return goods} = \text{Number of return goods} / \text{Number of delivery goods.}$$

### 4. Findings and Analysis

The previous research to measure supply chain of SMEs applied to variety industries in Thailand. The result found that the current supply chain system that have been use are not able to support or even sustain competitiveness as the overall performance is on par with those in the database but still very far from the major Thai company[6]. Base on the dimensional cost dimension of 43 Thai SMEs shows that cost superiority and advantage ae not exist over their competitors as their costs are on average at a similar level. The time dimension of SMEs group is only has superiority in the delivery cycle time. In the reliability dimension, it was observed that the discrepancy between the group average and the major Thai company was wide.

Top Unit Usaha Rajut is a group used as a benchmark of this performance appraisal. Top Group consists of 27 units of knitting business with the largest number of manpower of the total sample under study. In KPI the overall cost dimension shows good performance levels above the average with reference to 2 KPIs including at the superior level. Transportation costs are far away 1% ie in the range of 0.28%, followed by the return rate of goods that are below 0.5% with the percentage of 0.05%. At the level of Similar there are also two KPI each is the warehousing cost of 0.53% of total sales and the level of product damage by 0.24%. 5 Other KPIs can't be determined in value due to the unavailability of the relevant data.

From the overall 6 KPIs that can be measured on the time dimension of 2 KPI groups Top procurement cycle time that takes less than 1 day and packaging cycle time with the average time spent each 0.02 days is still less than 1 day. 1 KPI entered into a similar level ie cycle time order that required 9.6 days in the process. And the remaining two KPIs are at the inferior level, ie order processing, delivery and return goods cycle time. OPCT takes 3.9 days, while DCT spends 3.4 days and the return process can be completed in 5.3 days.

Reliability is the lowest performing dimension based on the reference value using SCPAT, where from 4 KPIs that can be measured there are 2 KPIs that are under the reference that is at the inferior level. The superior level is a damage rate of 0.19% along with the return rate of 0.074%. While the two KPIs that are in low performance level are accuracy order with 88% value and DIFOT of transportation equal to 68% far below 80%.

Based on the above exposure, SCPAT diagram can be shown the results of the measurement of each dimension. The cost dimension shows the cost measurement of existing KPI elements. The results of the assessment for each group are shown as follows:

Table 2 The Result

KPI Cost Dimension	Group					
	Top Group	Level	Average Group	Level	Small Group	Level
Transportation cost per sale	0.28%	Superior	0.85%	Superior	0.78%	Superior
Warehousing cost per sale	0.53%	Similar	0.71%	Similar	1.17%	Similar
Value Damage per sale	0.24%	Similar	0.42%	Similar	0.50%	Similar
Return goods value per sale	0.5%	Superior	0.12%	Superior	0.30%	Superior



KPI Time Dimension	Group					
	Top Group	Level	Average Group	Level	Small Group	Level
Order cycle time	9.6 days	Inferior	8.14 days	Similar	12.3 days	Similar
Procurement cycle time	1 days	Superior	1 days	Superior	1 days	Superior
Order processing cycle time	3.9 days	Inferior	2.6 days	Inferior	5.2 days	Inferior
Delivery cycle time	3.3 days	Inferior	2.9 days	Similar	3.8 days	Inferior
MH & Packaging cycle time	0.02 days	Superior	0.01 days	Superior	0.006 days	Superior
Cycle time for customer return	5.3 days	Inferior	3.8 days	Inferior	3.06 days	Inferior

KPI Reliability Dimension	Group					
	Top Group	Level	Average Group	Level	Small Group	Level
Order accuracy rate	88%	Inferior	87%	Inferior	83%	Inferior
DIFOT transportation	68%	Inferior	76.2%	Inferior	46.9%	Inferior
Damage Rate	0.19%	Superior	0.39%	Superior	0.54%	Superior
Rate of returned	0.074%	Superior	0.133%	Similar	0.512%	Similar

The value of supply chain performance against cost dimension. However, after experiencing adjustments with business conditions at the Industrial Sentra Rajut Binong Jati then there are some activities that are not performed by the craftsmen so it is not possible to do related performance measurement. The following performance cost dimensions based on supply chain activities conducted in the industrial center:

Based on the calculation of transportation costs, the three groups of knitting business units are at the superior performance level ie the amount of transportation cost is below 1% of total sales. Top Group Rajut averaged 0.28% transportation cost. Average Group averages about transportation costs of 85%, in line with the previous two groups of Small Group on average spend 0.78% of the total sales. The third groups percentage are at a superior level that is below the maximum reference of 1% of total sales.

KPI warehousing cost per sale shows the average cost incurred by each group of business units ranging from 0.5-8% of sales achieved. Average cost of warehousing for Top Group is Rp. 223,776 of total sales amounted to 0.5%, Average Group cost of warehousing is 0.70%. While the Small Group average cost of warehousing is 1.17%. Performance of KPI value damage per sale Sentra Industri Rajut Binong Jati shows similar performance level, the percentage of each group from top, average, and small is 0.24%, 0.42% 0.49%, respectively. Top Group shows superiority performance from remaining groups.

Overall cost dimension performance of Sentra Industri Rajut Binong Jati can be assessed based on KPI transportation cost per sale, KPI warehousing cost per sale, KPI value damage per sale and KPI returned goods cost per sale. Those KPIs showing the result that all three groups are simultaneously on The same level of performance for each KPI of the total of 4 measurable KPIs. All business unit groups have been able to emphasize the costs of transportation, warehousing, damage products and return goods.

The time dimension shows the time measurement of existing KPI elements. There are nine KPI related time, but only 6 KPIs are performed in this Sentra. KPI Order cycle time shows the difference between Top and Average Group performance levels are at similar level with the required time of 9.6 and 8.14 days. While small groups are at the inferior level with a time of 12.37 days. Procurement of raw materials can be completed in less than one day. KPI Order processing cycle time shows that level of performance. The three groups are inferior. Each Top, Average and Small Group spends 3.9, 2.6, and 5.2 days. The KPI Delivery cycle time shows the Top and Small Groups are at inferior levels for 3.3 and 3.8 days. While the Average group is superior for 2.9 days, there is a similar level. The next KPI is Material Handling & packaging cycle time Top Group takes time for 0.02 days for packaging. The Average and Small groups each took 0.01 and 0.006, so the three groups were at a superior level of performance. The last measured KPI is Cycle time for customer return time to receive the return item until

the delivery time of replacement goods. Based on the assessment results, all three groups for KPI cycle time for customer return are at the inferior performance level, where each group takes 5.3, 3.82 and 3.6 days.

The time dimension indicates that there is superiority in which the KPI order cycle time Top Group of Rule and the Average Rule of the Knitting Act are at a similar level, superior to the Small Rule of the Knit Group located at the inferior performance level. KPI delivery cycle time also points to an advantage, where the Average Group can be processed with a shorter period of time than the Top and Small Groups.

Finally, measurable dimensions using SCPAT are reliability dimensions that measure reliability against existing KPI elements. There are four activities that are implemented in industrial centers Rajut Binong Jati. The first KPI was the KPI Order accuracy showing the three groups were at the level of inferior performance. No group is able to achieve an order accuracy of 90%. KPI DIFOT Transportation also shows performance at the inferior level, where there are no groups with DIFOT transportation above 80%.

KPI Damage rate indicates that Sentra Industri Rajut Bnong Jati able to minimize the level of production damage, so that the performance level of this industrial center is at the superior level. Each percentage of each group from Top to Small is 0.19%, 0.39% and 0.54%. KPI rate of returned goods shows that the Top Group's return rate is lower by 0.074% better than the other two groups. So that the Average and Small groups are at the same level, with the percentage of returns of 0.13% and 0.512%, respectively. Overall there is superiority in the reliability dimension, Based on the KPI rate of returned goods, the Top Rule of Rajut is superior when compared to the Average and Small Groups.

## **Discussion and Conclusion**

The implementation of ACFTA by the government has an impact on the tight competition between domestic knitting products and knitting products originating from China. It is also felt directly by the craftsmen knitting in Industrial Sentry Rajut Binong Jati. Competition occurs because knitting products from China have competing prices with quality that is not much different. The problems faced by domestic craftsmen are related to the price competition, which is due to the high cost incurred so that the set price is also higher than China. China's competitive advantage is due to supply chain integration, starting from the provision of raw materials to the spearhead to the final consumer. Supply chain strategy is considered to be able to increase the competition because it sees its purpose to push the cost, capital and service improvement. Thus an effective and efficient supply chain is indicated to be a solution to the problems facing knitting craftsmen. To be able to determine the effectiveness and efficiency of the supply chain must first be measured the performance of the supply chain. So with this assessment is expected to see the performance of the supply chain of craftsmen in the Industrial Sentry Rajut Binong Jati.

Supply chain performance of Sentra Industri Rajut Binong Jati for Top, Average and Small UU Rajut Groups are together have performance above average based on KPI cost dimension. Including transportation cost per sale, warehousing cost per sale, value damage per sale and returned goods cost per sale. Time dimension of Top, Average and Small Groups has above average performance against the order cycle time KPI, procurement cycle time, and M.H & packaging cycle time. However, the performance level on the order processing cycle time and cycle time for customer return shows the performance that is below the reference value. This is due to the fact that productivity is determined by the number of knitting machines that have not yet matched the order and also the number of employees who operate the machine. Return of goods returns is still not considered, the tendency of the craftsmen not directly replace and focusing on the return of goods because it focuses on production itself.

In this time dimension there is superiority, where in the Average Group achieved superior performance based on delivery cycle time. This advantage occurs because the Average group can shorten the time for the delivery process. While other groups took longer to 9 to 20 hours. The Top, Average, and Small UU Rajut reliability group dimensions show performance above the average reference value against the KPI damage rate. However, based on order accuracy and DIFOT transportation KPI, the three groups are at the level of performance below the



reference value. There is no very accurate group regarding order accuracy, the three groups have not reached the 90% accuracy of their order. The DIFOT transportation has not reached 80% because the craftsmen do not have a variety of alternative modes of transportation. So if things happen that can't be controlled such as congestion, natural disasters, facilities damage etc, then the process of transportation of goods will experience delays. In the reliability dimension there is also superiority to the KPI rate of return, where the Top Group of Rajut Act shows above average performance level, superior to the Average and Small UU Rajut group.

Based on the of the research results it is necessary to increase the performance of warehousing cost where the calculation shows the warehousing cost incurred is still big enough to reach more than 0.5% of total sales. Maximize storage space to avoid wasting the cost of warehouse rental. The cost of KPI which still needs an increase is the value of the broken product where the percentage of total product damage to sales is greater than 0.1% causing this KPI still in the level of average performance only. To reduce the amount of things that can be done by artisans is to improve the skills of workers so that the possibility of errors in production can be reduced. Performance improvements to order cycle time, order processing cycle time, delivery cycle time and time for returns are required. Reducing time to order cycle time processing and order processing cycle time can be done by intensifying product outsourcing. Outsourcing decisions can shorten production time, will not increase the cost of employee and training costs, as well as support the minimization of work space utilization. Constraints on delivery cycle time are inversely proportional to cost, so the craftsman should determine the main focus on the emphasis of transportation costs or the effectiveness of delivery of goods.

For the next research can apply assessment of supply chain performance with SCPAT method to other industries. It is also desirable that further research considers the use of objects that already have systematic records related to their supply chain data. Further research is also expected to pay attention to exchange rate fluctuations and depreciation values.

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## Improving Employee Engagement at The West Wanagon Slope Stability (WWSS) Project of PT. Freeport Indonesia

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### Abstract

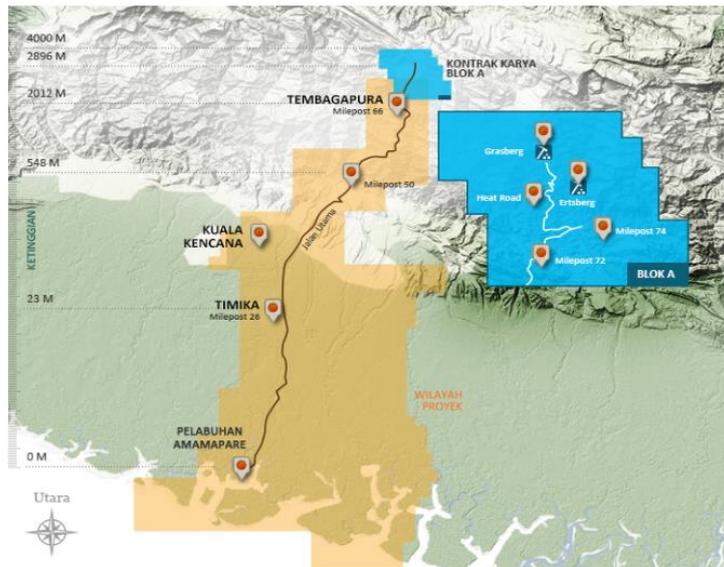
As a commitment to Indonesian government regulations on mine closure, PTFI launched the Lower Wanagon Project since January 2011 and projected will be finished in 2024. Delays in material movement potentially affect additional costs in the future. One of the cause of project delay is low rate of employee engagement. The purpose of this research are to find the factors that might affect Employee Engagement at PTFI especially in the WWSS Project, and analyze the critical factors and suggest several improvements based on critical factors to improve employee engagement. Three employee engagement models that common being used in mining company such as; Gallup, DDI, and Aon-Hewitt utilized as reference and supported by empirical studies to find the appropriate model for PTFI was conducted as a descriptive study. Based on the model, surveys that conducted combined with interviews and focus group discussions resulted in employee engagement models for PTFI. Defendant scoring to define the existing conditon about the factor through statements in questionnaire. Quality of Life factor contained living area that relatively far from nearest city and work schedule during the week and vacation schedule and allocation. Leadership factor contains ability by which individuals become conscious of ways to achieve their desired goals and develop new values. Career, Support, and Development factor contains strong performance conditions for the task, opportunities to advance more skills and chance to grow and pick up new ability and knowledge.

*Key words: Employee Engagement; Gallup, DDI; Aon-Hewitt; Mine Closure; WWSS; PTFI.*

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### 1. Introduction

PTFI has been operating for 50 years based on a Contract of Work (COW) with Government of Indonesia. Normally, PTFI produces ore more than 200,000 tons material movement per day as production result from surface mine (Grasberg open pit) and underground mine which consist of Deep Ore Zone (DOZ) and Big Gossan. Grasberg open pit is one of the largest copper and gold reserve in the world (Mahler & Sabirin, 2009:7). With its total proven ore reserve, about 1.76 billion tons contain 35.2 billion pounds of copper and 49 million troy ounces of gold, Grasberg become the backbone of PTFI since its production in 1992.



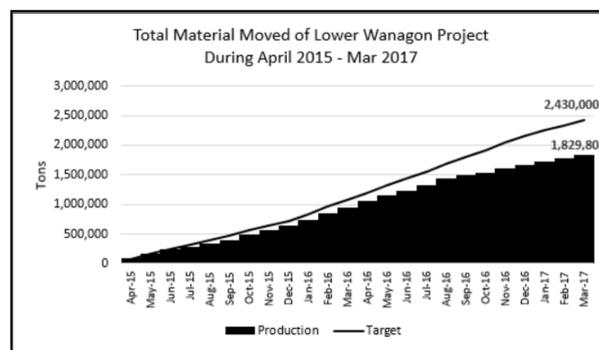
**Figure 1:** PTFI Project Area (Source: PT Freeport Indonesia, 2017)

## 2. Issues

As a commitment to the Indonesian government regulations on mine closure, PTFI launched the Lower Wanagon Project since January 2011 and projected will be finished in 2024. Long-term stability of the Lower Wanagon overburden stockpile is urgent to prevent the potential for acid rock drainage downstream, reduce the potential for failure in high seismic areas, and to meet reclamation commitments. The general aim of the project is stabilizing the overburden at Lower Wanagon through re-sloping its overburden. The total earthwork volume for this project is about move 275 Million Ton for re-sloping work, and total cost for this is approximately USD 500 Million and could be expand to USD 780 million if maximum delayed.

Based on strategic planning, the achievement of total displaced material is critical to the project to minimize erosion levels and to ensure that the project finish on schedule by 2024. By creating new organization structure for Lower-Wanagon Project since April 2015, Vice President of Surface Mine Division is expect that achievement of total material moved can meet the target.

Nevertheless, during April 2015 until March 2017 total material moved at Lower Wanagon Project is 24.7% behind than the target. Actual total material moved for this project is 1,829,804 Tons, while the target is 2,430,000 Tons. With this rate, it is projected that the project will be finished in 2027 instead of 2024.



**Figure 2.** Total Material Moved of Lower Wanagon Project During April 2015 - Mar 2017 (Source: Grasberg Dispatch)

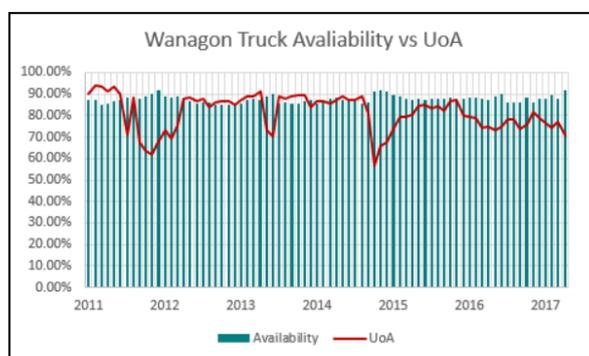
Delays in material movement potentially affect additional costs in the future. Thus, based on current achievements, the Vice President of the Mine Surface Area requires an evaluation of the project organization's performance.

In terms of cost, during 2011 to 2016, the Lower Wanagon project has cost the actual cost of USD 99 million from the initial total budget of USD 500 million until the project is completed.

Compared to the initial budget it is still under the budget but compared to the actual progress of the project, the cost is already over about USD 40 million and projected to be approximately \$280 million even higher by the end of the project.

In addition to the direct costs with the amount of money spent, the failure to complete the project on schedule will result be unsuccessful in obligations to the government, which we know that PTFI seeks to establish better relations with the government. In addition, the location of Banti Village is precisely located in the river flow through if the project is not in accordance with the schedule to create a higher erosion level and reduce water quality in Banti Village, this is certainly not in accordance with CSR Program owned by PTFI.

West Wanagon Slope Stability (WWSS) project itself runs behind the schedule because of low Use of Availability (UoA) as shown on diagram below (Figure 3). Use of Availability is low because of high standby time, and this high standby time mostly caused of absents most happened in the first day and/or the last day of working shift. The reason of not working in the first day and last day of working shift, most of the reason, is that the workers want to spend more time with their families. (Note: most of the operator living in Timika, nearest city from Tembapapura. Operator go to Timika during their day off)



**Figure 3. Wanagon Truck Availability compared to Use of Availability 2011- May 2017 (Source: Grasberg Dispatch)**

Grasberg dispatch provides data on the non-cycle delay condition of working trucks. Non-cycle delay here is an indicator to measure how long the operator is delay beyond the provision as it is caused by fog, the road is obstructed. (Note: also include the condition of employees "sitting" or not working normally due to demand something). Based on the data from the beginning of 2015 to the end of May 2017 indicating that a total of 19 days of trucks is simply not working. In addition, if compared between ceiling non-cycle delay with actual non-cycle delay the data from the beginning of 2015 until the end of May 2017 shows the value of 25% above the ceiling value. If a total of 19 days where the employee is not working are included in the data, then the total exceeds the ceiling of 811%. Graph of non-cycle delay time compared to its ceiling shown in Figure 4.

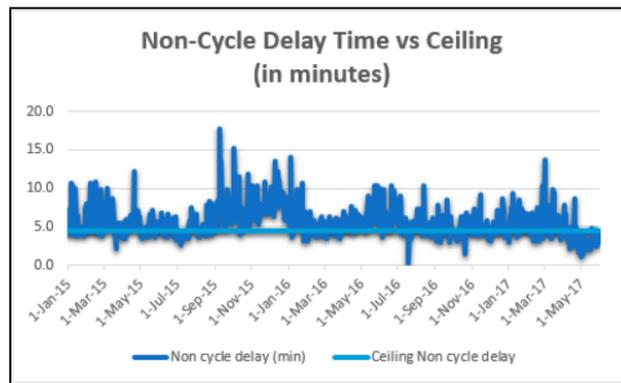


Figure 4. Truck Non-Cycle Delay Time vs Ceiling 2015- May 2017 (Source: Grasberg Dispatch)

Table 1.2. Days of Operator not working during January 2015 – May 2017 (Source: Grasberg Dispatch)

Day of Operators not Working (January 2015 - May 2017)
17-Mar-15
18-Mar-15
19-Mar-15
20-Mar-15
30-Jun-15
5-Oct-15
2-Feb-16
24-Apr-16
30-Sep-16
1-Oct-16
2-Oct-16
3-Oct-16
4-Oct-16
5-Oct-16
6-Oct-16
7-Oct-16
18-Oct-16
20-Oct-16
25-Jan-17

The Total Material Moved of Lower Wanagon Project During April 2015 - Mar 2017 shows an increasingly sharp gap since mid-2016, while based on absenteeism, the absence rate is constant at 10-20%. The cause of this sharper gap is the high non-cycle delay time that existed in addition to the occurrence of several strikes or “do not want to work” movement, recorded there are 19 times this incident occurred during the year 2015 until May 2017. The sharper gap is also due to the accumulated target not achieved, if production does not increase while the target is not reduced of course this gap will be even greater.

### 3. Literature Review



Referring Gallup (2009), there are three employee types (as cited in Tarigan & Gustomo, 2013): Engaged; these employees are loyal and psychologically dedicated to the organization. They are more dynamic and more likely to stay with their company. Not Engaged; these employees may be productive, but they are not psychologically linked to their company. They are more likely to miss workdays and more possible to leave. Actively disengaged; these employees are actually present but psychologically absent. They are unhappy with their working atmosphere and insist on sharing this unhappiness with their coworkers<sup>1</sup>.

Based on the characteristics that exist, the symptoms indicated by the low absence of employees, the reluctance to work according to the job description indicates that the reduced enthusiasm belongs to the second category, Not Engaged. All of the factors that Gallup mention in not engage condition happen in WWSS Project.

Institute for Employment Studies (2004) describes employee engagement as a positive attitude from employees to the organization as a place of work. Employees will care about the organization's business and work in teams to improve the company's performance. Several factors influence employee engagement, explicitly career development, leadership, empowerment and other factors such as fair treatment, performance appraisal, work safety and cooperation.

Rewards, corporate practices, quality of life, opportunities, work activities and employees within the company influent employee engagement based on Aon Hewitt (formerly known as Hewitt Associates). If the factors are well achieved, then an organization will succeed with employee engagement. All these factors are interconnected.

Meanwhile, according to Development Dimensions International (DDI), an international human resources and leadership development consultancy, the dimensions used to know employee engagement are individual value, interpersonal support and work focused.

From some opinions above can be concluded that employee engagement contains a positive attitude towards employees who have a commitment to the company to improve the company's performance with empowerment, the application of organizational culture and good leadership.

Based on the theories above and observations in the field, where the empowerment of relationships, organizational culture, work focus, recognition, leadership, work compensation according to the role, individual values of employee engagement in PTFI, it is necessary to conduct research to determine the effect of these variables.

If employee engagement and employee performance do not match expectations then what will be done is to conduct a sharper analysis to support the company's performance.

The work culture is the value managed by management to support the company's vision, mission and strategy, if the respondent's results are not good, then the thing to do is make adjustments to the current condition and situation and socialize to employees to understand the culture.

Referring to the descriptions mentioned above, the purpose of this research are:

1. Knowing factors that affect employee engagement
2. Analyzing the critical factors and suggesting several improvements based on critical factors to improve employee engagement.

#### **4. Employee Engagement Model For PTFI**

The research will select which variable is suitable to use employee engagement model in PTFI by being

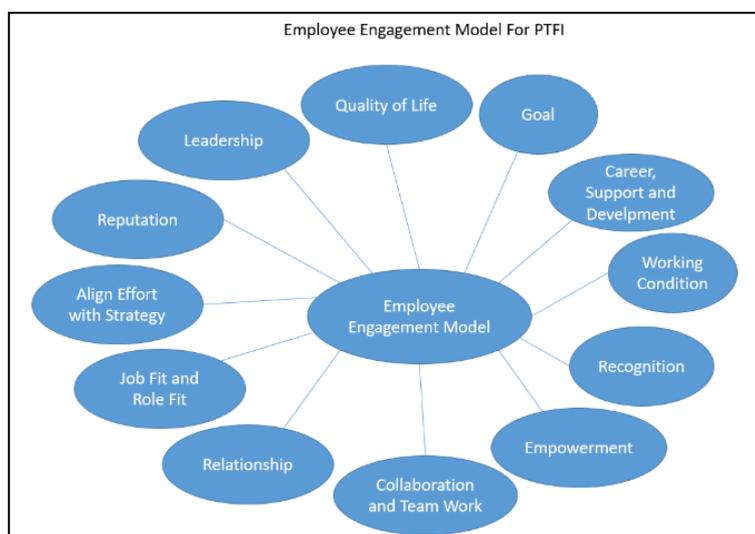
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<sup>1</sup> Tarigan & Gustomo, 2013, Proposal to Improve Employee Engagement at PT.XYZ, The Indonesian Journal of Business Administration

eliminated or combined because it has been represented by other models.

Some variables will be combined into factors because they have the same implication and will be used to model employee engagement in PTFI, after observing and reviewing all theoretical engagement factors, this study will create an engagement factor to model for use in PTFI.

Figure 5 shows employee engagement model based on combination factors from Gallup, DDI and Aon-Hewitt that having implication with PTFI condition.



**Figure 5. Employee Engagement Model For PTFI**

## 5. Recommendation

### 5.1 Quality of Life

The findings support research hypotheses from Selahattin Kanten and Omer Sadullah specify that (1) there is a significant connection between QWL and employee engagement; (2) blue collar and white collar employee supposed different aspects of their quality of work life; (3) blue collar and white collar employees have dissimilar work engagement levels. Current studies show that positive emotions a key factor of organizational performance and commitment. Understanding employees, feeling is crucial for human resource management. Because, employee behavior is affected by managerial practices and Organizational climate. QWL enhance organizational performance and commitment. QWL also facilitates employees to manage their personal life<sup>2</sup>.

There is a positive and significant relationship between the quality of work program (QWL) and quality of life (QOL) among employees of multinational companies in Sarawak, Malaysia. PTFI as a multinational company particularly in the similar condition with this. All elements of quality of work life (QWL) i.e. work environment and work aspects significantly correlated with quality of life (QOL). Sirgy et al. (2008) that the quality of work programs (QWL) improves the quality of life (QOL) of employees within the organization support the result. The QWL influence on QOL among employees in multinational companies shows that QWL does have a significant impact on QOL. All elements of the QWL program i.e. work environment and occupational aspects are found to correlate with the overall QOL. Given the fact that QWL programs within the organization contribute to better QOL among employees and reduce employee turnover rates, organizations should consider continuing to introduce, improve and implement QWL programs within the organization. This step will help the organization

<sup>2</sup> Selahattin Kanten and Omer Sadullah / Procedia - Social and Behavioral Sciences 62 ( 2012 ) 360 – 366

in improving the performance, productivity, and commitment also employee satisfaction<sup>3</sup>.

Based on questionnaire result respondents are have an average 3.12 that stated if they are agree about the statement "I am comfortable living far from my family". As a remote area company, PTFI cannot fulfill family accommodation for all of employee, but company accommodate employees need with limited family accommodation and regular family visit that company cover. So all of employee should know and understand about the company limitation regarding of family accommodation. For staff employee, company give option to take 6 weeks – 2 weeks working roster schedule instead of regular vacation schedule. But for non-staff, this option is not eligible.

Company also provide regular family visit for staff employee, eligible every 3 years, but non-staff employee is not eligible for this privilege. Probably if company could provide family visit for non-staff employee can help non staff employee increasing their engagement to the company in QoL factor. Since non-staff employee is in large of number and surely company cannot provide the accommodation for this, lottery can be an option. The winner will be happier because their family can do visiting, and for the one who not still have a change for the lucky draw.

The one and only place to do shopping is Hero supermarket and Department store in PTFI working area, there is no other option. Sometimes, Quality of Life Department conduct Bazaar market for alternative, but only happened incidentally. If QoL department can do this regularly probably can increasing QoL factor for the employee.

Plenty of things can transform corporate from good to great, by returning employee by having a corporate family gathering regularly. Having family gathering could be the easiest social activities because in Indonesia gathering together in one place is a tradition. A family gathering can bring freshness and more positive atmosphere to the employee.

## 5.2 Leadership

Leadership. The Encyclopedia of Management (2009) describes that leadership is probably the most frequently researched topic in organizational science.

Conceptual study of leadership and engagement. Serrano and Reichard (2011) suspect that leaders can play an important role in building a work environment where employees feel energized and engaged. To help leaders fulfill this role, they identify the following four specific pathways that can increase their employee engagement:

- (1) Design meaningful and motivating work,
- (2) Support and train employees,
- (3) Increase employee personal resources, and
- (4) Facilitate beneficial and supportive coworkers (p. 180).

In line with this thinking, Attridge (2009) outlines the efforts that the organization should consider to increase employee engagement. These efforts include, designing better jobs, providing appropriate support and resources from co-workers and supervisors, and eliminating the demands of work and the pressures of difficult organizational culture. Macey and Schneider (2008) support the notion that work arrangements are a constant contributor to feelings, enthusiasm, energy, dedication, and employee absorption. Shuck and Herd (2012) states that leaders who want to produce an attractive climate must develop self-awareness (in example, an understanding of what they say and how they act), the conceptual basis of emotional intelligence, and in many ways leadership that promotes Engagement, and Attention Basic needs of followers with a willingness to

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<sup>3</sup> Narehan Hassan et al. / Procedia - Social and Behavioral Sciences 112 ( 2014 ) 24 – 34

respond. They note the limitations by stating that it may be challenging for those who are not focused in personal development or outwardly in community management beyond task completion or performance management<sup>4</sup>.

Derived from Kouzes and Posner Transformational Leadership Model, the Four E's Leadership Framework is used to Inspire, Motivate, Coordinate, Harness and Leverage the abilities and potential of those around them.

Academics and business consultants have identified various taxonomies to describe the function of leadership. However, these taxonomies of tasks and capabilities can generally be synthesized into Four Functions: Envision; Enable; Empower and Engage.

PTFI has full leadership program from top to the bottom of the organization. However, the implementation in the field is not as company expected. Operator in the field more trust and listen to informal leaders compared to their supervisors. This condition happened because of inconsistency of rule enforcement. It began in 2011 when most of the employee did strike. At that time, most of the employee who not working for more than five days were disciplined with warning letter and termination threat. Supervisors as a frontline did the warning letter. Nevertheless, at the end of the day, no one was warned or terminated, all of them are abolished, and amnesty was given. This condition led some precedent, which if the same condition happened again, then same result will be got. It needs strong commitment from top management to enforce the rule.

### 5.3 Career, Support, and Development

Career development opportunities are an important part of employee engagement. In fact, key driver analysis has consistently shown that career development is the second most influential way to increase employee engagement, once identified.

Simply put, if people's desire to make progress in their own careers is not met, they will start looking for work elsewhere, not working as targeted and become lazy. The opportunity to climb the career ladder often stalls on the availability of open positions-waiting for someone to die or retirement to ride in the company is a sad reality for many. When the promotion looks like a game waiting for employees, the organization is at risk of turnover.

performance of the employees is positively influenced by the overall self-efficacy. It is also proved that the organizational behavior of the skeptical practicing professionals is usually influenced a significant amount of confidence. Secondly, complexity of the tasks as well as performance locus is found to moderate the link between self-efficacy and performance at workplace. These two factors play an important role in organizational settings as they have a tendency to deteriorate the link between self-efficacy and performance. With the increase in the complexity of task, this link has been proved to be weaker. However, the organizations can improve the performance of the employees with the help of the following suggestions: Firstly, the employees should be provided with relevant details of the tasks assigned to them. The exact definitions and explanations of the tasks and context of tasks would help them to deal with the complex tasks. Secondly, the managers should explain them about the technical skills required for successful performance. They should also instruct the employees how to select a proper method among the available methods while solving a complex task. Thirdly, the managers should keep the work environment away from physical distractions. These physical distractions are found to induce negative thoughts, psychological stress and reduce team spirit among the employees. In addition to that the managers should improve the self-efficacy of the employees through effective training initiatives and make them successfully perform the complex tasks. The managers should also improve the cognitive skills and support them in taking up challenging tasks through training<sup>5</sup>.

In PTFI condition, employee has tendency to have fatigue or saturated with their same old tasks, looks like that in more years doing the same thing make the employee lost passion, doing same activity every day in years. In

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<sup>4</sup> Marie Carasco-Saul, Woocheol Kim, Taesung Kim Leadership and Employee Engagement: Proposing Research Agendas Through a Review of Literature 2014 Sage Journal

<sup>5</sup> Jacob Cherian & Jolly Jacob, Impact of Self Efficacy on Motivation and Performance of Employees, International Journal of Business and Management; Vol. 8, No. 14; 2013, Canadian Center of Science and Education



this condition, work rotation or secondment program could be solution.

In PTFI, obligatory training mostly for safety training. Specific training only for new employee who has new task. Refresher training and technical support training besides safety training can rejuvenate employee mind.

PTFI has establish career, support and development program. For non-staff to have promotion beside fulfill training and assessment for competency also need appraisal value and also year of service condition. This condition aims to gain tiered promotion, to avoid top grade non-staff buildup.

## 6. CONCLUSION

Based on data and analysis in this research through preliminary study and interview, literature study, spreading questionnaire, have a result employee engagement model which accordance to implement in PTFI. This model has some factor that influenced in this company. There are:

- Quality of Life
- Leadership
- Career, Support, and Development
- Working Condition
- Leadership (Social Support)
- Recognition
- Reputation
- Empowerment
- Collaboration and Team Work
- Align Effort with Strategy
- Job Fit and Role Fit
- Relationship
- Goal

From the factors overhead, defendant will give a score to define the current condition about the factor through statements in questionnaire, combined with discussion and interview result selected three critical factors that effecting employee engagement in PT. Freeport Indonesia (PTFI) especially in (West Wanagon Slope Stability) WWSS Project as mention below. Quality of Life factor contained living area that relatively far from nearest city and work schedule during the week and vacation schedule and allocation. Leadership factor contains ability by which people become aware of ways to accomplish their desired goals and develop new values in satisfaction of the leader roles. Career, Support, and Development factor contains clear Performance criteria for the job, opportunities to develop further skills and chance to grow and pick up new skill and knowledge. The critical factors had been analyzed with literature study, empirical data and also interview and discussion with project stakeholders and produce some recommendations for the improvement critical factors to develop employee engagement in PTFI WWSS Project.

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## The Implementation of Research Management in Vocational Higher Education: A Review at Politeknik Negeri Bandung

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### Abstract

Quality research process will produced quality research products. In order to achieve excellent research results, university need to have good research management. Research Management describes the management with the contents of various research activities and the aspects are quite complex. Research portfolio development and management is not an easy thing, both for researchers individually and for institutions of higher education. It does cover the whole aspects of holistic research management.

This paper attempt to describes the results of a qualitative study on *Research Management* in Polytechnics as vocational higher education and the efforts that have been made by the institution to overcome the arise problems.

*Key words: Research management, vocational higher education, implementation*

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### Introduction

The attention of the Indonesian university, government as well as the public toward the issue of the low quantity and quality of scientific publication produced by academics in the universities has increase in 2017. This issue even warmer when associated with a rational for linking the productivity in publishing scientific paper with funding received by the lecturers or professors. Bearing in mind that discovery, dissemination and application of the new sciences is at the core of the provision of education in universities, therefore university was expected to produce good quality of scientific publication. And it can only be produced from quality research process.

Formerly, the search of science or innovative product conducted through research is an attempt to find answers to the questions post by the researcher/s, and researchers will feel satisfied with obtaining answer from research. Especially if the answer is in accordance with the criterion of truth of the researchers (Satori and Komariah, 2011, p. 20). Nowadays, research's products become an important aspect to establish the reputation of the university and it gradually evolved into the basis for measuring the success of its academic administration and financial management (Tacey, 2009). In this regards, focus of conducting research is not intended merely to satisfy the desire of the researcher alone.

Furthermore, research splits knowledge into disciplines and fields/programs that provide a deeper understanding in an increasingly complex world. However, in its development, there is an increasing understanding that the problems faced in the 21st century require *a holistic* understanding of knowledge in its various aspects (Gibb, 2009). This makes increasingly necessary for the research to be associated with the needs of the society, and this appears as a paradigm on the policy in higher education that "the result of research need to contribute to improving the welfare of society and the nation's economy" (MOHE, 2017). Herein, research activities should be viewed as an investment, so that the results of the implementation of research activities should be optimal utilized.

This paper attempt to describes the results of a qualitative study on *Research Management* in Polytechnics as vocational higher education and the efforts that have been made by the institution to overcome the arise problems.

### Condition of Research in Polytechnic

Politeknik Negeri Bandung (POLBAN) is one of the largest vocational higher education in Indonesia. Currently it has 10 departments that administer 41 study programs, and supported by 497 permanent lecturers. In the age of more than 30 years, POLBAN has contributed considerably to improve national competitiveness, especially in the field of providing skillful human resources for the industry or public institutions through the graduates. In addition, POLBAN is also expected to contribute in other areas such as provide support for increasing industrial competitiveness, strengthening small-scale industries and medium enterprises, solving existing problems in the community, developing science and technology including its application. Usually, the contribution done through conducting joint research, and dissemination of research products conducted by POLBAN's for the industries or the community.

Currently, the potential to optimize the utilization of innovation products produced through research are high. This is due to the large number of products resulted from the academican research. As most of the researchs are applied research, so the nature of products resulted from the research activities tend to be applied products. Figure 1 below shows the growth of research activities in POLBAN for the last six (6) years (2011-2016).

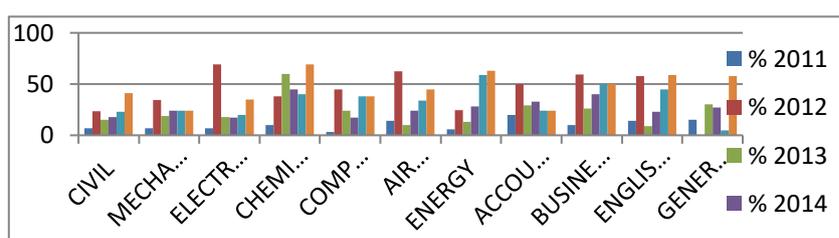


Figure 1 Growth of Research in POLBAN Year 2011-2016

As can be seen in figure 1, in average the number of research conducted by the lecturers was increased every year. For the last six years approximately 986 research's titles have been conducted. While the numbers of lecturer involved in the research activities each year arround 199. However, the involvement of the lecturer in research activity can be said low compare to the total number of lecturers which is 495. This means there is wide oppportunity to increase the lecturer capacity in conducting good research.

Another problem is related to the utilization of the research's products. In general the products of the research is still stored in the form of reports, prototypes, scientific publications or untested concepts. This situation shows that the research's products have not optimal utilized by the industry or by the general public to the fullest. Bearing in mind that an innovation is considered successful when it can be utilized such as by commercialized (Jobber.D, 2001), so it is urgent to promptly improve the condition.

### 3. Role of Research Management

Literture review on research management's topic in Indonesia is rare. There are three relevant Articles could be found. One was written by Purwo Santosa (2006, p.1) who describes the *lessons learned* of research management at Gajah Mada University. It confirms on '*the ability of Gajah Mada University in boosting its research capacity relies on its ability to bring together a sense of well-managed autonomous institution and atmosphere*'. The second articles from Sutjiredjeki et al (2011) which explain the function of research management unit in supporting research dissemination in polytechnic. And the third article is exploring Research Management aspects, their function and linking (Lasambouw, 2015). The articles discussed general aspect of research management in university.

On the contrary, several research management reviews undertaken in the past by overseas institutions. They showed that the scientific focus of the researchers tend to address the research activities in Research University

environment (Welker and Cox 2006; Beerkens 2008; RUF 2012) as well as commercialization of research products' (Greenberg, 2007). The two topics which become the focus of those researchers tend to be addressed towards researches conducted in research universities which definitely have already acquire power in producing good-quality researches as the fundamental characteristics of researches universities. In his article, *The New Production: The Dynamic of Science and Research*, Gibson et al (2009) discussed the aspects which contribute in shaping researches' management, mission and role. Mark E. Welker & Alan R. Cox research (2006) confirms that both research and mission of institutions are equally important. They found that 75% of researched institutions publicized researches activities, funding and researches results regularly through various media. 50% from the institution researched play a significant role in economic development. While British Council (2012) in a report entitled *The shape of things to come: Higher Education Emerging Global Trends and Opportunities to 2020* describes one of the trends of higher education in the global era is the importance of international collaboration in research activities.

In other article, *Professionalizing Research Management*, John Green and David Langley (2009) confirms that research management function requires a certain set of skills and knowledge which universities need to have. According to them, universities have to develop their research strategy and assign academic and administration leaders to support research management.

#### 4. Aspects of Research Management

Research Management describes the management with the contents of various research activities and the aspects are quite complex. In the opinion of Tacey (2009), and Green and Langley (2010) research portfolio development and management is not an easy thing, both for researchers individually and for institutions of higher education.

Research management does not only include the selection of individuals who will be assigned to manage research activities or efforts to improve the capacity of staff related to research management in the university environment in order to be able to manage optimally and professionally, but cover the whole aspects of holistic research management. As recognized by Connell (2004) that *"The growth of research management as a company is specialized and professional field of activity over the past decade has been striking"*. This is reinforced by the findings of Purwo Santosa (2007, p.1) that: *"Anyone attempt to Enhance research capacity would have to encounter with the external environment, structural factor of the which serves as hardware and cultural factors roomates serve as software for allowing the research community engage in a political dynamics"*. Referring to Connell and Santosa's description, it can be concluded that there are three factors related to strengthening the ability of universities to manage research. Two factors relating to internal university matters: they are factor related to structure of the organization as a *hardware* and factors related to organizational culture as *software*. The third factor is the factors relating to the external environment of the university.

Santoso's opinion on these three factors is in line with Green and Langley (2010) research results on research governance. They suggests that the process of conducting research governance manifested in the form a diverse set of activities undertaken by the research manager. Furthermore, Green and Langley referring to the results of *The Scottish University Research Policy Consortium* (1999) identifies thirteen (13) elements of governance of research as follows:

**Table 1 Elements of Research Management**

Research Management Element	Task / Activity
1. Institutional research strategy.	Refer to the strategic plan of the University to strengthen their research function.
2. Collaboration.	Addresses the need of institutions to share research resources to complement each other's strength and minimize weaknesses.
3. Accountability and research.	Establishes the delegation of responsibility of any research activity.



Research Management Element	Task / Activity
4. Funding issues.	Tackles how the institution divides its financial resources into two major dichotomies - teaching and research.
5. Teaching and research.	Communicates how both functions complement and support each other, and how academic personnel can be rewarded for being able to perform both functions.
6. Staff policy and research training.	Refers to what the training capabilities of its academic personnel are.
7. Post-graduate and research	Recommends how post-graduate students can be trained to fully maximize the research capabilities.
8. Scientific integrity.	Establishes what is the nature of scientific misconduct is.
9. Publication and research ethics.	Discuss what areas to be addressed in the publishing of research outputs and the importance of the code of ethics to guide research practice.
10. Academic freedom and research.	Discuss nature of academic freedom and its vital role in creating a research culture.
11. Protection and commercialization of research.	Explains the importance of upholding intellectual property rights and the need to promote research outputs beyond the University.
12. Risk management.	Addresses what factors can slow down, degrade, or totally inhibit research outputs.
13. Publicity and promotion of research.	Addresses the need of the University to inform the public and private advertise its research potential.

Governance-related elements of the study, Bernardo (2010, p. 6) states that "*the above listing is prescriptive of good research management practice*". Comparing with the rules in force in Indonesia, the elements of governance studies in line with the current policy of the Ministry of Research, Technology and Higher Education (Kemristekdikti) on Higher Education National Standard as outlined in the Handbook of Research Edition year 2017, including arrangements regarding eight research standards to be met by each university within the management of research, namely (1) the standard of research results; (2) study on the content standards; (3) standard for research process; (4) research assessment standard; (5) Standard of the researcher; (6) standard of research facilities; (7) the standard of research management; and (8) standard of research funding.

## 5. Research Management Model

In order to overcome problems such as lack of involvement of the lecturer in conducting good research activity, low number of publications, under utilization of research results and so forth, polytechnic need to find ways for solving those problems such as through optimalize research management functions.

The findings of qualitative research conducted in 2015 in three (3) Polytechnics showed 12 out of 13 elements of research management have been applied by the management of research at the polytechnic. However, the application tends to be partial or performed by each division/unit in silos and separate. Elements that have not been the focus of concern is *risk management*. Furthermore, In order for research management to perform optimum it needs to have a good direction, so that all elements can be synchronized implemented and in an integrated manner. Model for integrating elements of research management can be seen in Figure 2 below (Lasambouw, 2015). It is expected that the research managers in polytechnics, as well as in university in general, will use it for consideration.



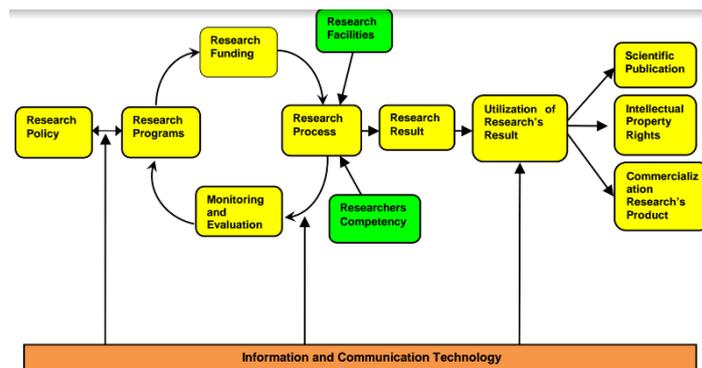


Figure 2 Integrated Research Management Model in Polytechnic, Indonesia (Lasambouw et al, 2015)

The research management system used by the polytechnic should be packed in such way that the research process undertaken by the lecturer is consistent with the research strategy set by the institution. Bring together individual research's passion and institutional vision is a challenge for the research managers.

The essence of Figure 2 is the integration of the whole elements in the process of conducting research in polytechnic, which is described as a large box that frames all research management components. **The first aspect is strategy.** Realizing the term strategy tends to be abstract, it needs to be realized in the form of programs that have clear objectives and can be implemented at the operational level. However, it is realized that translating strategy into a practical operation is not easy (Amstrong, 2006, p.23). The terminology of the basic strategy of research management is not expected to be simply as basic strategy for research planning or a set of policy designed to smooth the process of research activities. There are six (6) strategies proposed to be considered for strengthening research management in polytechnic. They are:

a) strategy for optimizing the core research direction in the institution.

The strategy used by Bandung State Polytechnic is through the provision of a Research Master Plan which contains the direction of research development plan and research activity which is inline with the institute's vision.

In line with the Master Plan, the research management leader develop Institution Research Road Map which is build with two approaches: bottom up and top down.

The two main documents provide as the basis for policy making in developing research capacity of the individual lecturer as well as supporting the goals of the institution.

b) research funding strategy. Funding play an important role in supporting research activities. Beside rely on funding from the central or local government, every year Polytechnic internally provide research budget to support the researchers who do not granted funding from government. The research fund provided by internal Polytechnic is used as a "bridge" to improve lecturer's ability in conducting research. It is expected that when their research ability increased, the lecturer will able to develop good proposal for winning research grant provided by the government.

c) strategy of optimalize of the research implementation process. The process of conducting research is done based on the standards operating procedures that has been made in line with the Research Master Plan.

d) strategy of optimizing research resources. For researcher capacity building purpose, research manager in Polytechnic has developing researcher competency standard. However, other resources to support POLBAN's lecturer conducting research tend to be limited. Resources such as laboratorium is provided only for students. Therefore researcher need to find their own way to obtain necessary source to support their research.

e) optimizing strategy for utilization of products resulted from research. The utilization of research product has

not been optimal yet. This is due to the cycle of the research process tend to end when the researcher submitted their research report. In the future, a mechanism to obtain, inventory, and further processing the products of research must be developed. Furthermore, the increase of research products' results may lead the research manager to develop a mechanism for optimizing the utilization. Consideration needs to set toward the increase of research products which tend to lead toward commercialization.

f) strategy for research's knowledge management. Knowledge management of research results is manage in the form of Research Repository dan Data Base of Research. In the future this source need to continuously improved and utilized.

g) strategy for continuous improvement. Continuous improvement in research management has not been implemented optimally. This is because the number of human resources that handle the research activities is very limited. The implication is that improvement focus more to routine activities. In the future, a more sustainable and holistic improvement mechanism should be inplaced.

Second important aspect is the core of research flow as showed by the four interrelated elements at a basic individual research cycle. They are: a) the research programs; b) research funding; c) implementation of process; and d) monitoring and evaluation. It is emphasized that the performance of the four components is mutually constructive and complementary to generate research outcomes in the direction set in the policy. The other three components, namely research support facilities, researchers competent, as well as information and communication technology become an important supporting components to realize innovation and creativity as the output of quality research. Results of the research are realized in various forms of products which will need to be sorted out into three groups: a) scientific articles publish in local/national/international journals, registered intellectual property assets, or product for commercialized.

### **Closing Remarks**

Research management becomes increasingly important to implement. Sadly, attention to this issue is still at the minimal level. Whereas good and quality of research management can contribute to the improvement of the quality and quantity of research.

The propose model of research management has considered the holistic elements and an integrated approach.

### **Acknowledgement**

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## An investigation into tourist experience of cultural tourism attraction

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### Abstract

Tourist experience is a critical issue for every tourism places as it is one of the key influences on the holiday decision-making process. Academic literature on tourist experience draws attention to that the concept of 'experience' has multifaceted meanings and different interpretations. Nonetheless, the received view remains that the experience may be measured and captured using standard instruments. This research develops our understanding of tourist experience through the tourist 'do and see' at a tourism places. Building on a quantitative method design, the framework is tested using a study of cultural attraction in Bandung, West Java, Indonesia. This methodology was used a large scale survey with 404 respondents in order to provide accounts of experiences. The survey was distributed to domestic tourist's who have visited to Bandung, especially at Saung Udjo's as a cultural attraction place.

The result shows that in terms of experience of the place from the visitors remains relatively good. The predominant experience of place was positive; the strongest dimensions of Saung Udjo, are 'make me understand something new, to increase my knowledge about a Sundanese culture, and give me an experience of learning Sundanese culture'. A key outcome from this finding shows that the tourist experience can be created from the real experiences. This analysis can provide a framework for destination marketing.

*Keywords : Tourist experience, cultural attraction, Saung Udjo's, Bandung*

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### Introduction

The raising competition among tourism places which has taken place lately has led to the push to create favourable experience of the destinations. Destination marketing has been obligate to create a competitive advantage of the tourism place through a quality of experience. From the literature perspective suggests that in order to establish competitive advantage the destination need to improve their tourism products and services, and by creating a positive experience for the tourist (Assaker et al, 2011, Qu, et al, 2011). Moreover, it is assumed that experience is the most important aspect of the selection made by the tourists (Govers & Go, 2003). In general, the 'experience' of any tourism place greatly affects tourist-perception and any resulting change in their behaviour and destination selection (Lee, et, 2005: Guthrie & Anderson, 2010: Rajesh, 2013). Thus, creating a difference positive experience becomes a basic aspect for survival and success of the destination.

A huge attention has been given to the study of tourist experience, but this tends to be dominated by popular destination (Tasci et al, 2007, Guthrie & Anderson, 2010; Agapito et al, 2013). Otherwise, in the case of Bandung, Indonesia relatively little research exists (Suhartanto, 2016); there has a little of this area. Thus, this research is proposed to give a contribution towards researching this area of tourism experience, but also to offer basic information from which to develop a marketing program for Bandung as a tourist destination.

### The research objectives

The quality of tourist experience of a tourism places is usually regarded a critical factor for the success of any tourist destination. However, the majority of the research in this area has been conducted from the perspective of the 'Western' tourist visiting tourists' places. Accordingly, the understanding of tourist experience has become more complex because of a huge of information sources channels that reveal, and also the real visited. Likewise, many information-sources related to Bandung tourism have different starting points and experience by the tourists when thinking about Bandung as a tourism places. Thus, the objectives of this research as follows:

- To describe tourist experience toward cultural attraction

## Literature review

### Experience concept

Different people have different experiences about their life or an event. Different author also has a different definition about experience for example, Pine & Gilmore (1998) looks from psychological aspects that focused on the emotional, physical, spiritual, and intellectual impressions that are felt by individuals during an event/activity. In contrast, from an anthropological perspective, tourists are motivated to escape from routine activity, and seek authentic (to them) experiences (Yoon & Uysal, 2005). Meanwhile, the term 'tourist experience' is socially developed and is connected with multiple perspectives such as social, emotional, environmental, economic, and psychological components (Buhalis, 2000; Swarbrooke, 2002; Bowen, 2001). Other writers, Gentile et al (2007) mention that whilst tourist experience has multi-dimensional characteristics evaluation maybe holistic. Schmitt (1997) notes that tourist experience can be defined in terms of five dimensions such as sensory experience (sense), affective experience (feel), creative cognitive experience (thought), physical experiences behaviours, and lifestyle (activity), and social identity experiences (relationships), Thus, from this perspective could be concluded that the word of 'experience' is an all embracing term replete in everyday conversation. However, Tung et al, (2011) argues that tourist experience is the relationship between people and their total world view; being dependent on the location of their centre with respect to the society to which they belong.

From tourism marketers view, has demonstrated that an experience plays a crucial role in the destination choice process (Molina et al, 2010; Bolton et al, 2014). Besides, the importance of the concept of tourist experience has led to a large body of research on the destination of particular places (Pike 2007; Qu et al, 2011). Tourism research about experience has showed the significant impacts of image on tourist decision making processes (Assaker et al, 2011, Agapito et al, 2013). Thus, experience will play an important role in a visitor's mind before visiting a destination (McCartney et al, 2008).

### Cultural attraction

The term attractions are a pull factor for tourists to travel from their usual living environment to tourist destination (Kustiawan et al, 2012). According to Hall et al (1999), attractions are an integral feature of tourism, which offer tourists passive and more active occupations on which to spend their time during a visit. Attractiveness can be the various resources available in a region and its regional characteristic which are different from the daily of life of the tourists. Sharpley & Yulia (1997) mentions that the attraction of a region can be the region itself with its variety of physical and cultural characteristics, providing the key drivers for visitation to the destination (Crouch & Ritchie, 1999). Thus, attraction is important part of the tourism place could be both tangible and intangible attractions (such as history and traditional people's culture), some of which are exploited, but others which currently have potential for further development. A variety of tourism attractions can bring massive drawing power, serving as a catalyst and motivation for visitors to visit a specific destination.

### Methodology

#### Research instrument

This research uses a 5-point Likert scale which is a 5-point scale is easy for respondents to use and can be applied speedily to a large number of items. In term to measure tourist experience this research uses a five -point scale are stated by '1' (Strongly Disagree), '2' (Disagree), '3' (Neutral), '4' (Agree), and '5' (Strongly Agree). Thus, in order to measure tourist experience of Saung Udjo's Bandung the researcher developed a questionnaire with 24 attributes according to previous literature on the experience and adjusted (Echtner & Ritchie, 2003).

### The sample and data collection



The sampling frame of this research is the tourist who had visited to Bandung, particularly Saung Udjo's. Saung Udjo's is the place who famous for a variety of traditional attractions such as Angklung instruments, the classical Sundanese gamelan, and a traditional dance (e.g. *Jaipong*), and located at Jl. Padasuka. The researcher distributed 404 questionnaires. The data collection process took around one and a half months, from in the mid of March to the beginning of April 2017.

### Data analysis

Regarding to measure tourist experience starts with an examination of overall sample composition, followed by univariate analysis of key independent variables. This technique was used to identify the attribute in order to describe the experience of the place from the respondent's opinion.

### Discussion

#### Sample analysis

The begin analysis focuses on all respondents. From A total of 404 usable responses were received showed that in terms of gender, there are slightly more females (56.8%) than males (42.9%). There appears to be an under-representation of older age groups, with sample composition being dominated by productive age groups; 89.3 were under the age of 45 years. In terms of the educational profile whereby the majority of respondents have tertiary education; 68.5 are senior high school, follow by college or university educated (31.5%). In addition, focusing on the domicile of the survey participants, domestic visitors were more likely to originate from beyond Bandung (79.1%) followed by Bandung itself (20.9%).

#### Overall tourist experience toward cultural attraction at Saung Udjo's

Due to identify the experience of Saund Udjo's, Bandung as a tourism place the respondents were asked to rate various aspects of their experience using a five point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). A descriptive analysis was carried out to identify the most important items of tourist experience. Thus, in order to measure tourist experience from 24 attributes of Saung Udjo were assessed and summarized using descriptive statistics. Firstly, analysis suggested that skewness and kurtosis were not a significant problem in the data (see Table 1.1); further visual testing using histograms suggested that the distribution can be taken as normal. Therefore, the mean and standard deviation are appropriate measures and the data is suitable for parametric statistics. The following table shows the mean results for each attribute related to the general experience of Saung Udjo's Bandung as a tourism place; ranked from the lowest to highest level.

**Table 1.1: Tourist experience of Saung Udjo's as a tourism place**

Ranking	Attributes	Mean	Standard deviation	Skewness	Kurtosis
1	I feel the Udjo's location is easy to access.	3.92	1.39	-0.171	-0.215
2	Can choose any actities which suitable with my preference	4.08	1.3	-0.571	0.032
3	I can forget my daily activity	4.19	1.39	-0.289	-0.344
4	Treat me like an important person	4.19	1.14	-0.756	0.566
5	Are Friendly	4.23	1.27	-0.469	-0.045
6	I feel differ from my daily life	4.24	1.38	-0.325	-0.323
7	My privacy safe	4.26	1.27	-0.439	-0.114
8	The environment is clean	4.28	1.43	-0.516	-0.264
9	Treat me wholeheartedly	4.29	1.27	-0.559	0.044



Ranking	Attributes	Mean	Standard deviation	Skewness	Kurtosis
10	Feel involved with the activity	4.31	1.27	-0.398	-0.247
11	Comfort	4.33	1.38	-0.41	-0.086
12	Are knowledgeable	4.33	1.21	-0.636	0.437
13	Treat me with respect	4.33	1.22	-0.799	0.666
14	I feel escape from my daily routine activity	4.35	1.45	-0.119	-0.527
15	Secure	4.37	1.41	-0.451	-0.31
16	Have a good quality of work	4.37	1.31	-0.818	0.517
17	Get a difference experience	4.39	1.33	-0.448	-0.238
18	Relax	4.40	1.33	-0.288	-0.193
19	Get a unique experience	4.43	1.19	-0.473	0.105
20	Get a new experience	4.43	1.24	-0.577	0.300
21	To Increase my skill about a Sundanese culture	4.43	1.17	-1.195	1.705
22	Give me an experience of learning Sundanese culture	4.43	1.17	-1.195	1.705
23	To increase my knowledge about a Sundanese culture	4.48	1.26	-1.1	1.145
24	Make me understand something new	4.48	1.22	-1.145	1.571
	Average	4.31			

From the table above shows the ranking and mean scores of tourist experience as measured using key attributes. Overall, the average score for Saung Udjos 4.31, which would suggest that tourist have a good experience, this can be regarded as a close average score (for a 5 point scale), implying that the first key finding is that the tourist experience of Saung Udjo could be positive

The strongest individual experiences of Saung Udjo's are 'make me understand something new, to increase my knowledge about a Sundanese culture. The fact that 'give me an experience of learning Sundanese culture', to Increase my skill about a Sundanese culture, get a new experience, get a unique experience, and relax are also highly rated suggests that the experience sense of place is favourable. Furthermore, attributes like treat me like an important person, I can forget my daily activity, and choose any activities which suitable with my preference, show moderately positive experience. However, the remaining of the attribute with the lowest score was 'easy to access' (mean score 3.92). This finding is surprising given that a majority of respondents have a tendency for a stronger and more positive experience of the place. This contributes to existing research which had noted that the mix of emotions and feelings gained through experience can leave positive impressions of the destination (Elitza et al, 2010). This is also consistent with a previous research conducted by Lee et al (2005); Chi & Qu (2008), whereby a favourable tourism place perceived through the real visiting the destination, will produce a positive experience of the place and as a consequent will create a repeat visiting.

## Conclusion

Tourism is an experience, so when tourists visit the place they acquire a more developed image of the place but also a richer perception. Experience is influenced and shaped by tourists, formed through components of real tourist experiences, which creates a sense of place. Therefore, specifically this research demonstrates that the 'sense of tourism place' provides a marketing framework for emergent destinations in terms of creating and developing effective promotion programmes and marketing strategies by building on an understanding of place



experience; which the research takes to be 'sense of place experience'. Therefore, in order to enhance and sustain the tourism place in specific markets, marketing of the place needs to comprehend to understand of how the place is experienced, or consumed by the visitors as a tourist destination. Moreover, it is important for place management to understand what the tourists expect as a component, and also how to provide a high quality of tourist experience.

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## Quality Assurance System in Politeknik Negeri Bandung: Experience in 2005 - 2017

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### Abstract

Indonesian higher education institutions indirectly contribute to the high unemployed educated labor. To seriously reduce this problem, higher education institutions have to conduct all efforts, including enhancement of higher education quality assurance system so that the higher education institutions capable to produce educated relevant employees. Through establishment of Law No. 20/2003 about National Education System, The Indonesian Government fully supports the implementation of quality assurance in higher education institutions. Three pillars of the higher education quality assurance system that has to be implemented by all higher education institutions are internal and external quality assurance systems as well as the appropriate data base pillar. In responding these pillars, Polban shifted its quality assurance educational system from ISO 9001:2008 to become internal quality assurance system. This internal quality assurance system conducted through internal audits together with external quality assurance system (accreditation) performed by National Accreditation Body, completed by the appropriate data base are a complete reliable quality assurance system chosen. "A" level of institutional accreditation was then granted in 2016 as a result of implementation of the three pillars of the higher education quality assurance system. Research and Community Services Unit (UPPM) as a supporting unit in conducting research and community services activities followed Polban quality assurance system to ensure quality assurance of these lecturers' activities. During implementation of quality assurance system based on the ISO 9001:2008, UPPM possessed all ISO documentation, i.e. Quality Manual, Procedures, Work Instruction, and all related Forms supporting all documents. After Polban shifted its quality assurance system to internal quality assurance system, UPPM also followed and adapted to the institution system. The documentation prepared during the previous ISO system could still be used as the new documentation with a little bit adaptation.

*Keywords: higher education; three pilars; ISO 9001; internal quality assurance system*

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### Introduction

Based on human resources possessed by Indonesia, Indonesia is categorized as a quietly competitive country. From the Global Competitiveness Index, it shows that Indonesia has competitiveness level on 38<sup>th</sup> in 2012; and it increases to the 34<sup>th</sup> level in 2014. This competitiveness level is still further above the Philippines (52) and Vietnam (68) however it is still below Malaysia (20), Thailand (31) and Singapore (2), (<http://reports.weforum.org>). If it is compared with the competitiveness data in 2016, Indonesia drop to the 37<sup>th</sup> level and left behind by the three neighboring countries (Malaysia, 18, Thailand, 32 and Singapore 2) but it was still above the Philippines (47) and Vietnam (56) (Klaus Schwab & Sala-i-Martin 2017).

The 37<sup>th</sup> level in the Global Competitiveness Index represents the level of higher education and training pillar (5th pillar) as well as the innovation pillar (as the last pillar from 12 pillars evaluated to determine the level of competitiveness). From these two pillars, Indonesia is actually still capable to intensify and increase its competitiveness. From higher education sides, the problems that can be analyzed are (1) limited capacity of qualified higher education institutions; (2) highly education cost that can be afforded; (3) the low relevance of higher education towards the needs of work force and industry; and (4) limited budget for education in Indonesian National Budget (Pandie & Sutedjo, 2015).

The problem of low relevance of higher education with the needs of work force and industry is also one of the causes of the high unemployees of educated labor. From the data of Statistics Indonesia (2015), Indonesia had

9.5% unemployed (or 688.660 people) in which these unemployees were high educated labor. Based on this problem, higher education institutions have to seriously provide efforts in reducing problems and to strengthen their contribution in generating educated relevant employees in Indonesia. One thing that can be done in improving the quality of educated relevant employees is by enhancing the quality assurance in higher education institutions.

### **Quality Assurance System in Indonesian Higher Education**

Quality assurance of higher education in Indonesia aims to ensure quality of higher education implemented by higher education institutions. As stated in Indonesian Law No. 20 year 2003 about National Education System (UU Sisdiknas), every education institution has to independently ensure the quality of higher education which they provide and organize. The assurance of higher education quality is in accordance with the autonomy granted to higher education institutions to manage their education institutions independently. For this aim, the Directorate General of Higher Education begins to implement Quality Assurance of Higher Education gradually in line with the issuance of the Law on National Education System. To assist and support the implementation of quality assurance in higher education, in 2003 the Directorate General of Higher Education issued a Guideline for Quality Assurance in Higher Education, which was then be renewed in 2009 to become a book of Higher Education Quality Assurance System that has been supplemented by good practices in various national education standards to accelerate the implementation of quality assurance at every higher education institution (Ministry of Research, Technology, and Higher Education, 2016). The Indonesian Government fully supports the implementation of quality assurance in higher education institutions by issuing Indonesian Law No. 12 year 2012 about Higher Education (UU Dikti). This law affirms the implementation of the three pillars of the Higher Education Quality Assurance System that has been implemented since 2008. These three pillars are:

- Internal Quality Assurance System (SPMI) that has to be implemented by all higher education institutions;
- External Quality Assurance System (SPME) or accreditation conducted by National Accreditation Body (BAN PT) or other Independent Accreditation Bodies; and
- Higher Education Data Base (PDPT) in the higher education institution levels and in Ministry of Research, Technology, and Higher Education levels.

Further effort from the government to proactively implement the quality assurance in higher education is by publishing regulation No. 50 year 2014 from Ministry of Education and Culture about higher education quality assurance system. This government regulation obligates that all higher education institutions in Indonesia have to implement the higher education quality assurance system in their institutions. In responding to the development of higher education and renewal of regulation in higher education which suits the Regulation No.44 year 2015 (Permenristek no. 44/2015) about national standard of higher education, the Directorate General of Learning and Student Affairs, has compiled the second edition of the Guidelines of Quality Assurance System in Higher Education (SPM Dikti) that has been published in January 2016 (Ministry of Research, Technology, and Higher Education, 2016). Therefore, the quality assurance of higher education in Indonesia can hopefully be really applied in every higher education institution, and active contribution from higher education institutions in escalating their quality of graduates can be really realized.

### **Quality Assurance System in Politeknik Negeri Bandung**

Quality assurance system in Politeknik Negeri Bandung (Polban) has actually been started since this higher education institution established. Polban initially set up the conventional quality assurance system, which performed through internal monitoring and evaluation as the internal quality assurance system and external monitoring and evaluation as the external quality assurance system through accreditation of all study programs. Moreover, the formal quality assurance system was seriously built in 2005 as the response to the UU Sisdiknas year 2003. Since during that period one of the quality assurance systems widely offered and chosen by a lot of education institution is the quality assurance based on ISO 9001, Polban also chose its education quality



assurance system based on ISO 9001:2008. The certification of ISO 9001:2008 was granted in 2010 for the whole institution except the Computer and Informatics Department which got their quality assurance system based on ISO 9001:2000 in 2008. In 2008 the quality assurance system of ISO 9001 was still the ISO 9001:2000 version. This Department got ISO certification earlier than other Departments as a result of the Department's commitment to ensure its high quality of vocational education and also as a result of supporting funding of the A3 Competitive Grand Program, a competitive education enhancement project provided by the Directorate General of Higher Education of Indonesia.

In 2005-2006 Polban started to build its vocational education management system based on ISO 9001:2000 by conducting training about this management system for representative staffs from each Department and Unit. The training provider is the SAI Global, Jakarta. The intensive training conducted several times to obtain high commitment staffs either as auditee representatives or as auditors. The auditee representatives together with its auditors in the same Department or Unit prepared the ISO 9001:2000 documentation and socialized this system in their Department or Unit. Audit internal was then conducted in each Department and Unit by auditors from different Department or Unit to maintain objectivity of the audit.

In 2007-2008, the training and socialization of education management system based on ISO 9001:2000 was continued to be conducted to enlarge involvement of all Polban staffs. The ISO 9001:2000 education system applied by Polban has to be known and understood by all staffs in order to maintain *rolling* of its high quality management system (Rosa & Amaral, 2014). The scope of audit internal was also enlarged to reach units which were not accounted as crucial units to be audited. The success of implementation of a system does not only depend on the top management but also on participation of each staff. During this period, Polban has got 23 trustworthy competence auditor internals and 36 auditee representatives. Every semester, the audit internal of ISO 9001:2000 vocational education system was continued to be conducted in all Department and Units by Quality Assurance Team in the Polban Quality Assurance Unit. To maintain continuous improvement of the system, auditors together with auditee representatives in the same Department or Unit socialized their system for all staffs in the corresponding Department or Unit.

In 2009, Pre External Audit was conducted by SAI Global Jakarta to observe the readiness of Polban in implementing its education management system based on ISO management system. The ISO version was changed to ISO 9001:2008 version during Pre External Audit. This audit was successfully conducted for 10 Departments and all supporting Units in supporting education management system in Polban. Several minors discrepancy obtained by SAI Global could be revised so that the next step of real External Audit was then proposed. During preparation of External Audit, intensive internal audits and following management review meetings were regularly performed. By conducting both activities in each semester, could not only management quality be maintained but also Polban management quality is improved. The principle of ISO management system as other managements systems is maintaining and improving management quality by conducting PDCA (Plan, Do, Check, Act) cycles. By high discipline and tight target to obtained ISO management system certification, therefore, in 2010 External Audit was proposed to be performed. During this year all documentation and fully understanding of all staffs in Polban strengthened by fully support of the Director as the top management and the Vice Director of Academic Affairs as the management representative and all Head of Departments as the vice management representatives, ISO 9001:2008 certification was conducted on 19-21 July 2010. The ISO 9001:2008 certificate was finally granted on 31 August 2010 and would be expired on 30 August 2013.

During 2011-2012, Polban had got used to in maintaining and improving its quality of education management system. Audit internal and management review meetings were always performed following the audits. Strategy of PDCA had been implemented by each Department or Unit during each internal audit. This PDCA strategy was also implemented during external audit of each Study Program in each Department conducted by Higher Education National Accreditation Body (BAN PT). Accreditation as an external audit conducted by BAN PT for each Study Program in Indonesia is a compulsory or obligatory accreditation required by Indonesian government in order to maintain and improve quality of each Study Program in each Department of Indonesian Higher Education Institutions. This accreditation implementation also aims to standardize the higher education quality



system in Indonesia and as well as to fulfill the Law No. 12/2012. Such as described above, this governmental law is then put into operation by implementation of regulation of Ministry of Education and Culture no. 50/2014 about Quality Management System in Higher Education.

Such experienced by Polban, Odhiambo (2014) observed that Kenya also experienced that obtaining an effective quality assurance system; it has to be combined between internal quality assurance and external quality assurance systems. Furthermore, Taiwan obtained that quality assurance influences higher education at least in terms of policy decisions and processes not only in global region but also in national and local regions (glonacal, Enders & Westerheijden, 2014; Hou et al., 2015)

Based on the positive customs through PDCA strategy obtained from ISO system implemented by Polban and demands from the Directorate General of Higher Education in implementing Quality Management System, this vocational institution changed its education management system based on ISO 9001:2008 to the Internal Quality Assurance System which has been proposed by the Directorate General of Higher Education since 2008 (Ministry of Research, Technology, and Higher Education, 2016). By this management system version changing, Polban did not find any hard constrains even Polban did not have to prepare different documentation, one documentation for ISO 9001:2008 and another documentation for study program accreditation. One of the reasons is that Polban has probably developed and achieved quality culture, indicating by changing of attitudes and behavior of all staffs (Stimac & Katic, 2015). Up to now, Polban has been implementing and committing its quality management system based on the internal quality assurance system. Furthermore, the institution accreditation of Polban, which was in B level, could be improved to A level in 2016. This institution accreditation has to be renewed in 2021.

#### Quality Assurance System in Research and Community Services Unit in Politeknik Negeri Bandung

Quality assurance system in Research and Community Services Unit (UPPM) in Polban follows the quality assurance system of the institution. During 2005 to 2010, the quality assurance system of this unit was based on the ISO 9001:2008, the system which was implemented by Polban. During this period, UPPM possessed all ISO documentation, i.e. Quality Manual, Procedures, Work Instruction, and all related Forms supporting all documentation. Based on this successful implementation of quality management system, UPPM was categorized as one of the best units conducting quality management system based on the ISO 9001:2008.

After Polban shifted its quality assurance system to Internal Quality Assurance System, UPPM also followed and fast adapted the institution system. The documentation prepared during the previous ISO system could still be used as the new documentation with a little bit adaptation. The PDCA strategy during ISO system could also be used even though with a different term to further enhance the quality improvement. The new term is Establish, Conduct, Evaluate, Monitor, and Improve (PPEPP) (Ministry of Research, Technology, and Higher Education, 2016). To comply with the new quality assurance version, the quality manual based on ISO 9001:2008 was revised into 8 (eight) standards, i.e. Research Result, Research Content, Research Processes, Research Marking, Researchers, Research Infrastructure, Research Management, and Research Funding Standards. All these standards have to be put into operation by implementation of a document called standard manual. To implement the standard manuals, the PPEPP strategy has to be applied. Therefore, in each standard manual, there are five steps in planning, implementing, evaluating, monitoring, and improving of the standard. In the previous ISO quality documentation, this standard manual is called as a procedure so that all standard manuals are exactly the same as the ISO procedures. The lowest document called supporting forms in this new quality management version are also exactly the same as the forms provided to support ISO quality documentation.

The eight standards with each manual consisting PPEPP steps and completing with supporting forms in each step have been provided by UPPM since 2015. All of the documents are available not only for research activities but also for community services activities. As a supporting unit, UPPM has indirectly contributed to improve the quality of Polban lecturers in fulfilling the other two dharmas/lecturers' activities, i.e. research and community services activities through maintaining and continuously improving its quality management system.



## Conclusions

- Obtaining an effective quality assurance system implementation in a higher education institution needs to combine both internal and external quality assurance systems, completed with appropriate data base.
- Polban has been successful in shifting its quality management system based on ISO 9001:2008 to the Internal Quality Assurance System.
- Once a quality management customs/culture is obtained, any quality management system can be successfully implemented.

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## Technology Acquisition Model In National Pharmaceutical Industry

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### Abstract

Rapid development in the current global economy encourages the Pharmaceutical industry to excel in the competitive global market. Apart from factors that determine the quality, with a very competitive market the ability of the pharmaceutical industry strategy to win competition in order to expand the global market becomes the determining factor. This encourages the company to develop a real strategy to meet the future demand, one of them by improving innovation. The purpose of this literature study was to identify the effect of innovation to improve competitiveness in winning solutions to achieve improvement in the company's performance. The literature study results showed that innovation on product development performed may affect the competitiveness of pharmaceutical company. Through innovation it is gained new ideas and improvements to the gap encountered in the company. Innovation generated in the form of basic research and product development which could encourage the creation of a new product needed by the market. As a case study therefore methodology used in this study is descriptive and explanatory methods. The value of this literature study is to improve the global competitiveness so as to improve the company's performance in winning the global competition.

*Keywords* : Management, Collaboration, innovation, Pharmaceutical Industry

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### INTRODUCTION

Pharmaceutical industry in Indonesia is one of the industries that develop rapidly whose market continuously expands and is the largest pharmaceutical market in the Association of South East Asian (ASEAN) area. The grouping study report of State Owned Enterprises (SOEs) of Pharmaceutical Sector stated that Indonesian pharmaceutical market is an important market .. (Mandiri Sekuritas, 2011)

The innovative discovery of new products boosts global pharmaceutical growth. License of patented drugs and off-patent drugs may encourage the continuity of national pharmaceutical market growth. Indonesian pharmaceutical market recorded a rapid growth that equals to the growth of the global pharmaceutical market.

It is important for the national pharmaceutical industry to prioritize the discovery of new pharmaceutical products. As one of the efforts to improve competitiveness, national pharmaceutical industry shall have a strategy mainly in suitable product innovation to be able to produce new products. The processes of research and development of new products take a long time, for example biomedical products take at least 12 (twelve) to 15 (fifteen) years as illustrated in Figure 1.2 as follows:

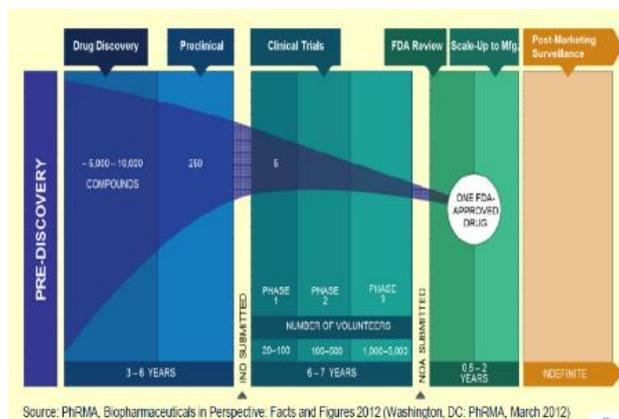


Fig. 1. Research and development process of new products.

As one of the efforts to improve competitiveness, national Pharmaceutical Industry shall have correct innovation strategy to innovate the products. Regional and global pharmaceutical growths are driven by discovery of innovative drug products (patented drug). License of patented off-patented drugs is able to boost the continuity of national pharmaceutical market growth.

Innovation improvement implemented by the pharmaceutical industry has not shown improvement of new products discovery by national pharmaceutical industries. It is indicated by the Intellectual Property registration in Directorate General of Intellectual Property (Directorate General KI) and the Ministry Law and HAM of the Republic of Indonesia that is relative small including the discovery in the pharmaceutical field.

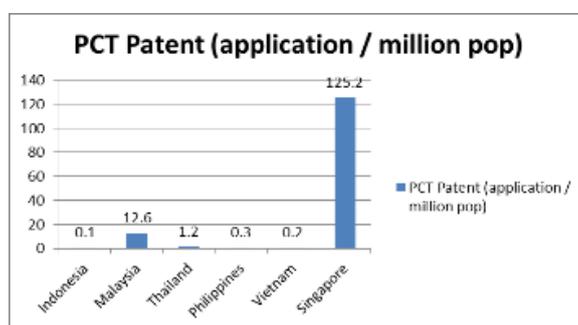


Fig. 2. PCT Patent Application.  
Source : Global Competitiveness Report , 2014 – 2015

In graph 1.2, in national scope, Indonesian innovation pillar compared to other ASEAN countries is still low, it is demonstrated by the data of ASEAN Ratio Patent Registration 2013. National pharmaceutical industry competitiveness will be hindered by increasingly decrease of active pharmaceutical ingredients discovery new chemical entities, fewer off-patent products. However, some developing countries have significantly improved their industrial ability for the last 50 years, such as India and China.

## LITERATURE REVIEW

### 2.1 INNOVATION

Innovation according to Philip C. & Olga M.: Innovation is the stage of the first application of the existing knowledge within production. While Benoit Godin in the journal *Innovation: The history of a category*, Project on the Intellectual History of Innovation, 2003 stated that the discourses on innovation have been Generally of three kinds: innovation as a factor for change in society, innovation as progress, and innovation for its own sake, such as personal recognition, prestige or professional identity.

Innovation by Peter Drucker is an effort to create changes aiming and focusing in an economic or social potential. While Theo Papaioannou, Andrew W., Julius M. and Dinar K., stated that The role of industry associations in shaping policy through various lobbying activities is well established. That places industry associations as key intermediary actors that facilitate knowledge exchange and institutional capacity building, particularly in the context of developing countries where limited institutional capacities and substantial knowledge gaps can limit both innovation and development.

The succeeded innovation according to by Cassiman B. and Veugelers R (2001) is affected by the integration of knowledge that is applied innovation implementing process. The success of developed countries to improve science and technology mastery is caused by the ability of the countries to synergize institutional development of science and technology resources they have with other factors and system nationally. It is shown by their competitiveness in the middle of globalization climate when they are able to be on the top ranks in the global competitiveness index as reported by World Economic Forum (WEF). Building a national synergy is the key word to be able to survive and compete in the midst of globalization. Globalization process has encouraged nations involvement in international competition as well as in the competition for market, technology, expertise and investment. WEF reviewed Global Competitiveness Index (GCI), which includes 12 pillars to compare countries competitiveness, such as institution pillar, infrastructure, macroeconomic environment, health and primary education, higher education and training, efficiency of commodity markets, labor market efficiency, financial market development, technological readiness, market quantity, business sophistication and innovation. In the pharmaceutical field, Ariana et al (2014) stated that the companies from different countries have made the effort to contribute to improve global health through innovative drugs.

In technological innovation aspect, Indonesia is in forty six rank of one hundred forty two countries in 2011 - 2012 in which Indonesia was in forty four rank. Of the twelve pillars, the pillars representing science or technology and technological readiness are weak, which is in ninety four rank. The technological readiness pillar, within 2008 – 2012, hardly shifts from the nineties rank.

The result of various studies that have been conducted by experts demonstrated science and technology contribution will be very great if Research & Development activities can synergize and focus on industry, government and society needs. For example, Japan, Netherlands and Germany. They build industries at the same time build their economy and competitiveness. It is an accurate way to contribute to their innovation system.

The innovation dimension comparison from a variety of sources is compiled, as the material to construct innovation dimension, as shown below:

Table 1: Comparison of Varibael Innovation Dimension

Name	Variable Innovation Dimension	Constructs
Cassiman B. and Veugelers R (2001)	Knowledge integration	Product Innovation
Schilling (2005)	a. Product Innovation versus Process Innovation b. Radical Innovation versus Incremental Innovation	



Name	Variable Innovation Dimension	Constructs
Tidd, Besant and Pavid (2005)	c. Competence Enhancing Innovation versus Competence Destroying Innovation	
	d. Architectural Innovation versus Component Innovation	
	a. Product Innovation process	
	b. Position	
Ahmed and Shepperd (2010)	c. Paradigm	
	a. Product Innovation	
	b. Process Innovation	
	c. Strategy Innovation	

### 2.1.1 Product Innovation

According to Manzano, Kuster and Vila (2005), product innovation is the output of an organization in the form of a product that can be seen and enjoyed, for example, new drugs, electronic appliances etc. There are eight steps of product innovation, they are: Basic Research, Applied Research, Technology Implementation, Production, Marketing, Proliferation, Technology enhancement.

Product innovation specified by Tidd, Bevand and Pavid (2005), is the creation of a new product for an organization, introduced to market through the utilization and commercialization, existing technology integration and is a patterns of thought process. Product innovations include creation of ideas, acquisition of important knowledge and transformation into a hardware or useful procedures and introduce them to society and their dissemination.

Product innovations according to Cooper, Robert in book of Kahn, Kenneth (2013), can be in the forms of new or development existing product or services to obtain better features / functionalities or than previous one.

In accordance with construct description, innovation is formulated in the following dimensions and indicators:

Table 2: Construct Dimension and Innovation Variabel Indicators

Dimension	Indicator
Product innovation	1. New Product
	2. New Product
	3. New Product

### 2.1.1 Competitiveness

The definition of Competitiveness according to Spulber (2004) is the difference between the value created by the company compared to the value created by competitors, in which the total created value for customers, suppliers and company owners should be more than the total value created by competitors. In the strategic management, sustainable competitive advantage is relative company's advantage against its competitors. Source of the advantage may be something different done the company and is hard to copy.

According to Walker (2009), competitive advantage can be obtained from the value of something produced and cost factor, it also reflects superior economic performance compared to those of competitors. To protect such different value, a mechanism that is hard to imitate must be created. To achieve a sustainable competitive advantage, a company must achieve a dominant marketing performance.

A company strategy shall be directed to improve competitiveness and win the competition in a target market. A competition will be won if a company's strategy is able to create a competitive strategy that has competitive advantages. As stated by Porter in book of Walker (2009), competitive strategy explains positioning in a

competitive strategy structure and use five forces to analyze the competitive advantage in industry. The theory suggests that a company shall choose an appropriate position in an industry. Porter's theory is a combination of objectives that are tried to achieve by company policy tools used to achieve the objectives or finding a favorable position in a market as a competitive place

To win the competition, a company may create a basic competitive advantage, such as differentiation or new product. As already known, differentiation strategy will put the company uniquely to meet specific customer needs. Generally, the company will provide important value for consumers so that the consumer is willing to pay a premium price. A company shall always look for differentiation methods that produce greater premium price than the cost differentiation.

Marcus (2005), suggested that sustained competitive advantage can be obtained from timing and positioning, company collaboration (merger, acquisition), globalization and innovation, which in turn will get continuous repositioning. While the competitiveness itself is obtained from the Cost advantage (similar product at low cost) and differentiation advantage (unique product at premium price). Meanwhile, according to Collis and Montgomery (2005) competitive advantage is obtained when a company diversifies the market existing products.

Business mission, goals and strategies to identify areas of product market are management consideration. Business scope and purpose business are the basis for product planning. Types of companies may assist determining scope of new product idea considered by a company. Top management can define the scope of new product idea considered by the company. Factors that contribute to new products success: Product fit with market needs, Product fit with internal functional strengths, Technological superiority of product, Top management support, Use of new product process, Favorable competitive environment and Structure of new product organization.

In accordance with the analysis on a variety of concepts, then the construct of Competitiveness will be seen considered, to Marcus and Collis, it is better cost and product quality than those existing in a market and according to Jouni, Midler and Gauler, where time is taken, or when the new products is released earlier, that is time to market. Then the competitiveness dimension comparison from a variety of sources is compiled, as the material to construct Competitiveness dimension, as shown below:

Table 3: Comparison of Dimensions Competitiveness Variable

Name	Dimensions Competitiveness Variable	Constructs
Walker (2009)	a. value of something produce and cost factors b. superior economic performance compare those of competitors	
Kottler & Keller (2009)	a. product differrentiation b. services differrentiation c. employees differrentiation d. Image differrentiation	a. Quality b. Cost
Marcus (2005)	a. Cost advantage (similar product at low cost) b. differentiation advantage (unique product at premium price)	c. Time to Market
Collis and Montgomery (2005)	Diversification among existing product market	
Jouni, Midler and Galer (2003)	Time to Market	

In accordance with the analysis on a variety of concepts, then constructs of Competitiveness in the national pharmaceutical industry, are Quality, Cost and Time to Market. In accordance with description, the construct is

formulated in a dimension and indicator as follows:

Table 4: Comparison of Dimensions Competitiveness Variable

Dimensions	Indicator
Quality	Product Quality
Cost	1. Cost efficiency 2. Price
Time to Market	Launching time

### 2.1.1 Company Performance

Organizational performance by Haris and Ogbonna (2011) is a success or achievement measurement achieved by an organization which is measured every certain period of time and can be measured with the following dimensions: (a) Financial factor, it is a factor related to financial companies such as the company's profitability, sales growth and market share and (b) Non-financial factor, it is a factor that has nothing to do with finance, for example customer satisfaction and customer loyalty

The company performance according to Aaker (2004), can be measured by measuring the sale volume, market share and profitability. Meanwhile, according to Walker, Boyd and Larreche (2003) company performance is a description of company objective achievement through improvement of sales and market share. Then the Company Performance dimension comparison from a variety of sources is compiled, as the material to construct Company Performance dimension, as shown below:

Table 5: Comparison of Definitions Variabel Company Performance

Name	Dimensions Variable Corporate Performance	Constructs
Haris and Ogbonna (2011)	a. Company profitability b. sales growth c. market share	Profitability market growth market share
Aaker (2004)	a. sales volume b. market share c. profitability	
Walke, Boyd and Larreche (2003)	a. sale increase b. market share	
Wheelen and Hunger (2010)	a. market share b. market growth c. profitability	

In accordance with the analysis on a variety of concepts, then the constructs of the Company's Performance in the national pharmaceutical industry are market share, market growth or an increase in sales volume (market growth) and profitability. In accordance with the description, the constructs are formulated in the following dimensions and indicators:

Table 6: Dimension Construct and Indicator of Company Performance

Dimensions	Indicator
Profitability	Profit
market growth	Market Growth
market share	Increased market share

## 3. RESEARCH METHODOLOGY & ANALYSIS

### 3.1 Research Framework

In accordance with problem identification, research objectives and research method, then it is produced a relationship model between variable that is a solution for pharmaceutical company performance problems as materials for solving the problems. The variables are expected to create a solution variable that can be used to develop action plans and rise the model of competitiveness and performance of the national pharmaceutical companies.

Innovation can also affect how the company utilizes its resources. Innovation is influenced by the integration of knowledge applied in the process of innovation. Corporate innovation has a close relationship with regulation. Companies that drive innovation are heavily influenced by regulation, whether regulation related to Intellectual Property or government incentives that can accelerate an innovation in pharmaceutical companies. Innovation has a close relationship with the mastery of technology. Innovative companies are able to master new technologies to produce a product that has value in the market and has a close relationship with competitiveness. Companies must have the mastery of technology to be able to win competitiveness. Companies that have the ability to mastery of technology, then able to have competed. Technological mastery has driven competitiveness through innovative new product development and technology transfer can drive the competitiveness of enterprises. Tidd, Besant & Pavid (2005), proves that business regulation impacts on the use of company innovation also resulted in research stating that government incentives affect investments that can drive corporate innovation. Regulation can inhibit or stimulate technological change. This relationship depends on the design of technology regulations and the instrument of choice of regulatory policy. Thus the new regulations will affect the technology as well as the influence of technology trends and technology adoption on the implications of regulation. Company resources have a close relationship with regulation. The company must have sufficient resources to meet the regulations governing its business. Regulation can also affect how the company utilizes its resources. The description of the study is presented in Figure 3.

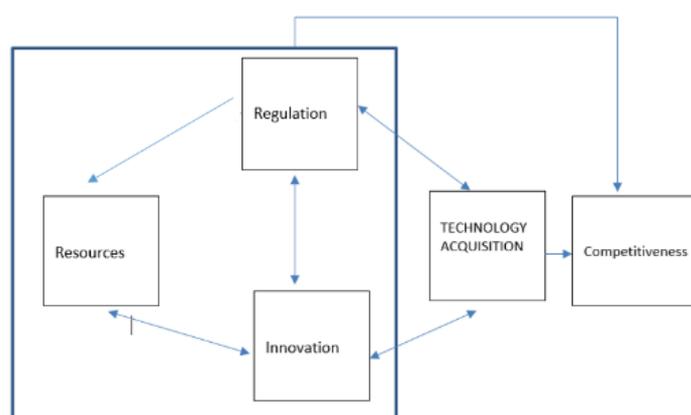


Fig. 3. Path Diagram of Research Model

Based on problem identification, research objectives and research methods that have been described, then it will be obtained the relationship model between variables that are the solution of pharmaceutical companies' performance problems as the material to solve the problem.

### 3.2 Methodology

In accordance with the research objectives to be achieved, then it is used a descriptive research and verification research whose objective is to obtain description on natures and characteristics of variables that are studied as well as to understand and analyze the relationship between variables through hypothesis testing. In accordance with the type of this research then this research uses descriptive and explanatory methods. Principally, verification research will test the hypothesis validity that is implemented through data collection in the field, in

which in this study the test is to determine whether product innovation and technology strategy and the collaboration of product development have the effects on competitiveness increase and performance improvement on national pharmaceutical companies.

The variables are expected to produce a variable solution that can prepare the operating strategy and action plan. From the research result consisting of interviews and observations and hypothesis testing using PLS analysis tool, it is expected that national pharmaceutical company performance improvement model can be obtained.

### 3.3 Policy Analysis

The populations of this study are national pharmaceutical companies who are active in pharmaceutical company association, totally 180 companies, the data are collected by survey and interview with leaders and managers of the national pharmaceutical companies to represent the company's board of directors. The analysis technique used is a structural equation modeling with Partial Least Square Path Modeling approach (PLS-PM).

## 4. DISCUSSION

Benneth and Smith (2002) state that competitive advantage is an advantage achieved through superior customer value.

## 5. CONCLUSIONS

Objective formulation of problem solution of this study is the next stage of problem formulation. Furthermore, objective formulation can be measured and it is possible to identify solution variables. Innovation effect and research & development cooperation are measured as one of the potential variables that affect competitiveness and have the impact on company performance. To understand the effect on each of the variable, then this research is expected to measure four interrelated variables, namely innovation strategy and cooperative research & development variables as the independent variables, the competitiveness that still need testing as a full intervening or partial intervening and finally, the pharmaceutical company performance variable as the dependent variable. In this objective formulation, it is expected that innovation strategy and research & development cooperation for competitiveness and pharmaceutical companies performance can be seen.

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## Primary Factors In Human Capital Management That Significantly Influence Toward The Performance Of Employee

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### Abstract

Employee performance is a very important factor in an organization to achieve its goal of becoming a high-performance and sustainable organization. Therefore, organizations need to identify the primary factors in the management of human capital that significantly influence the performance of employees in order to manage it such that it can be optimized and have strong alignment with organizational strategy in achieving the vision, mission and strategic objectives of organization. The purpose of this conceptual paper is to develop a conceptual framework about the primary factors that significantly influence employee performance and create a model as well as a comprehensive framework for the organization.

This article uses qualitative methods to make facts easier to understand and produce new models. The author conducts a review literature to examine theories that can be used to explain the phenomenon and previous research studies to show the linkage between research being conducted and that has been done. The results of the previous study were selected and analyzed, then relevant items were linked and formulated in accordance with the research problem, so that relevant factors could be integrated into a new comprehensive model.

The approach used consists of 3 stages as follows: first, this article discusses the relevance of the factors of leadership, organizational culture, career development, compensation systems, performance management and organizational commitment to employee performance. Second, this article performed a literature review of previous researches on the influence of leadership, organizational culture, career development, compensation systems, management performance and organizational commitment to employee performance, and Third, this article is to integrate all of these factors to become comprehensive model and framework for the organization.

**Keywords:** *Leadership, Organizational Culture, Career Development, Compensation Systems, Performance Management, Organizational Commitment and Employee Performance.*

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### 1. Introduction

Employee's performance is a very important factor in an organization to achieve its goal of becoming a high performance and sustainable organization. Therefore, organizations need to identify the primary factors that have a significant effect to employee performance.

In the human capital management system, there are many factors that affect the performance of the employee, start from recruitment, management performance, talent management, competency development, career management, and others, but from these factors, of course there are primary factors which influence more significantly employee performance such as leadership, organizational culture, career development, compensation systems, performance management and organization commitment. Therefore, companies should be more focus on managing the primary factors in order to manage it such that it can be optimized and have strong alignment with organizational strategy to achieve the vision, mission and strategic objectives.

Employee's performance comes from the word employee job performance that means work achievement achieved by an employee. Understanding the performance is the result of the quality and quantity of work accomplished by an employee in performing its functions in accordance with the responsibilities given to him.

According to Dessler (2000), the performance is a comparison of the work performance with established standards. Meanwhile, according to Mangkunagara (2002), the performance is the work of both quality and quantity is achieved by a person in carrying out tasks according to responsibilities given.

Based on some opinions about the performance it can be concluded that the definition of performance containing achievement substance of the work by a person, hence the performance is a reflection of the results achieved by a person or group of people. Individual performance has a close relationship and have a major impact on the performance of the organization so that if the performance of the employee/individual performance can be properly managed, high performance, the impact will also create a high-performing organization, and sustainably.

## 2. Literature Review

This article uses qualitative methods to make facts easier to understand and produce new models. The author conducts a review literature to examine theories that can be used to explain the phenomenon and previous research studies to show the linkage between research being conducted and that has been done. The results of the previous study were selected and analyzed, then relevant items were linked and formulated in accordance with the research problem, so that relevant factors could be integrated into a new comprehensive model.

The reason why the author chose the literature review method is as follows:

1. Literature Review shows the pattern of previous research and its relation to the research being conducted.
2. The review literature allows researchers to group and synthesize different research results and show what has been done and what has not been done.
3. The review literature helps researchers to tell what has been found so that researchers benefit from what others have done and encourage the emergence of new ideas.

Previous research is very important as a foundation in the preparation of conceptual paper writing to learn about the main factors that affect the human capital management of employee performance significantly. Based on the results of previous research in the form of journals that become literature in this research it can be identified that the main factors which influence and significant impact on the performance of employees, among others, leadership, organization culture, career development, compensation systems, management performance and organizational commitment.

Resume from previous research related to leadership, organizational culture, career development, compensation systems, performance management and organizational commitment to employee performance can be presented in the following table:

RESEARCHER	DEPENDENT VARIABLE	INDEPENDENT VARIABLE	RESEARCH RESULT
McNeese-Smith (1996)	Employee Performance	<ul style="list-style-type: none"> <li>• Productivity</li> <li>• Work Satisfaction</li> <li>• Organizational Commitment</li> <li>• Leadership Behavior</li> </ul>	<ul style="list-style-type: none"> <li>• Organizational commitment and job satisfaction significantly and positively associated with employee performance.</li> <li>• Leadership behavior is positively related to employee performance.</li> </ul>
Cianni & Wnuck (1997)	Employee Performance	<ul style="list-style-type: none"> <li>• Leadership role</li> <li>• Work Satisfaction</li> <li>• Self-esteem</li> </ul>	Research results indicate that the role of leadership, job satisfaction and self-esteem has a significant positive effect on employee performance.



RESEARCHER	DEPENDENT VARIABLE	INDEPENDENT VARIABLE	RESEARCH RESULT
Darwish A. Yousef (2000)	Job Performance	<ul style="list-style-type: none"> <li>• Leadership Behavior</li> <li>• Job Satisfaction</li> <li>• Organizational Commitment (mediating)</li> <li>• National Culture</li> </ul>	Results suggest that those who perceive their superiors as adopting consultative or participative leadership behavior are more committed to their organizations, more satisfied with their jobs, and their performance is high. The results also indicate that national culture moderates the relationship of leadership behavior with job satisfaction.
Duong Manh Cuong Fredric William Swierczek (2008)	Employee Performance	<ul style="list-style-type: none"> <li>• Corporate Culture</li> <li>• Leadership</li> <li>• Job Satisfaction</li> <li>• Job Commitment</li> </ul>	Company culture, leadership, job satisfaction, job commitment has a significant positive effect on employee performance.
Lee Huey Yiing, Kamarul Zaman Bin Ahmad (2009)	Job Performance	<ul style="list-style-type: none"> <li>• Leadership Behavior</li> <li>• Organizational Commitment</li> <li>• Job Satisfaction</li> <li>• Organizational Culture (mediating)</li> </ul>	Leadership behaviour was found to be significantly related to organizational commitment, and organizational culture played an important role in moderating this relationship.  Organizational commitment was found to be significantly associated with job satisfaction, but not with employee performance. However, only supportive culture influenced the relationship between commitment and satisfaction.
Muhammad Riaz Khan Ziauddin Farooq Ahmed Jam M. I. Ramay (2010)	Employee Job Performance	<ul style="list-style-type: none"> <li>• Organizational Commitment</li> </ul>	<ul style="list-style-type: none"> <li>• The results revealed a positive relationship between organizational commitment and employees' job performance.</li> <li>• In the comparative analysis of three dimensions of organizational commitment, normative commitment has a positive and significant impact on employees' job performance.</li> </ul>

RESEARCHER	DEPENDENT VARIABLE	INDEPENDENT VARIABLE	RESEARCH RESULT
Solomon Markos M. Sandhya Sridevi (2010)	Employee Performance	Employee Engagement	<ul style="list-style-type: none"> <li>▪ Employee engagement is stronger predictor of positive organizational performance clearly showing the two-way relationship between employer and employee compared to the three earlier constructs: job satisfaction, employee commitment and organizational citizenship behavior.</li> <li>▪ Engaged employees are emotionally attached to their organization and highly</li> </ul>



RESEARCHER	DEPENDENT VARIABLE	INDEPENDENT VARIABLE	RESEARCH RESULT
			involved in their job with a great enthusiasm for the success of their employer, going extra mile beyond the employment contractual agreement.
Hueryren Yeh Dachuan Hong (2012)	Job Performance	<ul style="list-style-type: none"> <li>▪ Leadership Type</li> <li>▪ Organizational Commitment (Mediating)</li> </ul>	Organizational commitment will positively and significantly affect to job performance. It shows that employees are willing to stay and devote ourselves to achieve the goal of a job because they have the same values and goals of the organization.
M Umer Paracha Adnan Qamar Anam Mirza Inam-ul-Hassan Hamid Waqas (2012)	Employee Performance	<ul style="list-style-type: none"> <li>▪ Leadership Style <ul style="list-style-type: none"> <li>○ Transformational</li> <li>○ Transactional</li> </ul> </li> <li>▪ Job Satisfaction (mediating)</li> </ul>	Leadership style i.e. Transactional or Transformational leadership style can increase the performance of Employees of private school (educators) working in Pakistan. The results indicate that Leadership has significance (strongly positive relationship) with Employee performance. The level of significance of transformational was positive but weak then transactional leadership.
Rabia Imran Afsheen Fatima Arshad Zaheer Imran Yousaf Iram Batool (2012)	Employee Performance	<ul style="list-style-type: none"> <li>▪ Transformational Leadership</li> <li>▪ Work Environment</li> </ul>	<ul style="list-style-type: none"> <li>▪ The results reveal positive and significant impact of transformational leadership and work environment on employee performance.</li> <li>▪ The work environment was also found to play a mediating role in the relationship between transformational leadership and employee performance.</li> </ul>
Fakhar Shahzad Zahid Iqbal Muhammad Gulzar (2013)	Job Performance	Organizational Culture	Culture of organizations has the significant positive impact on employee's job performance.
Rahmisyari (2015)	Employee Performance	<ul style="list-style-type: none"> <li>▪ Leadership Styles</li> <li>▪ Organizational Culture</li> <li>▪ Employees Development</li> </ul>	<ul style="list-style-type: none"> <li>▪ Leadership style has significant effect on organizational culture.</li> <li>▪ Leadership style has significant effect on employee performance.</li> <li>▪ Organizational culture has insignificant effect on employee performance.</li> </ul>

RESEARCHER	DEPENDENT VARIABLE	INDEPENDENT VARIABLE	RESEARCH RESULT
Enggar Dwi Jatmiko, Bambang Swasto,	Employee Performance	<ul style="list-style-type: none"> <li>▪ Work Motivation;</li> <li>▪ Organizational Commitment</li> </ul>	There is a significant simultaneous effect of work motivation on the employee performance, organizational commitment on



RESEARCHER	DEPENDENT VARIABLE	INDEPENDENT VARIABLE	RESEARCH RESULT
Gunawan Eko N (2015)			the employee performance, also work motivation and organizational commitment significantly effect on the employee performance.
Monica B.R. Pangemanan (2015)	Organizational Commitment	<ul style="list-style-type: none"> <li>▪ Staffing</li> <li>▪ Training And Development</li> <li>▪ Performance Management</li> </ul>	Performance Management (performance appraisal) have significant impact on Organizational Commitment
Cindi Ismi Januari Hamidah Nayati Utami Ika Ruhana (2016)	Employee Performance	<ul style="list-style-type: none"> <li>▪ Work Scoring</li> <li>▪ Work Satisfaction (Mediating)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Performance appraisal affect the variable of job satisfaction significantly.</li> <li>▪ Performance appraisal affects the variable of job performance significantly.</li> </ul>
Ni Komang Sri Wahyudi I Gede Adnyana Sudibya (2016)	Employee Performance	<ul style="list-style-type: none"> <li>▪ Work Satisfaction</li> <li>▪ Organizational Commitment</li> </ul>	<ul style="list-style-type: none"> <li>▪ Job satisfaction has significant and positive affect on organizational commitment.</li> <li>▪ Job satisfaction has significant and positive affect on employee performance.</li> <li>▪ Organizational commitment has significant and positive affect on employee performance.</li> </ul>

### 3. Discussion

The research result from 1996 to 2016 are presented in the research of literature, it indicates that there are many factors that affect the performance of the employee, but the very fundamental thing is leadership, organizational culture, career development, compensation systems, management performance and organizational commitment. Although there are other factors such as motivation, job satisfaction, work environment, as well as training and development. Some research also shows that organizational commitment is a variable mediating / intervening toward employee performance.

McNeese-Smith (1996) states that the productivity associated with a variety of items such as: inputs, goals, meetings, hours of work and other items related to the output. McNeese-Smith found that organizational commitment positively significantly related to employee performance. His research examines five leadership behaviors that challenge the process, inspiring a shared vision, enabling others to act, to give an example and motivating. The research then identifies both correlational and predictive relationship between the use of leadership behavior with the performance of the employee, employee job satisfaction and organizational commitment. This research shows that there is a positive relationship between the use of leadership behavior with the performance of the employee, employee job satisfaction and organizational commitment.

Cianni & Wnuck (1997) states that employees who have a high chance of increasing their career would stimulate their motivation to work better. Companies that have a systematic model in career development of employees will have a good performance. It can be concluded that the development achieved a good career employees then performance will increase, or in other words the career development significantly influence employee performance.

Yusef, A.D. (2000), conducted a research that the results concluded that organizational commitment mediates the relationship between leadership style and job satisfaction and performance. From these researches it can be concluded that it is proven that the employee's performance improved strongly influenced by organizational

commitment (McNeese-Smith), a leadership role (Yousef, A.D.), and career development (Cianni & Wnuck).

Cuong & Swierczek (2008), conducted a research that the results show that corporate culture, leadership, job satisfaction, job commitment has a significant positive effect on employee performance. Then Yiing & Age (2009), conduct advanced research with reference to the research Yousef, AD (2000) above, the results of his research suggest that three elements of organizational culture (culture of bureaucratic, innovative and supportive) moderated significantly the relationship between leadership style participatory and supportive leadership style to organizational commitment.

Khan, et al (2010) conducted a research on the relationship between the Employee Job Performance with Organizational Commitment and the results show that there is a significant positive relationship between organizational commitment and employees' job performance. Then the three dimensions of organizational commitment shows that normative commitment has a significant and positive effect on employee performance.

Based on the research that conducted by Markos & Sridevi (2010) Employee engagement is stronger predictor of positive organizational performance clearly showing the two-way relationship between employer and employee compared to the three earlier constructs: job satisfaction, employee commitment and organizational citizenship behavior. Engaged employees are emotionally attached to their organization and highly involved in their job with a great enthusiasm for the success of their employer, going extra mile beyond the employment contractual agreement. Later researches conducted by Yeh and Hong (2012), also showed that organizational commitment has a significant positive effect on employee performance.

According to the research conducted by Paracha et al (2012), Leadership style i.e. Transactional or Transformational leadership style can increase the performance of the Employees of private school (educators) working in Pakistan. The results indicate that Leadership has significance (strongly positive relationship) with Employee performance. The level of significance of the transformational was positive but weak then transactional leadership.

According to research conducted by Imran et al (2012), which examines the relationship between employee performance with transformational leadership and work environment, the results show that there is a positive and significant impact of transformational leadership and work environment on employee performance. The work environment was also found to play a mediating role in the relationship between transformational leadership and employee performance.

From several researches it can be concluded that it is proven that the employee's performance improved strongly influenced by organizational commitment (Khan et al, 2010 and Yeh & Hong), leadership style (Paracha et al 2012 and Imran et al 2012), and organizational culture and style leadership significantly influence organizational commitment (Yiing & Age).

Then Shahzad et al (2013) conducted a research on the influence of organizational culture on job performance, and the results showed that the Culture of organisasi has the significant positive impact on the employee's job performance.

Rahmisyari (2015) in his research also found that leadership style has significant effect on organizational culture, Leadership style has a significant effect on employee performance, and organizational culture has insignificant effect on employee performance.

According to Jatmiko et al (2015), there is a simultaneous significant effect of work motivation on the employee performance, organizational commitment on the employee performance, also work motivation and organizational commitment significantly effect on the employee performance. Meanwhile, according to Pangemanan (2015) Performance Management (performance appraisal) has a significant impact on Organizational Commitment.



According to the January et al (2016), Performance appraisal Affect the variable of job satisfaction significantly, Performance appraisal affects the variable of job performance significantly. Meanwhile, according to Wahyudi & Sudibya (2016), job satisfaction has significant positive effect on organizational commitment. Job satisfaction has significant positive effect on employee performance. Organizational commitment has significant positive effect on employee performance.

From several researches, it can be concluded that the improvement of employee's performance strongly influenced by organizational culture (Shahzad et al, 2013 and Rahmisyari, 2015), leadership style (Rahmisyari 2015), organizational commitment, and performance management / performance appraisal (Jatmiko et al, 2015 and January et al, 2016).

Thus, it is based on a literature review that has been conducted shows that there are six main factors that significantly affect the performance of employees, namely leadership, organizational culture, career development, compensation systems, performance management and organizational commitment.

Despite research in the literature, there are still other factors that affect employee performance such as motivation, job satisfaction, work environment, as well as training and development. In a literature research has been done above, also found that there are two variables that can be variable mediating/intervening variable organizational commitment and variable organizational culture, but the majority of researchers made variable organizational commitment as a mediating variable/intervening and only a small portion that makes organizational culture variables as variables mediating/intervening.

Therefore, when developing the model, the researchers found there are six key variables significantly influence employee performance, namely 1) leadership, 2) organizational culture, 3) career development, 4) compensation system, 5) management performance and 6) organizational commitment (as a mediating variable/intervening), so that the model can be described as follows:

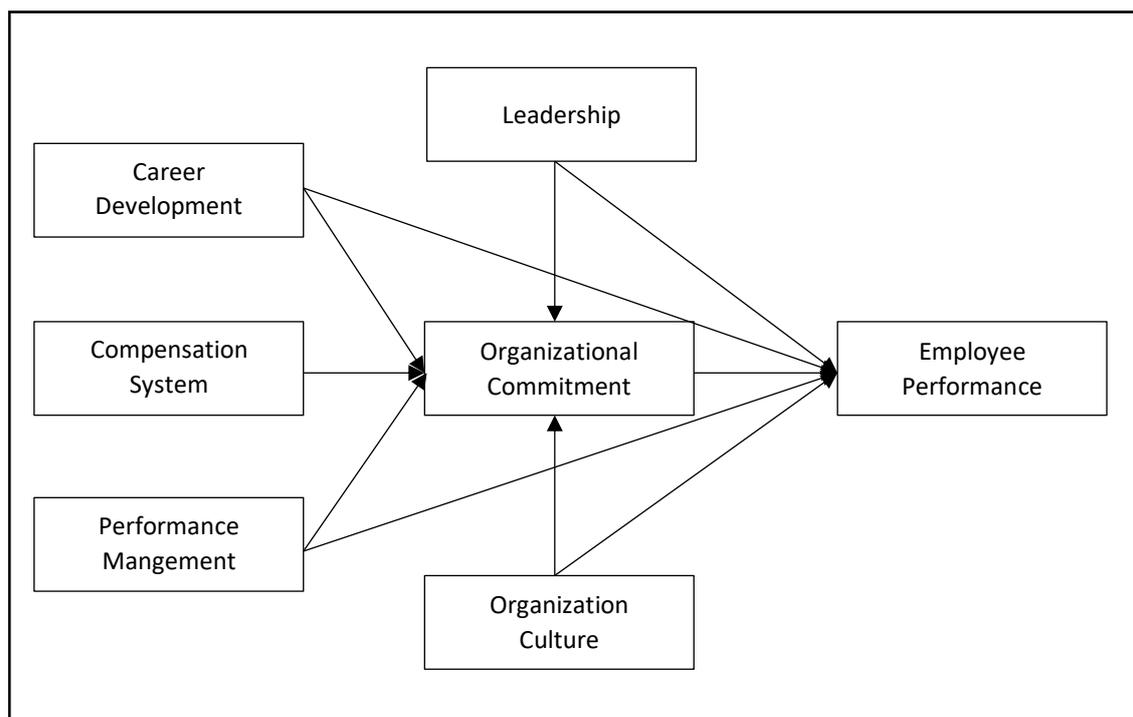


Figure 1. Primary Factors Model that Influence Employee Performance (Formulated based on a literature review of the previous researches result)

#### 4. Conclusion

Based on a literature review that has been done towards previous researches and continued with the discussion, it can be concluded that the primary factors which significantly influence the employee performance, there are six of them such as: 1) leadership, 2) organizational culture, 3) career development, 4) compensation system, 5) performance management and 6) organizational commitment (as a mediating variable / intervening).

Further research can do testing empirically for the model in Figure 1 to measure the significance and the influence of each factor, or examine the influence of other factors that have not been discussed in this article such as motivation, job satisfaction, work environment, as well as training and development.

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## What Makes Tourism Platform's Video Marketing Failed to be Viral? A case study from Indonesia

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### Abstract

Along with technology development, marketing now took in a video form. Companies now make their marketing in a video form and spread it online to gain people's attention since nowadays people tend to use the internet on a daily basis. People, in this case customer, also rely on the internet to find more information whenever they want to go travelling. Not only for search about destination information, but people also use the internet to buy the hotel and aeroplane tickets. This is beneficial for the company in tourism sector which runs online platforms because they will get more customer. However, even though people aware of the platforms, only a few of them know about its video marketing because the videos are not viral. There are several missing elements which make them failed to become viral. Those elements are Title length, Element of irony, and Talent. In order to help tourism service platform companies make their video become viral, they have to fulfil those elements.

*Keywords: viral video; marketing; tourism*

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### 1. Introduction

The tourism industry has a role in a country to boost their income. According to Rizal Ramli, Coordinating Maritime Affairs Minister of Indonesia, the most potential sector to increase foreign exchange is tourism (Kementerian Pariwisata, 2015. Indonesia placed in the fifth position in ASEAN for its tourism (Industri Pariwisata Indonesia, 2016) and had a target to increase its performance this year (The ASEAN Travel & Tourism Competitiveness Report 2012, 2012).

Along with technology development, now tourism service companies in Indonesia are utilising video as their marketing tool. Video marketing is good for tourism since it represents more than one sense; visual and auditory. With help from the Internet, those tourism video marketing can be viral. A viral video will help the marketer to gain a lot of attention from people in large number. It takes minimal time and effort, makes it beneficial for a marketer (Rayport, 1996). Stelzner, in 2006, state video marketing later on will be used by approximately 73% marketer (Stelzner, 2016).

Youth people, which take 35% of total population in Indonesia, are potential to make a video become viral (Nuraeni, Arru, & Novani, 2014). Youth people have an age range between 15-24 years old according to UNESCO. Youth people play an imperative role in tourism because they travel a lot because every sixth arrival in the world is represented by young tourist (Organization, World Tourism, 1991). They have the ability to influence their surroundings even those who came from different generations. People also have a habit to seek information through the Internet, which make the video easier to be acknowledged by people.

As stated before, to make a video become viral marketer can utilise the internet as a place to spread it and engage youth people. The Internet will be a good place for it since there are around approximately 132.7 million people of internet user in Indonesia which 80% of it spend at least an hour of the day to access it (APJII, 2014).

To get more information, the researcher has conducted a preliminary interview. Based on the data gathered,

found that people use the internet to collect more information before they go travelling. They also use the internet to help them plan their trips. Respondents are relied their trust on online travel agencies to buy hotel and aeroplane tickets. The most dependable one according to respondents is Traveloka, but they also mention another platform such as Pegipegi, Agoda, Tiket.com, and Airbnb. They knew those platforms from their relatives and search engine (on the first page from a search engine). However, they rarely know its video marketing/campaign even though Traveloka and other platforms have it. It means those videos aren't viral.

Thus, this research is intended to find (i) why these tourism videos not viral and (ii) what factors that should be improved in order to make the video viral.

## 2. Literature review

A fast shared data process which intended to give certain effect in a very short time is called as viral marketing (Akdeniz, 2015). Viral marketing can be in the form of video, which identified as a condition where the particular video remarkably liked and shared through online (Huang, Chen, & Wang, 2012). The key to making it become viral relies on people's intention to forward it (Lin, Huang, & Lin, 2008).

A viral video content characteristic was explained by Tyler West on his journal in 2011. There are nine variables which are Title length, Run-time, Element of laughter, Element of surprise, Element of irony, Minority presence, Music, Youth presence, and Talent. Tyler state a viral video has short title length with maximum three words and has short run-time which no longer than three minutes. Those number came from the average title length and average run time of particular videos. Other important variables are Element of irony, Music quality, and Talent. A viral video doesn't have to contain Element of laughter and presence of minority and youth. Furthermore, Tyler found that Element of surprise isn't correlated with video's popularity.

Table 4: Tyler's videos sample list

No	Videos	No	Video
1	"Charlie Bit My Finger"	11	"Flea Market Montgomery"
2	"Evolution of Dance"	12	"United Breaks Guitars"
3	"David After Dentist"	13	"Kittens, Inspired by Kittens"
4	"Here it Goes Again"	14	"Potter Puppets Pals"
5	"Rick Roll"	15	"Jill and Kevin's Big Day"
6	"Leave Britney Alone"	16	"Sneezing Panda"
7	"Don't Tease Me, Bro"	17	"Otters Holding Hands"
8	"Keyboard Cat"	18	"Literal Music Videos"
9	"Dramatic Chipmunk"	19	"OMG, Shoes"
10	"Hitler's Downfall"	20	"Baby Laughing"

## Methods

This research began with a preliminary study through the interview. This preliminary study aimed to help the researcher identify the problem and determine the list of company's video marketing to be examined. The respondents for preliminary study are people who live in Bandung and like to go travelling. When the problem already identified, researcher done some literature review and develop the methodology.

The methodology used for this research is by quantitative. The researcher made a comparison of a list of tourism video marketing with the viral videos according to Tyler West's paper. A coding was used to analyse the data, marked with "yes/no" and "short/long" based on each variable.

- Title length: it categorised as short if it's five words or less since the average title length from the sample is five words.
- Run time: it categorised as short if it's no longer than 46 seconds, due to average sample were under 46 seconds
- Element of Laughter: marked as "yes" if there's a visual or audio of laughing people in the video
- Element of surprise: marked as "yes" if there are a surprised people in the video
- Element of irony: marked as "yes" if the video shows something that contradicts with society's expectation
- Minority presence: marked as "yes" if there's a person from minority ethnic in the video
- Music: marked as "yes" id the video contain a music
- Youth presence: marked as "yes" if there's a person under 18 years old in the video
- Talent: marked as "yes" if the scene in the video seems like a result of practice

The data then processed by comparing the proportion. Researcher's judgment also used to analyse the data. The list of tourism video marketing that is analysed by the researcher are:

Table 5: List of video sample

No	Videos	No	Videos
1	"Liburan Gratis dengan Traveloka Points" by Traveloka	11	"Liburan harus tertunda? Untung pakai Traveloka!"
2	"Traveloka Dulu, Momen Tak Terlupakan Kemudian"	12	"Apapun cerita travelingmu, awali dengan Traveloka dulu!"
3	"Temukan Agoda Base Campmu"	13	"The Chase 30"
4	"Pegipegi Promo Tiket Kereta Mudik 2017"	14	"Traveloka Dulu, Mudik Naik Kereta Kemudian"
5	"Kado Ulang Tahun dari Pegipegi"	15	"Langkahkan kakimu untuk pengalaman yang tak terhitung jumlahnya"
6	"Tiket Pesawat Promo Murah"	16	"Bebaskan rasa penasaranmu dengan Agoda"
7	"We Accept"	17	"Envy"
8	"Welcome to Airbnb"	18	"2 Juta!!"
9	"Ingin dunia tahu cerita travelingmu? #TravelokaDulu!"	19	"Butuh Tiket Kereta Api Murah? Traveloka Dulu!"
10	"Apa yang dilakukan traveller indo waktu mereka #CheckInStepOut"	20	"Check-in hotel terkendala? Untung pakai Traveloka! "

## Findings

The result of the processed coding data shows in the table below with percentage of each element. The data were coded by "yes/no" and "short/long" adjusted with each variable. More detailed explanation are:

- Title length:  
A title can be categorized as have short title if it's contain no more than five words. It's considered like that since the average title length of chosen video is 5.15 words. Only 45% video of the sample who has short length title.
- Run-time:  
In this paper, a video can be considered as short if it was less than 46 seconds. There are 12 videos that are categorized as having short run time, which is around 60% of the total sample. The shortest video is 15 seconds and the longest is 1 minute 48 seconds.
- Element of laughter:  
Element of laughter can be identified if there's anyone who seen or heard laughing in the video. The laugh must be in the first 30 seconds of the video. Most of the sample doesn't have this element, and only 20% who have it.
- Element of surprise:

If there's people in the video who show surprise expression whether it's visual or audio, then that particular video considered as have element of surprise. 75% of the sample are marked as "no", which means they don't have this element on the video.

- **Irony:**  
A video can considered as ironic if it's show ay scene that contradict with what was expected. 70% of the sample isn't have this element. Only six video who identified as having ironic element. This element actually can increase the attractiveness of a video, and can increase the potential to become viral.
- **Minority presence:**  
If there's a presence of minority ethnic in a video, then that particular video marked as "yes" in the column, which means they have this element. The result shows only 5% of the sample who have it, or for more detail, only one video who actually have this element.
- **Music:**  
Any video that shows a visual of someone singing or have a background music or was a music video, are marked as have this element. The result shows every video or 100% of the sample are have this element.
- **Youth:**  
If there's someone aged under 18 who appear in the video, then it's marked as contain this element. Only 25% of the total sample who contain youth element.
- **Talent:**  
Talent is important in a viral video. This element can be judge from guessing the level of practice needed to perform in that particular video. The result shows only 40%, which means 8 video, of the total sample who contain this element. This element is relative.

The result of the processed data shows that there are significant difference in several elements between the tourism marketing video and the viral video (based on Tyler's paper). Those elements are Title length, Element of surprise, Element of irony, and Talent. Most of the video from tourism service platform have a long title for their video with average having five words. That video also lacks ironic element which can effect a decreasing in video's attractiveness. Other significant difference occurs in Talent. Data shows that a video more likely become viral if they have talent on it. These are why tourism service platform's video tend not to viral.

Refers to Tyler's findings, the most important variable to make a video viral are that video must have a short title, short run-time, have ironic element, have musical qualities and have talent on it. That variable would attract people's attention easily since a short title, and short duration would be easy to remember. Music would help to make the video more attractive and dissociate boring feeling. Element of irony would make the video become more interesting as well because it makes the video become unique and trigger people's willing to share it with their friends. Meanwhile presence of talent will make the video become looks more professional. Compared to the processed data, there are three variables that does not fulfill the requirement, which are the title length, element of irony and talent. That is the reason why any video from the sample did not viral.

Table 3 : Results by Percentage

Variable	Reference		Tourism		Z test	p value	Result
	Short/Yes	Long/No	Short/Yes	Long/No			
Title length	Short : 75%	Long : 25%	Short : 45%	Long : 55%	0.75	0.004	Significant difference
Run-time	Short : 60%	Long : 40%	Short : 60%	Long : 40%	0.60	0.596	No significant difference
Element of Laughter	Yes : 30%	No : 70%	Yes : 20%	No : 80%	0.70	0.238	No significant difference
Element of Surprise	Yes : 50%	No : 50%	Yes : 25%	No : 75%	0.50	0.041	Significant difference
Element of Irony	Yes : 90%	No : 10%	Yes : 30%	No : 70%	0.90	0.000	Significant



Presence of Minority	Yes : 20%	No : 80%	Yes : 5%	No : 95%	0.80	0.069	difference No significant difference
Presence of Musical Qualities	Yes : 60%	No : 40%	Yes : 100%	No : 0%	0.60	0.000	No significant difference
Youth	Yes : 35%	No : 65%	Yes : 25%	No : 75%	0.65	0.245	No significant difference
Talent	Yes : 60%	No : 40%	Yes : 40%	No : 60%	0.60	0.057	Significant difference

## Conclusion and implication

With the development of technology, marketing now also take in a digital form. Many companies, include tourism service company start to make a video for their marketing and put it on internet with hope it will become viral. Most of them use Youtube as a place to share videos. In order to make a video become viral, they have to fulfilled several elements such as Title length, Run-time, Element of Irony, Music qualities, and Talent. However, most of tourism service company did not fulfill these requirements which make their videos didn't go viral. To overcome this problem, tourism service companies have to adjust their video concept with these requirements. The analysis of the processed data shows that tourism platform companies have to improve their video in these three elements; title length, element of irony, and talent. The title of the tourism video have to be shorter than before. The video also have to contain ironic element to give surprise effect that will lead to increase its attractiveness. The video would be better if it have talent on it as well, to make it looks more professional. Therefore they can make a great video marketing and be known by many people at rapid time.

This study have limitation since several variables are considered as relative. Those variables are element of irony and talent. Also, this study rely on researcher's judgment, which can be different with other individuals.

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## **Boosting Mini-Hydro Power Plant (PLTM) Business Performance by Implementing Supply Chain Management and Business Partnership – Case Study: PLTM Business Unit in West Java**

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### **Abstract**

West Java topography condition is very potential for the development of hydro power plant technology especially mini-hydro power (PLTM) and micro-hydro power (PLTMH) which is a runoff river power plant. Unfortunately, until right now the business performance of PLTM and PLTMH is not optimal yet. It was allegedly related to the supply chain management and business partnership aspect. This research aims to examine the effect of supply chain management and business partnerships aspect towards business performance of West Java PLTM business units. This research is a verificative research that use explanatory survey as method and with cross section/one shot observation time. The unit of analysis is PLTM industry in West Java and the observation unit is the company management itself. Target population is all of companies belonging to PLTM industry, which contain of 33 PLTMs. The data collection is done by census with Partial Least Square (PLS) as the analytical approach. The results showed that supply chain management and business partnership significantly influence business performance on business units of PLTM in West Java. Business partnerships have a greater impact than supply chain management in boosting business performance.

*Keywords: supply chain management; business partnership; business performance; mini-hydro power plant; PLTM*

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### **I. INTRODUCTION**

#### **1.1 Research Background**

The mountainous topograph in Southern part of West Java, with many small rivers flowing throughtout the year and high rain fall volume have springs flowing to the rivers is very potential for the development of environment-friendly hydroelectric technology, which is a runoff river power plant between 1-10 MWh called Mini Hydro Power Plant (Pembangkit Listrik Tenaga Mini Hidro). The equipment used is relatively simple and easy to find. The required land is not extensive, so there is no need to open the forest to build the large scale hydroelectric power supply with big water dam and hughe power installation. Southern part of West Java has mountain topography spread all over the region. In general, mountain's texture is steep with relatively few inhabitants. The mountainous area has a large electrical energy in the form of water. The flow of water from the plateau to the lower one has potential energy that can be utilized as a source of electrical energy, especially in Sukabumi, Cianjur, Garut and Tasikmalaya that still have forests and stable water supply.

With the publication of ESDM Regulation no. 19 of 2015 on Micro Hydro Power Plants regarding the electricity tariff (Feed In Tariff) of Hydro Power Plants under 10 MW/h of 12 cent USD / KWh and the use of mini hidro Potential of 500 MW, newly installed 86.1 MW, should increase the number of Mini Hydro Power Plants (PLTM) in West Java. Actually, the potential of Mini Hydro Power Plants for supporting to the main grid of electricity (Jawa Bali Network) and remote areas that have not reached the electricity network or areas that do not have other sources of fuel, so that the potential for the development of the Mini Hydro Power Plants is not optimal. However, the request for a Water Power Business Permit under 10 MW in Indonesia has only reached 33 Commercial Operation Date (COD) Permits from 266 Permits during 2015 to date.

Until now, the company's performance is only 65%-75% of 86.1 MW installed yet, due to the frequent down time. This problem is caused by lack of optimal partnership and also supply chain management in mini hydro power plants companies, especially in the technology to be used, expertise people and financial investor. The Previous study has not address on Supply Chain Management and Strategic Partnership during the operation phase of Mini Hydro Power Plant. The form of partners relationship proposed by Cravens (2013) that includes a vertical relationship consisting of relationships with suppliers and customers and the relationship horizontally consisting of lateral and internal partnerships. In the era of decentralization of the energy sector in Indonesia, the key to sustainability success is extensive coordination with private parties, local government offices, state electricity company, and communities. On the other hand, Clement, Clement, Joseph (2013) suggests that the performance of a company with partnership is better than a single-ownership company. In addition, Agus and Hassan (2012) demonstrate that the product quality performance and business performance dependence on practices of strategic suppliers partnerships.

Another factor that is alleged to have an impact on the optimum business performance of micro hydro power plant companies is regard to the aspects of the supply chain. Turban, Rainer & Porter (2004) mentions supply chain includes 3 components ie upstream supply chain, internal supply chain management, and downstream supply chain. Lia, Ragu-Nathan, Ragu-Nathan, Rao (2006) found that higher levels of SCM practice lead to increased competitive advantage and improved organizational performance.

Based on this background, this study aims to examine the effect of supply chain management and business partnership on the business performance of business units of micro hydro power plant in West Java. In this case, this study are expected to be used by the Government in their policies and private sectors to boosting mini hydro power plant performance to increase electrification ratio based on renewable energy resources. And may also provide benefits to the next Mini Hydro Power Plant Business studies writing academics.

## II. LITERATURE STUDY

### 2.1 Supply Chain Management

According to Turban, Rainer & Porter (2004), supply chain includes 3 (three) kinds of components: Upstream Supply Chain, with main activity is procurement; Internal Supply Chain Management covers all the processes of goods imported into warehouses used in transforming upstream inputs, so it main concerns include production, manufacturing and inventory control; and downstream supply chain, encompassing all activities involving the delivery of goods to end customers, so that the main concern is directed to distribution, warehousing, transportation and service.

According to Kalakota (2000), supply chain management is a major process by which products are created and delivered to consumers from a structural angle. A supply chain refers to an intricate network of relationships that maintain an organization with its business associates to gain a source of production in delivering products to consumers. Currently, conventional supply chain management is starting to be abandoned and turning to green supply chain management.

Previous study on Green Supply Chain Management (Zhu & Sarkis, 2004) point out that the success of copmanies in implementing GSCM practices and achieving the targeted performance. In this study, there is still a need to



examine the influence of Green Supply Chain Management on the business performance of mini mydro power plant, since there are technology, people and water factors of supply chain management jointly impact the company performance were unexplored as an Upstream Supply Chain, Business & Technical Process as an internal Supply Chain and Electricity Out Put send to On Grid Distribution. In this study, supply chain management is measured on the dimensions & indicator of upstream supply chain, Internal Supply Chain Management, and downstream Supply Chain is shown on the table 1 below.

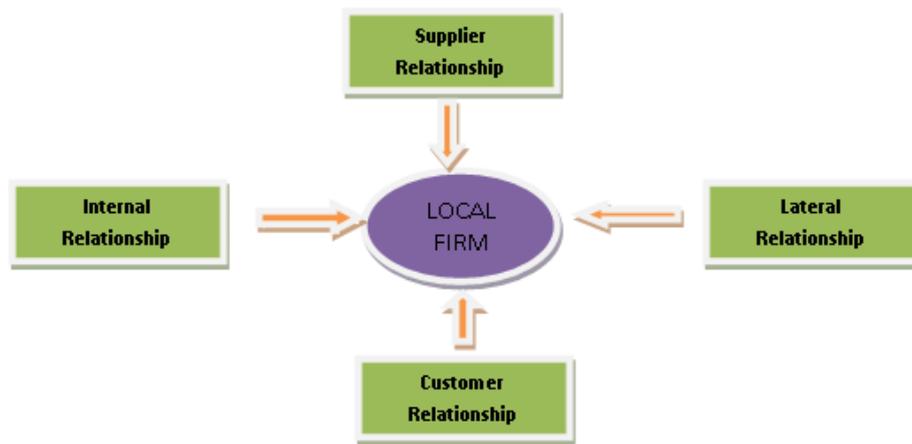
**Tabel 1**  
**Dimension and Indicator of Supply Chain Variable**

<b>Dimensions</b>	<b>Indicator</b>
Upstream Supply Chain	<ul style="list-style-type: none"> <li>a. Catchment Area (ha)</li> <li>b. Water Volume Flow Rate at intake (m<sup>3</sup>/sec).</li> <li>c. Water Quality (Good, Normal, Poor).</li> <li>d. Civil Construction (Good, Enough, Bad).</li> </ul>
Internal Supply Chain	<ul style="list-style-type: none"> <li>a. Turbin Technology (Pelton/Keplan)</li> <li>b. Water Transport to Turbine (m<sup>3</sup>/sec)</li> <li>c. Breakdown Maintenance (week)</li> <li>d. Expertise Engineer (Task Performace, Specific Problem Solving)</li> <li>e. Log Book on Business Process</li> </ul>
Down Stream Supply Chain	<ul style="list-style-type: none"> <li>a. Power Produce/hour (MWh)</li> <li>b. Electricity Usage (KVAR)</li> <li>c. Connection Capacity at Local Grid ( MWh)</li> <li>d. Connection &amp; Network Services (Rp/Month)</li> </ul>

## 2.2 Business Partnership

According to Simo'es and Mason (2012) the company is part of a network of suppliers, customers and others involved in a relationship. Companies use collaborative business relationships with selected stakeholders to innovate and maintain market supply. There are several key factors in the success of business partnerships according to Ghzaiel and Akrouf (2012) which are grouped into three categories: (1) factors related to partnership characteristics of both partners, (2) factors related to partnership behavior, and (3) factors related to the characteristics of supply.

The concept of partnership in the opinion of Cravens (2013), includes a vertical relationship consisting of relationships with suppliers and customers and horizontal relationships consisting of lateral and internal partnerships. The types of companies partnerships according to Cravens (2013), shown as follows :



**Picture 1**  
**Types of Organizational Relationships**  
 Sumber: Cravens (2013:196)

**Vertical Relationship (Supplier Customer Relationship)**

Suppliers and buyers of raw materials, substitutes and components, equipment, services and customer relationship are linked together in a vertical distribution channel. Vertical relationships can be transactional up to the business to business relationship. In the study on Mini Hydro Power Plant, water supplier from the small river is under control the regional government, it is necessary to permit the utilization of small river water by the regional irrigation services for long term usage (20 years). There are also civil works contractors and overseas technical turbine suppliers who have responsibility for construction and turbine maintenance during the operation of the plant. The only customer is PLN (Perusahaan Listrik Negara), Indonesia's Electric generation company which is marked by Price Purchase Agreement for 20 (twenty) years under Feed In Tariff Act as a Standardize Power Purchase (SPP) rates.

**Horizontal Relationship (Internal & Lateral Relationship)**

Internal relationship occur between business units, departments and individuals to encourage optimal operational purposes. A successful internal relations strategy requires strong leadership, team work, standardize business processes which can achieve the business performance target of the plant. Usually, there are more than one mini hydro power plant in located alongside one river, mostly operated by different owner. To increase the overall power generating efficiency of all hydro power plants alongside one river, a good communication- and cooperating concept that is called lateral relationship. The dimension and indicator of Relationship such as follow :

Dimension	Indicator
Supplier Partnership	a. Partnership with Regional Water Agency b. Partnership with community c. Partnership with civil work contractor d. Partnership with technology agency
Customer Partnership	a. Price Purchase Agreement b. Interconnection Capacity (MWh)
Internal Partnership	a. Functional Team Work b. Internal Collaboration c. Individual Relationship
Lateral Relationship	a. Joint Operation

Dimension	Indicator
	b. Technical Service Assistance
	c. Outsourcing

### 2.3. Business Performance

According to Hubbard and Beamish (2011), the type of organization affects the type of performance measurement. In private companies, performance measures are: market share, sales, net profit, growth, ROA, ROE, customer satisfaction, efficiency, and quality.

Matic & Jukic (2012, p.199) suggest "Business performances are indicator of how well does organization accomplish its goals (Ramanujam, 1986 in: Lin and Kuo, 2007, pp. 1069".

**Table 2**  
**The Business Performance Measurement Model**

Non- Financial Business performance measure	Financial Business performance measure
1. Customer satisfaction	1. Return on assets (ROA)
2. Quality of products and/or services	2. Return on equity (ROE)
3. Market share	3. Operative profit
4. Growth of sales	
5. Reputation of organization	
6. Employees' satisfaction with their jobs	
7. Organizational innovativeness	

Source : Matic (2012, p.281)

David (2013) measured performance by : Return on Investment (ROI), Return on Equity (ROE), Profit Margin, Market Share, Debt to Equity, Earnings per share, Sales growth, Assets growth.

### 2.4 Previous Research

Lia, Ragu-Nathan, Ragu-Nathan, Rao (2006) found that higher levels of SCM practice lead to increased competitive advantage and improved organizational performance.

Clement, Clement, Joseph (2013) suggests that the performance of a company with partnership is better than a single-ownership company. In addition, Agus and Hassan (2012) demonstrate that the practices of strategic suppliers partnerships and their implementation have significant relationships with product quality performance and business performance.

## III. METHODOLOGY

The method used in this study is explanatory survey. The type of research used is verifikation. Scope of observation time in this study is cross section , meaning that information or data obtained is the result of research conducted at one particular time that is in 2017.

The unit of analysis is the micro hydro power plant industry with Price Purchase Agreement (PPA) in West Java where the observation unit is the management of the company. The target population is all companies belonging to the micro hydro power plant industry group. Based on secondary data, there are 33 companies. Because of the small population size, the data collection method is done by census. The analytical approach used is Partial Least Square (PLS).

## IV. RESULT AND DISCUSSION

### 4.1 PLS Result

**Table 2**  
**Test of Outer and Inner Model**

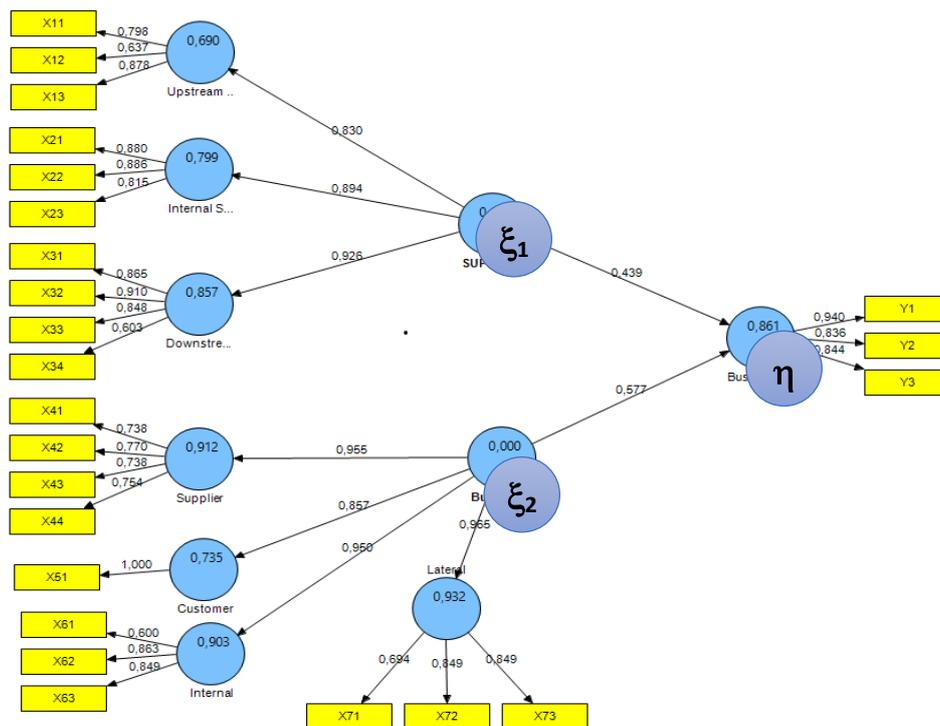
Variable	R Square	Cronbachs Alpha	Composite Reliability	AVE	Q square
Supply Chain Management		0.896	0.916	0.524	0.496
Business Partnership		0.921	0.933	0.560	0.551
Business Performance	0.861	0.845	0.907	0.765	0.508

Source: SmartPLS 2.0

The table show that the value of  $R^2$  of business performance as endogenous variable in the strong/high criteria ( $>0.67$ ), and the value of Q square is in the large criteria ( $>0.350$ ), so it can be concluded that the research model is supported by the empirical condition or the model is fit.

The result of measurement model of dimensions by its indicators show that the indicators are valid which the value of  $t < 2.04$  (t table at  $\alpha = 0.05$ ). The result of measurement model of latent variables on their dimensions show to what extent the validity of dimensions in measuring latent variables.

Following figure show the complete path diagram:



**Figure 1**  
Complete Path Diagram of Research Model

#### 4.1.2 Structural Model

Based on the research framework, then obtained a structural model as follow :

$$\eta = 0.439\xi_1 + 0.577\xi_2 + \zeta_1$$

Which are :

$\eta$  = Business Performance

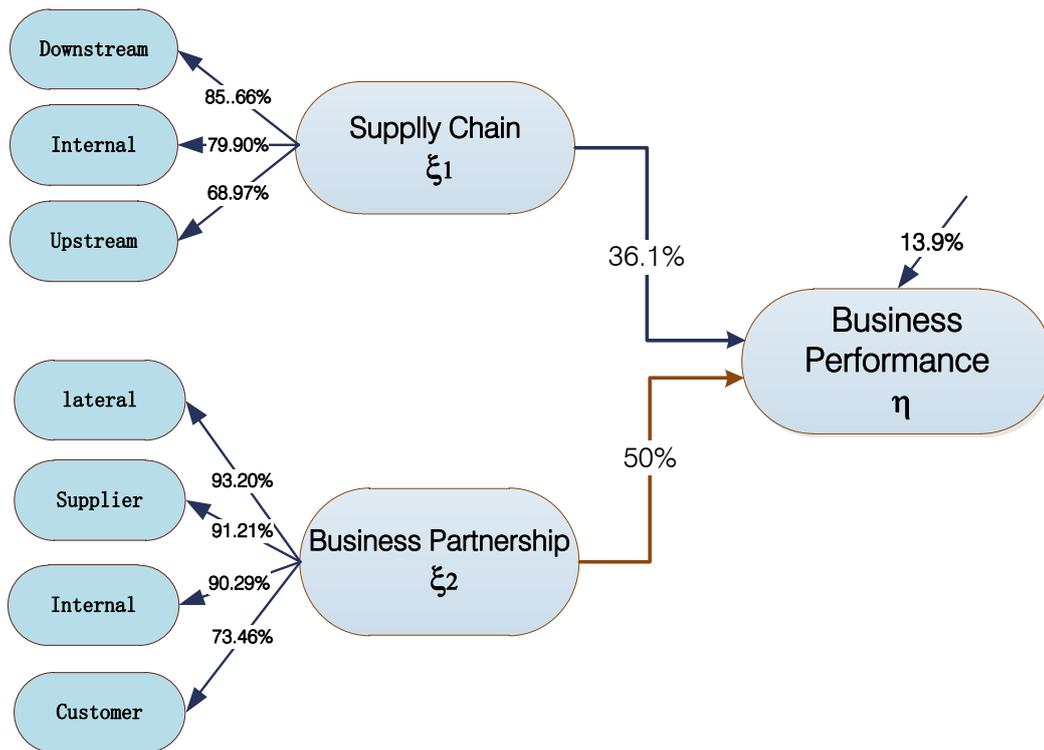
$\xi_1$  = Supply Chain Management

$\xi_2$  = Business Partnership

$\zeta_i$  = Residual

The table show that partially, Supply Chain Management and Business Partnership affect significantly to Business Performance, which is Business Partnership has a greater influence (50%).

Based on hypothesis testing result, will describe the Research Model Finding as follow:



**Figure 2**  
**Research Finding**

#### 4.2 Discussion

The research findings show that supply chain management and business partnership have the effect on business performance. Business partnership has greater influence than supply chain management in improving business performance in business units of micro hydro power plant in West Java.

Lateral partnership play a major role in encouraging business performance, then supported by supplier partnership, internal partnership and customer partnerships. Lateral partnerships can be done through joint operations, joint ventures, and outsourcing.

While on the aspect of supply chain management, it is known that Downstream Supply Chain is more dominant aspect in boosting business performance. Downstream Supply Chain covers all activities that involve the delivery of electricity to the PLN Interconnection station . In the downstream supply chain, the main concern is directed to water volume m<sup>3</sup>/second transporting to turbin and generator at powerhouse.

The findings of this study indicate that business partnership plays a dominant role in encouraging business performance, supporting Clement's Clement, Joseph (2013) which indicates that the performance of firms with partnership is better than single-ownership firms. In addition, Agus and Hassan (2012) demonstrate that strategic supplier partnership practices and their implementation have significant relationships with product quality performance and business performance.

#### V. CONCLUSION AND RECOMMENDATION

##### 5.1 Conclusion

From the result of hypothesis testing, can be concluded that supply chain management and business partnership

have an effect on business performance. Business partnership has a greater impact rather than supply chain management in improving business performance in business units of micro hydro power plant in West Java.

## 5.2 Recommendation

For the management of the business unit of micro hydro power plant, the findings of this study can be used as input to improve business performance through the improvement of business partnership implementation especially lateral partnership supported by better implementation of supply chain management.

For those who interested in researching the micro hydro power plant business unit, the findings of this research can be used as a framework for preparing the premise.

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## Corporate Culture And Organizational Commitment Of Training Institution In Indonesia

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### Abstract

Organizational Commitment is an aspect that plays an important role in an organization. Commitment to the organization can influence the improvement of effectiveness and efficiency. Employees who have strong commitment to the organization will show maximum effort in doing the task and believed to dedicate their time, energy, talents, and loyalty to the organization, compared with employees who do not have a commitment. One of the factors that affect the organization's commitment is the organization's culture. In this study, the factors measured include the organizational culture of integrity, enthusiasm, and totality.

This study aims to determine how the culture of an organization that consists of integrity, enthusiasm, and totality, how is the commitment of the organization, how significant is the influence of organizational culture on organizational commitment both simultaneously or partially at Training Institution of Indonesia .

The data analysis technique used in this study is path analysis with SPSS for Windows version 22. The study population is all of the employees of Training Institution of Indonesia with a total sample of 148 employees. Data were collected using a questionnaire containing 55 items related statement of organizational culture and organizational commitment.

The analysis results showed that the culture of the organization as a whole amounted to 76.68%, which can be categorized as strong, with details of the integrity being 80.63%, 73.21% being enthusiasm and 76.12% of the totality variable. The organizational commitment is categorized to be very strong by the amount of the value of the percentage 82.46%. The results of path analysis showed that simultaneously organizational culture significantly influence organizational commitment with the amount of influence amounting to 35.80%. Partially the variable integrity significantly influence commitment by 28.90%, enthusiasm by -31.50%, and totality by -17.70%.

Keywords: organization culture, organization commitment, integrity, enthusiasm, totality.

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### Introduction

Telecommunications technology advancement and rapidly changing environment, marked by the advancement of information, changes in market tastes, demographic changes, economic fluctuations, and other dynamic conditions, require organization to respond to these changes so that the organization can thrive in global competition. Organizational changes will have an impact on every individual residing within the organization. Every individual who becomes a part of an organization is required to develop and realize their full competences. Organization will utilize the competence of the individual to provide an assessment of performance.

Organizations must be more flexible to adapt to a competitive environment. Flexibility is determined by the organization's ability to have adequate resources abilities, skills, high competence and commitment to the organization. The ways by the company utilize and develop human resources in one way can be done through having organizational culture that serves as a guide for any employee to behave and act.

Commitment to the organization is an aspect that plays an important role in an organization (Chen, 2004). Because commitment to the organization can influence to increase the effectiveness and efficiency of work. Employees who have a strong commitment to the organization will show maximum effort in doing the task and are believed to dedicate time, energy, talents, their greater loyalty to the organization, compared to employees who do not have commitment (Luthans, 2006). If the commitment to the organization is not considered the organization is likely to generate unfavorable impact on the organization's progress.

Despite the commitment to the organization being indispensable, in reality, not all employees can demonstrate their commitment to the organization. For example Training Institute Indonesia has decreased number almost every year. Employee turnover during this time will hurt the performance of the company if there is no effort from the company to lower the levels of entry and exit (turnover) of the employees. The turnover rate of Training Institute Indonesia can be seen in Table 1.1 below:

Table 1  
Training Institutions Indonesia Employee Turnover  
2012 – 2015

Year	Number of Employee	Number of Turnover	Percentage of Turnover	Number of Turnover	Percentage of Turnover
			(%)	APS	APS(%)
2012	461	66	14	11	2
2013	395	107	27	17	4
2014	288	37	13	9	3
2015	254	42	17	14	6

Source: Institute for Training Indonesia (2015)

Training Institutions Indonesia from 2012 to 2015 has decreasing number of employees turn over. The reasons of employees' turn over at Training Institute Indonesia, are because of the need and requested by organization include : work location are close to home, better self-actualizing, can not keep up with changes, family and other interests. Based on the above data, it is known that the number of departing employees have a growing percentage of which in 2012 it is increased by 14% to 27% in 2013 so that the data turnover average is 17%. For the percentage of outgoing employees at request either retire early or to move away from Indonesia Training Institute in 2012 amounted to 2% which increased to 4% in 2013 to an average of 4% above turnover may indicate a decline in organizational commitment.

Turnover continues to increase each year indicating that the organizational culture in the company is still weak. Referring to the theory, one of the causes of low commitment is culture. Therefore it shows the indications of turnover. One of the signs of a strong culture is a reduced level of discharge of employees (Mahal, 2009). Many factors may influence commitment to the organization and one of them is the organization's culture.

Training Institutions Indonesia continues to build system and integrated corporate culture as a comprehensive business management approach to achieve excellent performance of the company, in compliance with the ethical business and its consciousness. Companies and employees who are sensitive to social responsibility will try to fulfill them to the society as part of being good citizens. Moreover the system and culture continue to be developed in accordance with the demands and changes in the business to realize the ideals that Training Institute Indonesia continues to advance, valued by customers, competitive in the industry and become a company role model.

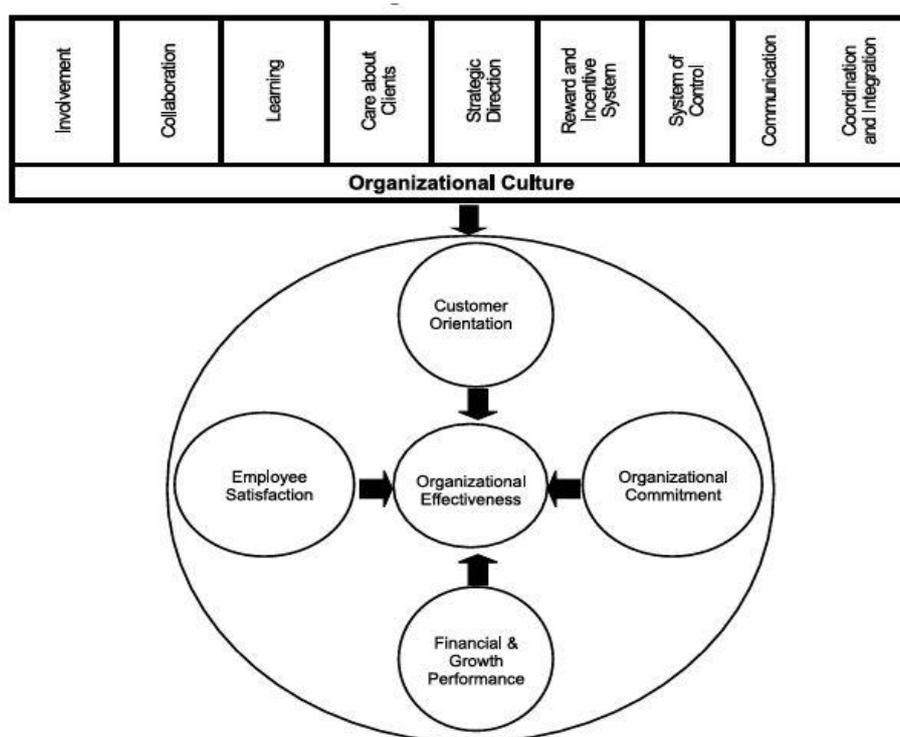
### Theoretical Base and Methodology

According to Robbins (2012), organizational effectiveness is affected by people behavior as an individual or group.



Sempene et.al. (2002) state that job satisfaction of employees has important role in influencing organizational effectiveness. Further, Aydin & Ceylan (2009) on the research entitled The Role of Culture on Organizational Effectiveness, it is found that the effectiveness of the organizations is affected by the 10 (ten) organizational cultural factors. It is widely accepted in the literature that organizational culture is a complex concept that can be analyzed from various perspectives. According to Aydin & Ceylan (2009) organizational culture can be measured by Involvement, Collaboration, Transmission of Information, Learning, Care About Clients, Strategic Direction, Reward and Incentive System, System of Control, Communication, Coordination And Integration.

Based on the cultural factors put forward by Aydin and Ceylan, researchers use these factors as the variables of the study. This is because the researchers wanted to know how big is the influence of organizational culture in Training Institute Indonesia on organizational commitment.



Source: Aydin & Ceylan (2009: 37)

Figure 1.1

Dimensions of Organizational Effectiveness Model

Table 2  
Implementation of Culture and Cultural Organization by Aydin & Ceylan at Training Institute Indonesia

Culture Based on Theoretical Approach		Culture of Training Institute Indonesia	
Description	Value	Value	Description
-Building trust and good will between stakeholders in an open and sincere relationship based on capability -The condition in which all	Communication Involvement	Integrity	-Building trust and good will between stakeholders in an open and sincere relationship based on capability

members of the organization have the chance to input ideas and recommendations			-Always think, speak, and act properly; upholding reputation and the ethic code of profession
-Knowledge Increasing Process -Teamwork more than individual. -New informations arrive on time. -Motivates.	Learning Collaboration-Transmission & Information Incentive System	Anthusias	Developing and Betterment in all subjects in order to get the optimal plus value and the best result with high spirit.
-Commitment to work effectively alongside other divisions -Determinator of Organization Planning and Goal -Structured Observation -Customer Satisfaction-centric	-Coordination & Integration - Strategic direction - System of Control - Care about clients	Totality	Commitment to work in totality and accurately with the best competition base full of responsibility. Always treat customers as the number one beneficial partner that develops evermore.
Source: Aydin & Ceylan (2009:37)		Source : Training Institute Indonesia (2013)	

Based on data from the company, journals and theories that exist, the framework of this research is shown below:

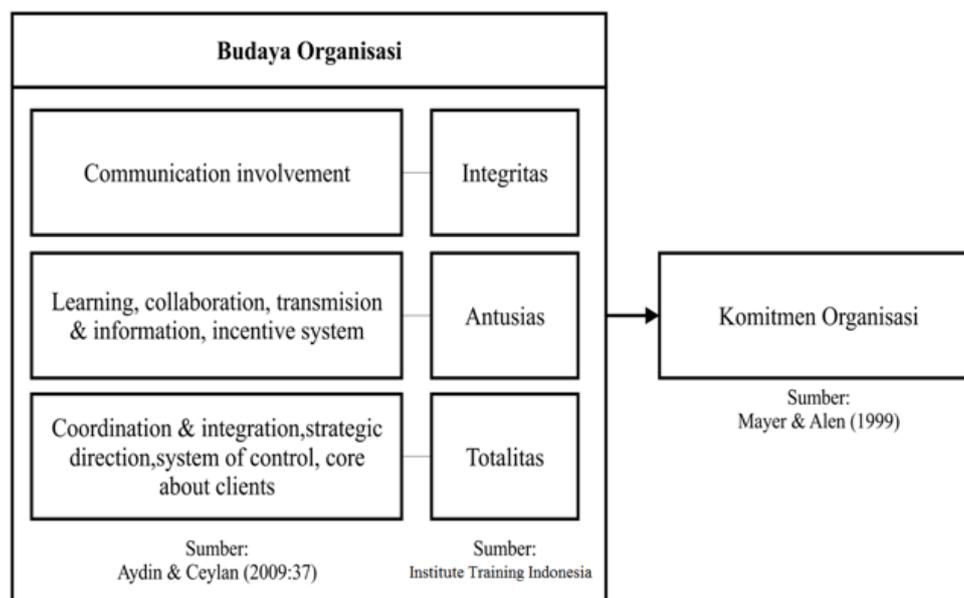


Figure 1.2  
Framework Flow

Data Collection Methods: Questionnaire (Questionnaire) This technique is a technique in which researchers give a set of questions or also known as a questionnaire. The statement contained in the questionnaire are concerned with variables that are discussed in this research, namely organizational culture and organizational commitment. library research techniques is a data collection technique in which researchers study the literature associated with the research. The results of the research can be used as additional literature for researchers in discussing problems in this study.

The technique that the researcher vamooses is the Proportionate random sampling technique, this is because the population is not homogeneous and stratified proportionally. So the probability sampling technique is suitable for use in this study. Researchers gave the same rights to the population to be selected into the sample. Total population of the employee of Training Institute Indonesia in May 2016 amount to as many as 228 people. The sampling in this study use the Slovin formula by Riduwan (2010) which state as follows: where, N = the number of population n = number of samples d = precision (fixed at 5% with a confidence level of 95%) n = 146.

### Hypothesis

1. Based on the framework the research hypotheses are:
2. How does culture influence the organizational commitment simultaneously.
3. How does culture influence the organizational commitment partially.

### Discussion

The sample used in this study were employees of Training Institute Indonesian amounting to 148 people. Furthermore, respondents were given a questionnaire which is a collection of statements about Cultural Organization (Integrity (X1), Enthusiast (X2) and the totality (X3)) with 26 statements and of commitment with 9 statements. Based on the results of descriptive analysis it is indicated that organizational culture which consists of Integrity, enthusiasm and totality in Training Institute Indonesia is included in the strong category with a percentage of 76.73%. This shows uniformity of behavior among the employees of Training Institute Indonesia, and it is an indication that the employee's behavior has not met the company's expectations, the behavior that needs to be improved in accordance with the rules and values of the company. Integrity's (X1) sub variables Involvement and Communication are in a very strong category. Enthusiastic has four sub variables: Collaboration, Learning, Transmission & Information and Incentive System and all are included in strong category. Totality has four sub variables measured, namely Care about Clients, Strategic Direction, System of Control and Coordination and Integration which are also all in the strong category. Organizational commitment (Y) of Training Institute of Indonesia are in the category of very powerful which means employees have a very strong commitment and strong spirit, are open minded, productive, and have concern for the fate of the company.

### Path Analysis

Path analysis is a statistical technique used to examine the comparative strength of the relationship or the direct and indirect influence between variables.

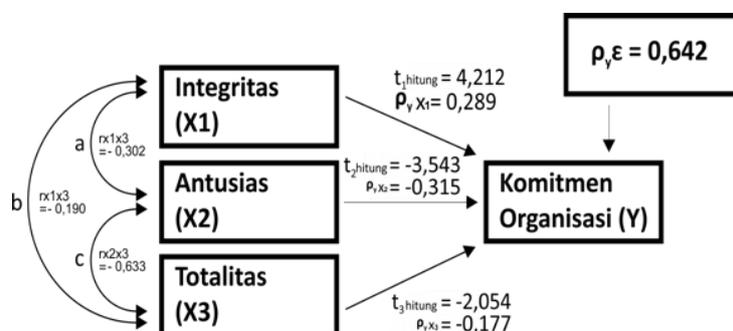


Figure 1.3  
Research Model of Path Analysis

Based on the calculation above, it can be seen that the influence of organizational culture on organizational commitment at 35.80 and 64.20 is influenced by other factors, while for each variables of organizational culture are: Integrity variable (X1) has a total effect of 13.75%, Enthusiastic variable (X2) have a total effect of 55.5%,

and totality variable (X3) have a total effect of 0.89% towards Organizational commitment variable (Y).

Table 3  
Influence of Organizational Culture on the commitment of the Organization Simultaneously

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14,773	3	4,924	26,799	,000b
	Residual	26,461	144	,184		
	Total	41,234	147			
a. Dependent Variable: Y						
b. Predictors: (Constant), X3, X1, X2						

According to Table 1.3, it is known that the value of Fcount is 26.799. Ftable value can be seen in Table F distribution with  $\alpha = 0.05$  and  $k = V1$ ,  $V1 =$  number of independent variables = 3 and  $V2 = nk-1$ , with  $n =$  number of samples,  $V2 = 148-3-1 = 144$ . With the above information and referring to Table F Distribution, then obtained Ftable value of 2.161, so the result is:  $F_{count} (26.799) > F_{table} (2.161)$  F test results above show that  $H_0$  is rejected and  $H_a$  is accepted, this means that the hypothesis research reads "the culture of the organization's has an overall significant effect on organizational commitment in Training Institute Indonesia".

Tabel 4  
Influence of Organizational Culture on the Organization's commitment Partial (t test)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,781	,345		10,960	,000
	X1	,287	,070	,289	4,121	,000
	X2	-,281	,079	-,315	-3,543	,001
	X3	-,197	,096	-,177	-2,054	,042
a. Dependent Variable: Y						

The value of tcount and path coefficients of each variables including Integrity (X1), Enthusiast (X2), and totality (X3) can be viewed on the Coefficients Standardized column (Beta). To facilitate the reader, the author will describe the tcount and the correlation coefficient of each variable X as follows:

Variable Integrity (X1) has a value of  $t = 4.121$ , with a path coefficient value of 0.289.

Variable Enthusiast (X2) has a value of  $t = -0.3543$ , with a path coefficient of -0.315.

Variable totality (X3) has a value of  $t = -2.054$ , with a path coefficient of -0.177.

Value of the variable residue or error factor ( $\rho_{y\epsilon}$ ) can be obtained through the following equation:

$$\rho_{y\epsilon} = 1 - R^2 \quad \rho_{y\epsilon} = 1 - 0,358 = 0,642.$$

## Conclusion

Cultural organization of integrity, enthusiasm and totality simultaneously has significant effect on organizational commitment. However, in this study the totality and enthusiastic variables have significantly negative effect on organizational commitment at training Institute Indonesia. The value of the influence is 35.80%, and the rest of the influence amounting to 64.20% is influenced by other factors that were not discussed in this study. This means that changes in the integrity, enthusiasm and the totality simultaneously or together will have a

significant influence and organizational commitment in line at CorpU Telkom amounting to 35.80%.

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## **Determinant Factors of Employee Satisfaction in the Performance Appraisal Based on Management by Objectives**

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### **Abstrak**

In response to the phenomenon of low employee satisfaction level on performance appraisal, organization nowadays need to identify the determinants of employee satisfaction in the performance appraisal. The purpose of this article is to develop a conceptual framework about the determinants of employee satisfaction in performance appraisal using the effectiveness of performance appraisal approach.

The review of this article using three approaches. First, this article discusses the relevance of employee satisfaction with performance appraisal. Second, review the literature about performance appraisal effectiveness as determinants of employee satisfaction in the performance appraisal. Third, integrating the types of performance appraisal systems in organizations with a determinants model of employee satisfaction in the performance appraisal in order to develop a comprehensive framework for the organization.

A determinants practical model of employee satisfaction in the performance appraisal based on management by objectives has been obtained. This model adopts the performance appraisal model with the changes caused by adjustments to the appraisal basis management by objectives. This shows that employee satisfaction in performance appraisal can be obtained from the effectiveness performance appraisal system.

*Keywords: performance appraisal; employee satisfaction; effectiveness of the performance appraisal system.*

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### **Introduction**

Employee is the only organizational resource which has ratio, feel, and intention that affect the organization's efforts in achieving goals because employee has a role as the driving force of all the resources owned organization. Therefore, employees will always be a benchmark in the management of the organization to consider any decision relating to salaries, with project work to be done, and also with social rules on which the organization was sheltering (Colquitt, 2001). In response, the idea that an employee in the workplace must be assessed is eminently reasonable.

Performance appraisal has widened as the concept of performance management implementation has been part of a strategic approach to integrating HR activities with the company's policy (Fletcher, 2010). Appraisal performance procedures potentially bring substantial benefits for both employees and the organization, where the feedback from an appraisal can be referred by an employee to set goals that can be used by the employee and the organization as a tool to evaluate and improve their performance (Swanepoel, et al. 2014).

The purpose of performance appraisal by Palaiologos et al. (2011) is for administrative purposes (consideration of salary increases, bonuses, promotions, recruitment and employee pension) and for the needs of development (increased competence as well as education and training considerations). Therefore, when it has impact on the compensation obtained, then an employee will take the job seriously and automatically increases employee satisfaction (Stringer et al, 2011). Supporting the statement, according to Poon (2004) when the value of the performance becomes a consideration in determining opportunities for administrative and development, the performance appraisal will affect employee satisfaction. Low satisfaction may have a negative impact on

organizational commitment (Judge et al, 2001).

Facing the global challenges, organizations need human resources who are committed and have a high work ethic. According Stevers & Joyce (1999), the commitment and performance of employees depends on the evaluation and perceptions of employees in the performance appraisal practices. Therefore, it is necessary to examine more about performance appraisal and the factors that determine employee satisfaction in the performance appraisal across an organization.

## **Literature Review**

### **Performance Appraisal Based on Management by Objectives**

Performance is the willingness of a person or group of people to do something and refine activities in accordance with its responsibilities in order to obtain the expected results (Rivai & Basri, 2005). Rivai & Basri (2005) added, the performance is basically determined by three things: the ability, desire, and the environment. Meanwhile, according to Dessler (2006) basically the employee's performance is more a function of training, communications, tools, and control rather than personal motivation. In other words, the performance can be associated with a positive contribution to the organization's employees.

The way to measure the employee's contribution to the organization he worked for was by conducting performance appraisal (Bernardin & Russell, 1993). The performance appraisal refers to a formal and structural system used to measure, assess, and affect the properties associated with the work, behavior, and the results, including absenteeism (Rivai & Sagala, 2009). So that, a performance appraisal can encourage responsibility and accountability of employees (Flaniken, 2009).

During the past centuries, the organization can survive without their performance appraisal (Wiese & Buckley, 1998). But as the times, the current performance appraisal is an integral element of organizational life (Cintron & Flaniken, 2011). Performance appraisal system that exists today has evolved over time since it was first used in the early 1800s (Wiese & Buckley, 1998). One performance appraisal method currently used is Management by Objectives (MBO).

MBO system has been introduced since 1950 (Wiese & Buckley, 1998). Step of MBO process started after the employee and the leader agree with their job and responsibility for certain period of times, then continue by determining specific target, measured, and has a limit time for those tasks (Wiese & Buckley, 1998). The final performance appraisal conducted at the end of the deadline that has been determined and based on the appraisal of the achievement of the employee towards the agreed targets (Wiese & Buckley, 1998) This system is believed to have advantages such as: redefining the role of management to help employees achieve goals; boost employee confidence on the appraisal as specified target together, than if the appraisal is based upon the observation of behavior; and shift the orientation of the appraisal of "past behavior" to "future acts" (Wiese & Buckley, 1998). According to Wiese & Buckley (1998: 240), the main problem of this system is the need for a strong commitment from management and the time required to reorient the employees thought.

### **Determinants of satisfaction on performance appraisal based on Management by Objectives**

According to the research conducted by the Keeping & Levy (2000) employee satisfaction in the performance appraisal will affect the effectiveness of the performance appraisal itself. Employee satisfaction may include satisfaction with the performance appraisal system, satisfaction with the implementation of performance appraisal, satisfaction with the perceived benefits of performance appraisal (Keeping & Levy, 2000), and satisfaction with the fairness and objectivity of performance appraisal (Keeping & Levy, 2000; Jawahar 2007; Cintron & Flaniken, 2011). If employees believe that the performance appraisal process is already fairly applied, the employee is more likely to be satisfied and recognizes the performance evaluation results obtained, even the performance evaluation results despite unfavorable (Cintron & Flaniken, 2011). Meanwhile, according to Ochoti, et.al (2012), efforts to increase employee satisfaction in the performance appraisal one of which is



precisely to build an effective performance appraisal system that is relevant appraisal system, not bias, and not contain the political interests of the organization.

Employee satisfaction in performance appraisal can not be separated from the measure of achievement of each stage of the existing appraisal. Starting from the implementation of goal-setting performance appraisal must contain the aspirations of assessors and assessed so as not appear dissatisfaction with the objectives set (Ikramullah, et.al., 2016). The purpose of performance appraisal that is relevant to the organization's goals is necessary for the effectiveness of the performance appraisal system (Boice & Kleiner, 1997; Ochoti, et.al., 2016; Ikramullah, et.al., 2016). Generally, the purpose of performance appraisal is for administrative needs (Palaiologos et al., 2011) and development requirements (Ikramullah, et .al., 2016). If the employee does not feel the benefits of the purpose of the performance appraisal, so it should be reconsidered because it can decrease the number of employees satisfaction (Agyare, et.al., 2016).

Furthermore, in planning and establishing performance targets need to be matched to the determined purpose (Ikramullah, et.al., 2016). This is due to the planning and establishment of appropriate target would be effective to measure the performance achieved (Keeping & Levy, 2000; Ikramullah, et.al., 2016). If the target has been set, it needs constant control to oversee the achievement of predetermined targets (Boice & Kleiner, 1997; Jawahar, 2006). In addition, routine monitoring also helps superiors (appraisers) in its appraisal that not only focus on results, but considering the overall process (Ikramullah, et.al., 2016). The regulatory process can be coupled with counseling and coaching for employees to help employees deal with problems at work (Ikramullah, et.al., 2016). Through direct coaching by leader, employees will feel confident and feel treated with respect.

After the performance value is obtained, then the feedback should be given so employees can determine the extent to which the achievement of an employee against the company's expectations and to help employees plan targets in the future (Ikramullah, et.al., 2016). In the stages of the appraisal process from beginning to end, required good communication between leader and employee under (Ochoti et.al., 2012; Ikramullah, et.al., 2016). So that needs to be carried out training for management-related insight into the performance appraisal (Ochoti et.al., 2012). Communication and employee engagement can reduce the chances of conflict between leader and employee (Ikramullah, et.al., 2016).

Beside the things taht mentioned earlier, Ochoti et.al. (2012) also found employee attitude or perception of employee plays an important role. If the system is already deemed biased already, irrelevant, or politically, the dissatisfaction with the system can not be avoided (Ochoti et.al., 2012). Talking about the quality of performance appraisal, Showkat (2013) is generally argued that the effectiveness appraisal focuses on: the design of the performance appraisal system; its process involving the employer as well as a program evaluator organizations to reinforce the achievement of the performance; the output of the function of the process of performance evaluation results; as well as other things in the organization that affect satisfaction in the performance appraisal.

Research conducted by Rowland & Hall (2012; 2013) looked at satisfaction in the performance appraisal of the fairness perceived by the employees. Performance appraisal often creates inequities in terms of procedure and benefits, both real injustice and presumption (Rowland & Hall, 2012). Therefore, a fair evaluation is not just about developing the right form, but it depends on the openness and willingness of all parts involved to try to see things from another point of view. Justice is what will affect employee satisfaction (Thursthon Jr. & McNall, 2009).

Based on the reviews, the determinants of employee satisfaction in the performance appraisal obtained by the effectiveness of performance appraisal systems approach and employee notion of justice. When the effective performance appraisal, the employee will be satisfied (Showkat, 2013). So the determinants of employee satisfaction in the performance appraisal can be described in the following conceptual framework:



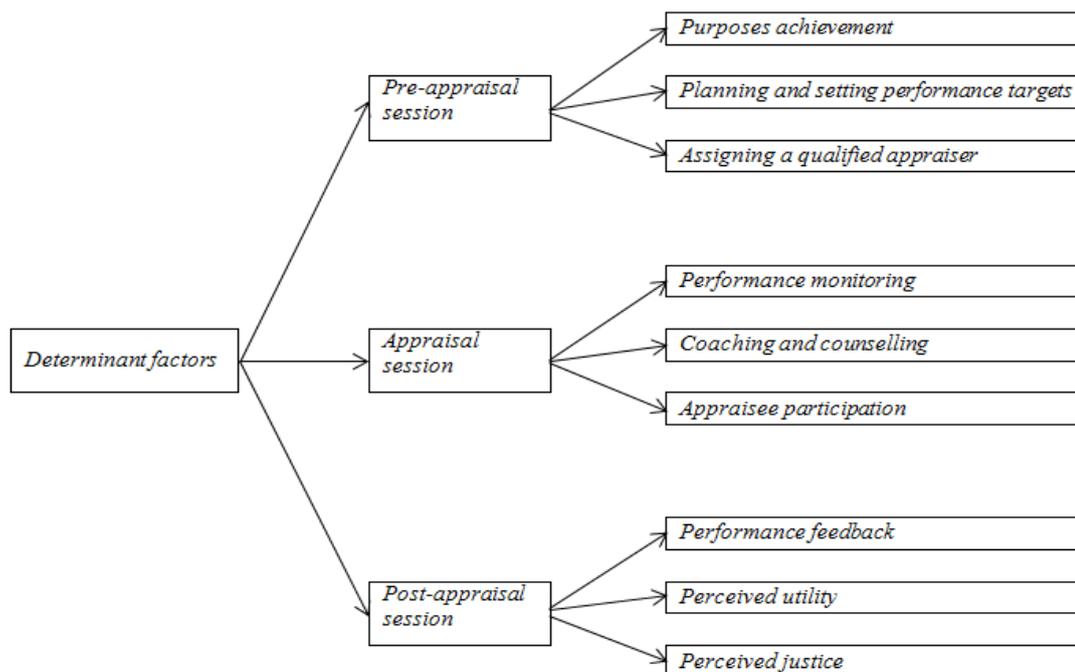


Fig. Framework of Determinant Factors of Employee Satisfaction in the Performance Appraisal Based on Management by Objectives

### Conclusion and Suggestion

Based on the review of previous research, obtained the determinants of employee satisfaction in the performance appraisal with the determinants of performance appraisal effectiveness approach. The model can be applied in the organization that implement the performance appraisal system based on management by objectives. Further research can explore the significant factors that determine employee satisfaction in performance appraisal. In addition, further research may also examine the influence of the determinants of employee satisfaction in the performance appraisal toward the desired variable.

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## Factors That Affecting Employees Career In Directorate Of Human Capital Management PT. Telekomunikasi Indonesia, Tbk

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### Abstract

The level of employee satisfaction in PT. TELKOM classified as "*satisfied*" with the average value on 71,08%. Telkom employee satisfaction level in 2015 increased compared to the level of employee satisfaction in 2014. However, if traced in indicators that make up the satisfaction level of employees it can be seen that career, promotion, training and capacity building of employees occupying the smallest percentage of engaged employees who make up the level that is equal to 62.63% and 64.19%. This value is certainly interesting to be given one of the important factors that affect the level of employee engagement today is heavily influenced by the career that is designed by the company through a management career.

This study will analyze the factors that influence employee career in Directorate of Human Capital Management. The population is all employees of the Directorate of Human Capital Management, amounting to 62 employees and as well as a sample for this study as a whole. Data analysis technique used is multiple linear regression with two independent variables and the dependent variable. The independent variables in this study are organizational career management and individual career management, while the dependent variable is the career path. Data is collected using online questionnaires filled out by 62 employees as respondents.

The results showed that organizational career management and individual career management simultaneously in positive influential and significant to career path of employees at the Directorate of HCM PT. Telkom Indonesia, Tbk. Organizational career management partially positive and significant impact on the careers of employees. Individual career management also partially positive and significant impact on the careers of employees. Based on descriptive analysis Career Development became the most important components in variable Organizational Career Management while for individual career management Networking component becomes the most important thing. In addition to the variable career, career opportunities become very important dimension for the employees of the Directorate of HCM PT. Telkom Indonesia, Tbk.

*Keywords : Career Management, Organizational Career Management, Individual Career Management, Career Path*

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### 1. Preface

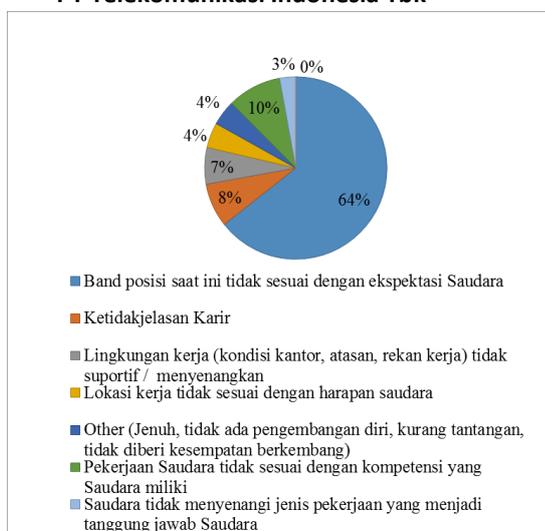
In the management of Human Capital, in order to realize the vision of Telkom "Be the King of Digital in the Region" with the mission "Lead Indonesian Digital Innovation and Globalization" by Strategic objectives Top 10 Market Capitalization Telco in Asia-Pacific by 2020, career management of employees is an important part on the implementation of career development activities to improve employee productivity. Factors that influence the careers of employees need to know from the beginning that will help employees to achieve specific career tailored to providing career paths that exist in the company. Organizational career management will drive the effectiveness of career externally, while the individual career management will support the achievement of individual careers within the organization internally.

In 2015 based on management engagement survey Telkom, PT Engagement Index. TELKOM is high, namely 89.25%, which means as much as 89.25% of respondents classified as category Engaged. A total of 10.73% of respondents classified Somewhat Engaged and only amounted to of 0.02% were classified as disengaged.

However, if traced by the unit will be obtained Directorate of Human Capital Management that are in the index 72.41%, which became one of the units with the lowest levels of engagement. This value becomes interesting to explore the Directorate of Human Capital Management (HCM) considering the concepts of engagement designed and developed by the HCM unit but this unit into one of the units with the lowest index value engagement.

Dissatisfaction got the largest percentage of employees that 38% says the band position or class of positions today do not correspond to their expectations and the second largest percentage that is equal to 7.76% of employees say that there is no clear career for them, 6.51% said that aspects of the work environment is not supportive or unpleasant, 4.45% said that the location did not correspond to their expectations, 4.45% said that they are saturated because there are no self-development, lack of challenge, and not given a chance to develop, 9.60% say that their work is not in accordance with the competencies they have, and the latter as much as 2.85% of employees say they do not like the type of work for which they are responsible. It can be concluded that the majority of the employees are not satisfied in this aspect of their career.

**Figure 1. Percentage Level of Dissatisfaction of Employees 2015 in PT Telekomunikasi Indonesia Tbk**



Source: Report of Telkom Employee Engagement Survey, 2016

One of the dimensions that influence the formation of engagement index PT. TELKOM is employee satisfaction. The level of employee satisfaction PT. TELKOM classified as "satisfied" with the average value of 71.08% employee satisfaction. Telkom employee satisfaction levels in 2015 increased compared to the level of employee satisfaction in 2014. However, if traced indicators that make up the satisfaction level of employees it can be seen that career, promotion, training and capacity building of employees occupying the smallest percentage of engaged employees who make up the level that is equal to 62.63% and 64.19%. This value is certainly interesting to be given one of the important factors that affect the level of employee engagement today is heavily influenced by the career that is designed by the company through a management career.

Based on the description above as background, this study will examine the factors that affect the careers of employees in the Directorate of Human Capital Management PT. TELKOM. The discrepancies between the results through value engaged engagement and employee satisfaction level towards career, promotion, training and capacity building at the level that is less than average to points of interest in this study. Selection of the research object of the Directorate of Human Capital Management (HCM) due to the largest gap lies in this directorate nature when compared with HCM should work directorate can provide representative results for HCM is the owner and controller and employee career development program. The main problem in this study

lies in the differences that occur in HCM on the attributes of a career, promotion, training and capacity development to its engagement value that needs to be analysed in depth about the factors that affect the career itself. Therefore, these factors will be analysed internally and externally through individual career management and organizational career management.

## 2. Basis Theory and Methodology

Factors that affect a person's career can be divided into individual career management and organizational career management. Greenhaus et al (2003 : 12), "*career management as a process by which individual develop, implement, and monitor career goals and strategies. For the time being, career management can be briefly described as an ongoing process in which an individual.*". Career management lies not only in the interests of employees, but also the organization's involvement in it. In this case it is important organizational career management planned by the company. According to Mathis and Jackson (2006: 343) centered on career planning organization focused on identifying jobs and career paths that provide a logical progression on people between the work of the organization. That is necessary to understand the individual in following a career path or groove made by the organization in order to move forward in its organizational units.

Dimensions of variable organizational career management as the basis of measurement derived from the 3 (three) dimensions of organizational career management proposed by Khulida Kirana Yahya (2004) which includes 1). *Career Management Policy*, measured by standard, procedure, method and employee system that works by management in managing employee's career, 2). *Career Development*, measured through a variety of activities, programs and techniques used by management to enhance the career development of employees, 3). *Career Information*, efforts made by management to provide information for employees in relation to support individual career planning and career strategy.

Dimensions of variable individual career management that formed the basis of measurement derived from four (4) dimensions of individual career management proposed by Sturges et al (2002) which includes: 1). *Networking*: the ability of employees to create a network of friends with other employees, 2). *Mobility Oriented Behaviour*: behavior to leave the company, 3). *Practical Thing*: the willingness of employees to play an active role in the development of their career 4). *Drawing Attention*: the ability of employees to be able to attract the attention of their superiors in the development of their career. Whereas, for the forms of careers through career development, according to Bambang Wahyudi (2007: 166) is made up of education and training, transfer and promotion.

In this study the author uses descriptive method and verification method. Descriptive method is intended to answer the first objective relating to factors that affect an employee's career Directorate of Human Capital Management at PT. Telekomunikasi Indonesia Tbk. Descriptive method according to Sugiyono (2009: 53) is a study conducted to ascertain the value of either one independent variable or more variables without making comparisons or connect with other variables. The reason of this is the use of the descriptive method because this method is suitable to answer the problem formulation that is independent, with descriptive methods can be investigated notch phenomenon of research.

The verification method will be used to answer the research purpose is to analyze the factors that affect the careers of employees to achieve career paths of employees Directorate of Human Capital Management PT. Telekomunikasi Indonesia Tbk. The verification method is a type of research that aims to identify causal relationships between variables through a hypothesis testing. The reason for the use of the verification method is suitable for assessing the level of relationship or ratio between the two variables.

Selection of this method in accordance with the analysis of the variables studied where there are variable factors influence the career that would eventually variable employee career. Descriptive method needs to be done in order that the factors career consists of individual and organizational career management can be specified in detail. As for the method of verification to see the extent of influence of each factor indicator of career to a career that is owned by the employees of the Directorate of HCM. Implementation verification test performed



after the whole item is in a valid and reliable condition.

The data collection methods used two sources of data, namely primary data: the data obtained directly, specifically collected and dealing with the problems examined. In this study, primary data obtained directly from respondents through observation, interviews and questionnaires distributed to all employees of the Directorate of Human Capital Management PT. Telekomunikasi Indonesia, Tbk. As for the secondary data is data obtained in finished form, the results of the collection and processing of other parties. In this study, secondary data include: Data employees and employee engagement reports, the literature related to this study, the profile of PT. Telekomunikasi Indonesia, the list of employees, and other documents deemed necessary.

Population is the generalization region consisting of the object / subject that has certain qualities and characteristics defined by the researchers to learn and then be inferred (Sugiyono, 2010: 61). The population in this study were all employees of the Directorate of Human Capital Management PT. Telekomunikasi Indonesia, Tbk. The samples used in the study sample saturated or census of the entire study population, those are 62 employees consisting of 4 employees Vice President, 13 employees Assistant Vice President, 24 employees Senior Officer, 5 employees Officer 1, 4 employees Officer 2 and 12 employees Officer 3.

Questionnaires are 28 items of questions before distributed to the respondents, conducted validity test includes three types of validity, namely face validity (validity looked), content validity (Validity of Contents) and construct validity (Validity Construction), furthermore, to test the validity of a research instrument used Pearson product moment correlation formula, the validity of the test results show the value of r count each indicator variable of organizational career management, individual career management and career path is larger than the value of r table, so that the otherwise all research questions are valid and can be used as a measurement variable.

Reliability test is used to determine whether the indicator or questionnaires used trustworthy or reliable as a measurement variable. The reliability of an indicator or questionnaire can be seen from the value of Cronbach's alpha ( $\alpha$ ), ie when the value of Cronbach's alpha ( $\alpha$ ) greater than (>) 0.60 indicator or the questionnaire is reliable, whereas if the value of Cronbach's alpha ( $\alpha$ ) is smaller (<) 0.60 indicator or questionnaires are not reliable. Overall reliability test results can be seen the results in the following table:

**Table 1 Reliability Test Result**  
**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.931	.934	28

Source: Results of Primary Data Processing with SPSS 21

### Hypothesis

The hypothesis in this study are:

H1 : Organizational Career Management Affects Employee's Career Path.

H2 : Individual Career Management Affects Employee's Career Path.

H3 : Organizational Career Management and Individual Career Management Affect Employee's Career Path.

### 3. Result and Explanation

Based on the results of the descriptive analysis performed in this study, that the organizational career management (X1) which consists of three dimensions namely Policy Career Management, Career Development and Career Information has an average percentage of 81.39% or fit in either category. It can be interpreted that

the overall organizational career management is perceived well by all employees in the Directorate of Human Capital Management PT. Telekomunikasi Indonesia, Tbk. In the organizational career management variables on average the highest percentage value contained in the variable sub Career Development, amounting to 82.7%. Individual career management (X2) which consists of four dimensions: Networking, Mobility Oriented Behaviour, Practical Thing and Drawing Attention has an average percentage of 79.5% or fit in either category. It can be interpreted that the overall individual career management is perceived well by all employees in the Directorate of Human Capital Management PT. Telekomunikasi Indonesia, Tbk. In the individual career management variables are the average value of the highest rates found in sub-variables Networking, amounting to 82.6%. Career employees (Y) which consists of two dimensions, Education & Training and Promotion has an average percentage of 78.1% or fit in either category. It can be interpreted that the whole career is perceived well by all employees in the Directorate of Human Capital Management PT. Telekomunikasi Indonesia, Tbk. In a career path variable is the average value of the highest rates found in sub-variables Promotion of 80%. Generally, the whole item forming organizational career management and individual career management major effect on employee career paths but which became the most influential factor is the variable sub Networking with an average percentage of 86.4% has a very high category, that employees strongly agreed on the importance of showing best ability in front of the leaders in affecting one's career. While the lowest percentage value contained in the variable sub drawing attention to the average percentage of 77.6%. The results of the analysis of organizational career management at the highest rates are in sub-variables Career Development, amounting to 82.7%, followed by sub-variable Career and Career Information Management Policy, each of which amounted to 82.2% and 78.9%. When viewed from the overall statement contained the highest percentage in the first statement amounted to 87.3%. This statement is one part of the sub-variable Career Management Policy which plans and procedures relating to the recruitment of companies that are considered best employees of the entire item statement on organizational career management variables. As for the percentage was lowest for the 13 sub-variable statement Career Management Policy that with the amount of 74.9%. This statement relates to the opportunity to perform for training workers.

### 3.1. Test Model of Organizational Career Management and Individual Career Management Towards Career Path

F Test or Significance Tests of Organizational Career Management and Individual Career Management Against Career Path. This test is used to determine whether the independent variables in the regression model simultaneously significant effect on the dependent variable.

**Tabel 2 Significance Tests of Organizational Career Management and Individual Career Management Against Career Path**

ANOVA <sup>a</sup>						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	17,624	2	8,812	15,277	,000 <sup>b</sup>
	Residual	34,033	59	,577		
	Total	51,658	61			

a. Dependent Variable: Y (Career Path)

b. Predictors: (Constant), X2 (Individual Career Mgt.), X1 (Organizational Career Mgt.)

ANOVA table shows  $F_{\text{regression}} = 15,277$  while  $F_{\text{table}} = 3,14$  or  $F_{\text{regression}} > F_{\text{table}}$ , hence  $H_0$  rejected and  $H_a$  accepted, means there is a significant influence. So that organizational career management and individual career management simultaneously positive and significant impact on the careers path of employees.

### 3.2. Multiple Regression Analysis

Multiple linear regression analysis is used to test the influence of more than one independent variable on the dependent variable. In this research, analyzing the influence of organizational career management and individual career management as independent variables on the career path of employees as the dependent variable.

**Table 3 Multiple Regression Analysis Result  
Organizational Career Management and Individual Career Management  
Toward Career Path  
Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	0,637	0,883		0,721	0,473
1 Org. Career Management	0,402	0,185	0,316	2,168	0,034
Individual Career Mgt.	0,456	0,209	0,319	2,186	0,033

a. Dependent Variable: Career Path

Based on Result on Table 4, *coefficients* that appears from result are constant value (a) = 0,637;  $b_1 = 0,402$   $b_2 = 0,456$  and  $F_{\text{regression}} = 15,277$  with sig. value = 0,473. Based on coefficients table explains:

- 1) Organizational Career Management Towards Career Path obtained by standardized coefficient 0,185 positively, stated as unidirectional relationship.  $t_{\text{regression}} = 2,168$  while  $t_{\text{table}} = 1,999$  or  $t_{\text{regression}} > t_{\text{table}}$ , then  $H_0$  is accepted and  $H_a$  rejected, which means significant effect. Organizational career management so positive and significant impact on the career ladder.
- 2) Individual Career Management Towards Career Path obtained by standardized coefficient 0,209 positively, stated as unidirectional relationship.  $t_{\text{regression}} = 2,186$  while  $t_{\text{table}} = 1,999$  or  $t_{\text{regression}} > t_{\text{table}}$ , then  $H_0$  is accepted and  $H_a$  rejected, which means significant effect. Individual career management so positive and significant impact on the career ladder.
- 3) Partially the result shows that organizational career management variables produce a significance value of  $0.034 < 0.05$  that showed significant effect of organizational career management variables of the career ladder. Regression coefficient of 0.402 is positive, stating the direction of a unidirectional relationship, which show the effect on the organizational career management career path, so as to improve the quality of organizational career management will improve the better career path for employees in the Directorate of Human Capital Management in PT. Telekomunikasi Indonesia.
- 4) Partially the results shows that individual career management variables produce a significance value of  $0.033 < 0.05$  that showed significant effect of individual career management variables of the career ladder. Regression coefficient of 0.456 is positive, stating the direction of a unidirectional relationship, which shows the career management of individual effect on the career ladder, so that an increase in the quality of management of individual career of each employee will increase career path, the better for the employee in the Directorate of Human Capital Management in PT. Telekomunikasi Indonesia.

### Conclusion

Based on the results of multiple regression analysis of organizational career management and individual career management simultaneously positive and significant impact on the careers of employees in the Directorate HCM

PT. Telkom Indonesia, Tbk. Organizational career management partially positive and significant impact on the careers of employees. Individual career management also partially positive and significant impact on the careers of employees. Based on descriptive analysis Career Development became the most important components in variable Career Management Organizational while for individual career management Networking component becomes the most important thing. In addition to the variable career, career opportunities become very important dimension for the employees of the Directorate of HCM PT. Telkom Indonesia, Tbk.

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## The Influence Of Talent Management On The Job Satisfaction Of Employees In Telkom University

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### Abstract

**Purpose** – The purpose of this paper is to investigate the levels of job satisfaction employees in the Telkom University and to determine the influence of talent management on the job satisfaction of employees in the Telkom university, Indonesia.

**Design/methodology/approach** –The sampling technique this study is saturated sampling on 112 respondents with criteria of Individual Performance Value (NKI) is P1

**Findings** – The job satisfaction levels of the employees were found to be high. Simultaneous hypothesis testing are uses the F-test, the results that Attracting Talents, Devoloping Talents, and Retaining Talents significant influence on job satisfaction. Based on results of partial hypothesis testing are using T-test, the results that Attracting Talents, Devoloping Talents, and Retaining Talents significant influence on job satisfaction of employee in Telkom University.

**Originality/value** – This study shows the job satisfaction levels of employees and to determine the influence of talent management on job satisfaction employees in Telkom University, Indonesia. Hence the results from this study can help the Telkom University to increase the satisfaction level.

*Keywords: Attracting talents; Developing talents; Retaining talents; Job satisfaction*

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### 1. Introduction

The formation of AEC by the end of 2015 (cheong and Suthiwartnarueput,2015; Jarungkitkul and Sukcharoensin, 2016) an impact not only on the economic sector, but also in other sectors, not least in the education sector, where education is carrying out an important role in building human resource competitive and able to compete with other countries. In anticipation of global reality, it is necessary to educational institutions such as universities to build generations of quality to encounter the competition in the world of work in the era of MEA. Higher education institutions are designed to prepare educated human beings who have a certain degree of quality (Indrajit dan Djokopranoto,2009:4). One way to achieve organizational success is to maintain of job satisfaction their employees (Hamidi *et al*,2014:1). Job satisfaction is one criterion to show that organization is well-managed (Fitzgerald *et al* dalam Crossman & Abou-zaki, 2003:2). Satisfaction of the employee in higher education institutions is a very important issue (Küskü, 2003:1). Consequently, job satisfaction is an important matter that needs to be researched further in academic work life since it is related to performance, productivity, absenteeism, and turnover (Toker,2011:12). In generals we can say that one of the mechanisms influencing the job satisfaction is a talent management that can use as a means to improve the hiring process and develop people with the skills and abilities needed to fullfilment the current needs of the organization (Hamidi *et al*, 2014:2). it can be claimed that talent management is one of the effective factors in job satisfaction which can

be used as an instrument for improving the hiring process and applying high skilled and able people for conducting the organizational processes. In addition, using such a tool, we can use the qualified people with the right skills in right positions in order to obtain the objectives and strategies of the organization and create the job satisfaction through identifying and optimizing the employees' talents and strengthening them (HajiKarimi dan Soltani dalam Elahinejad dan Gholami, 2015:1). Talent Management is described as a systematic attractiveness of identification, development, engagement or retention, and deployment talents (Scullion *et al*, 2010:3). Talent management is a series of activities integrated in managing high performers in all levels of the organization with the main component is an interesting talent through procurement and orientation, developing talent through performance management, learning, and reviews talents, as well as retain talent through career planning, succession planning, and keeping talent (Sule dan Wahyuningtyas, 2016:13-14). Over time the necessary changes for the future development, so that the survival of the organization changes with the evolution and talents of employees in order to achieve organizational goals. Implementation of talent management effectively is necessary for organizations ready to compete and compete in a change in the Era of MEA's where the challenge for higher education institutions to improve the processing of talent consisting of attracting talent, developing talent, and retaining talents to fullfilment the needs of today's organizations and the future.

### **1.1 Background to the research**

Telkom University is one of the private college in Bandung, 2016 is the third year of Telkom University established since on 14 august 2013. As a newly established university for three years, Telkom University has been ranked 25 in Indonesia based on the results data of Webometrik. It shows that Telkom University at a young age was capable of being the best universities in Indonesia. However, job satisfaction of employees in Telkom University has not achieved optimally because there is an average value realization is not comparable with the average value of the specified target. Has not realization of job satisfaction of employees in Telkom University allegedly affected by the processing of talent that consist of attracting talent, developing talent, and retaining talent, where there is a gap between talent management processing and employee expectations. So that the processing of talent management at the Telkom University away from the desired expectation by employees.

## **2. Literature Review**

Talent Management is a set of activities integrated in managing high performers in all levels of the organization with the main component is attracting talent through procurement and orientation; developing talent through performance management, learning, and reviews talents; retaining talent through career planning, succession planning, and keeping the talent (Sule dan Wahyuningtyas, 2016:13-14). To attracting and retaining talent, companies need to know what is desired talent as a result the company should set up an incentive system in accordance with the needs of talent. (Maslow dalam Bethke-Langenegger *et al*, 2011:7). Identifying the right people and having a special programme to keep them in the company raise their work quality and qualification levels. Moreover, as talent are part of a privileged group of employees and are valued, they show a higher level of job satisfaction, performance motivation, and commitment (Senge, 2006:6). The successes of communicate talent management strategy by focusing on talent development, significant higher job satisfaction, performance motivation, commitment and higher trust in leaders as employees are given career and development perspectives and goals according to their competencies and engagement levels (Bethke-Langenegger *et al*, 2011:13). The talents who are given opportunities to grow and develop themselves and gain experience within the organization, and engaged in jobs having a higher job satisfaction (Anand, 2011:6). The implementation of Talent Management which correctly is integrating talents attracting, developing talents, keeping talents with



human resource management procedures in order to raise job satisfaction and encourage employees to keeping the commitment on the company (Elahinejad dan Gholami, 2015:7).

The main areas of Talent Management based on Sule and Wahyuningtyas (2016:31-39)

- **Attracting Talent**  
Attracting talent is a series of processes to gain the best people and put the employees in accordance with the talent possessed. Attracting talent consists of talent planning, recruitment, selection, and orientation.
- **Developing Talent**  
Talent development is a process to explores the potential of the employees that developed into organizational competencies needed in the future. Employee development started from the performance assessment, the mapping of talent, the needs analysis of learning and development, implementation of learning and development, and talent review.
- **Retaining Talent**  
Retaining talent is a process to retain talented employees in order to remains a part of the organization. Organizations should take steps to build employee commitment, job satisfaction and foster a pride of employees to the organization. the activities of the process are career planning, succession planning, keeping talent.

Job satisfaction is a very important factor in career succession and a factor to improves individual performance and personal satisfaction of individuals. Every manager in a variety way tries to increases job satisfaction in the company. Job satisfaction is an important element in the company. Job satisfaction refers to an individual's general attitude towards work (Robbins, 2007:103). The results of dissatisfaction and job satisfaction are influenced by several factors. Based on previous research said that there are five dimensions in job satisfaction that is *Nature of work, Salary, Promotion Opportunities, Supervision and Care, dan Colleagues* (Hamidi et al, 2014:13). Based on Elahinejad dan Gholami (2015:7) said that job satisfaction has five dimensions that is *Job Nature, Salary, Improvement Opportunity, Monitoring and Care, dan Co-Worker*.

The six dimensions of job satisfaction based on Luthans (2008: 145-146) :

- **The work itself**  
This element describes that the employee perception toward the job as an interesting job, through their job has an opportunity to learns, and the opportunity to accepts responsibility
- **Pay**  
The employees want the wage system and promotion policy they perceived as fair, no doubt, and in line with their expectations.
- **Promotion Opportunities**  
Promotion opportunities lead to a different effect on job satisfaction because of differences on remuneration. Promotion is the process of moving employees from one office to another on higher position
- **Supervision**  
Task of supervision could't be separated with leadership functions, which affects the activities of subordinate enterprises through the communication process to achieves certain objectives of an organization.
- **Co-worker**



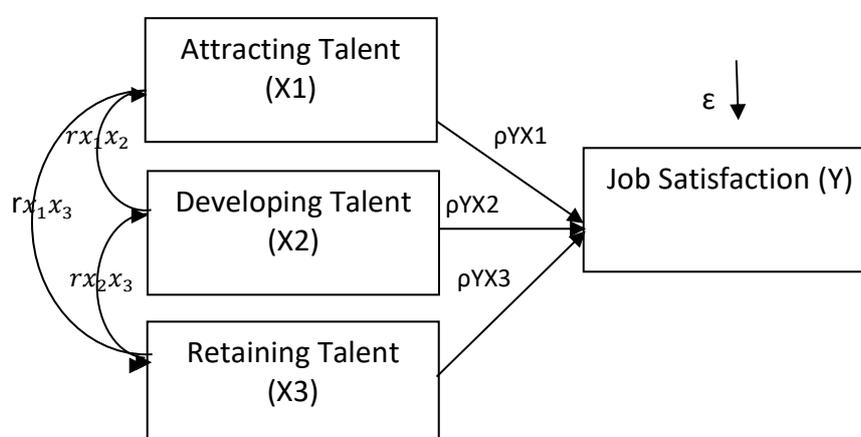
Colleagues who are friends, co-workers or cooperation working group is a source of job satisfaction for workers individually

- Working conditions

Good working conditions (environment clean and attractive), could made the job can easily and then there would be no problems with job satisfaction, otherwise if the existing bad conditions it will be bad impact on job satisfaction.

## 2.1 The Conceptual Model of the Research

The main purpose of this study is to investigate the levels of job satisfaction employees in the Telkom University and to determine the influence of talent management on the job satisfaction of employees in the Telkom university, Indonesia. Here the theoretical foundations related to research subject are evaluated, the conceptual model of the research is provided. After evaluating the theoretical foundations and analyzing the gap of talent management in Telkom University consist of attracting talent; developing talent; and retaining talent and job satisfaction consist of work itself, promotion opportunities, pay, supervision, co-worker, working conditions. The model was provided as follows:



**Figure: Research Model**

Based on the research model can be explained the research hypotheses as follows:

H1: Attracting talent, developing talent, retaining talent has a positive effect on job satisfaction in Telkom University simultaneously

H2: Attracting talent has a positive effect on job satisfaction in Telkom University

H3: Developing talent has a positive effect on job satisfaction in Telkom University

H4: Retaining talent has a positive effect on job satisfaction in Telkom University

## 3. Methodology

The research study is to investigate the levels of job satisfaction employees in Telkom University and to determine the influence of talent management on the job satisfaction of employees in the Telkom university, Indonesia. This study is cross-sectional and hypothetical approach study. The sampling technique this study is saturated sampling on 112 respondents with criteria of Individual Performance Value (NKI) is P1. The procedure of his research is collecting data by questionnaire and in this study used path analysis technique because to know the direct and indirect influence between variables within statistical package for social sciences (SPSS).

#### 4. Results and Discussion

Determine the reliability of the questionnaire:

In this study to determine the reliability of the questionnaire, we used Cronbach's alpha test. Cronbach's alpha coefficient at least 0,70 that indicates the questionnaire has a good level of reliability (Indrawati, 2015:155). The results of this test are given in the table 1 below.

Table 1. Cronbach's alpha coefficient

Variables	Cronbach's alpha coefficient	Conclusion
Attractig talent	0,748	Realible
Developing talent	0,770	Realible
Retaining talent	0,767	Realible
Job satisfaction	0,737	Realible

Cronbach's alpha coefficients for all questions are equal greater than 0,70, then questionnaire has acceptable reliability.

The descriptive Result:

Here a summary on sample demographic variables such as gender, age, education level, employment period within 112 respondents are provided in table 2.

Table 2. Summary on Sample Demographic Variables

		Frequency	Percentage
Gender	Male	70	62,5%
	Female	42	37,5%
	Total	112	100%
Age	20-25	6	5,4%
	26-30	27	24,1%
	31-40	57	50,9%
	>41	22	19,6%
	Total	112	100%
Education Level	Diploma	4	3,6%
	Bachelor	26	23,3%
	MS	75	67%
	PHD	7	6,3%
	Total	112	100%
Employment Period	<5	47	42%
	5-10	56	50%
	11-15	5	4,5%
	>15	4	3,6%
	Total	112	100%

Based on the results of respondent characteristics shown that 62,5% on sex dominated by men, age category by 50,9% dominated age range 31-40 years, education level category by 67% dominated respondents on Master (S2), and employment period category by 50% dominated on 5-10 years. Based on the results of opinion

respondent analysis about attracting talent (X1) shown that 77,19% belong to effective category, it means that Telkom University in procurement of employees adjusted with organizational strategy and also adjusted with knowledge, skills, abilities possessed by employees and new employees gain the orientation after the selection. Based on the results of opinion respondent analysis about developing talent (X2) shows that 73,52% belong to effective category, it means that Telkom University in developing talents were adjusted the needs pf development and learning of current and future employees and the effectiveness of competency development are assessed from the performance appraisal. Based on the results of opinion respondent analysis about retaining talents (X3) shows that 71,65% belong to effective category, it means that Telkom University in retaining talent by providing career planning, succession planning is adjusted the needs of the organization and also Telkom University seek on fulfillment of financial and non-financial and to increase employee satisfaction. Based on the results of opinion respondent analysis about job satisfaction (Y) shows that 75,15% belong to high category, it means that Telkom University was appropriate in the desire of employees within provides employment, pay, promotion opportunities, supervision, co-worker, and working conditions so that gives a sense of satisfaction to the employees.

The Summary Result:

The result within SPSS obtained for F-test is 22,108> F-table is 2,61 so that the first hypothesis is accepted and the p-value is less than 0,05 which depicts that the attracting talent, developing talent, retaining talent have positively significant impact on the job satisfaction simultaneously. Based on the R-Square, the magnitude of the influence of elements of attracting talent, developing talent, retaining talent is 38% while the remaining 62% is influenced by other variables outside of this research. Retainng talent (X3) has a total effect on job satisfaction by 15%. It is shown that the majority of age category is 30-40 years that is at the consolidation phase, where individual plan career to determine the promotion, change work, and activity education needed to achieve this objective. So that employees will be compete to meet them, where the role of organization required in designing career his servants a good by adjusting the needs of employees for the purpose company (Rivai, 2008:291). The developing talent (X2) has a significant effect on employee job satisfaction with a total effect of 13%. It is shown that the employment period of respondents with criterion <5 years is 42%, where the work is relatively low on the hours of flying in work so needed development and learning in the present and future to improves the knowledge and competence of employees to become educators who ready to contribute in Tri Dharma activities at Telkom University. Thus, learning directed not only to the creation of products and better service, but also toward more alert, adaptive, and efficient (Gaspersz, 2013:445) so it needs effectiveness of development and learning. The attracting talent (X1) has a significant effect on employee job satisfaction with a total effect of 10%, It is shown that 67% on level education are dominated by Master (S2) while the level of education on Doctor (S3) by 3,6%, where there is a gap competency in fulfillment on level of education in Doctor less than 30% (managerial work plan of Telkom University). So that to completing gap competency is needed recruitment process and selection which is adjusted with needs organization.

The results of hypothesis partial test based on criteria of t-test > t-table (1,982) are accepted and p-value <0,05 are significant. The results are provided in table 3.

Table 3. Hypothosis Partial Test

Path	T-test	P-value	Beta Value	Confirmed Hypothesis
Attracting talent →Job satisfaction	2,197	<0,05	0,211	H2 accepted
Developing talent →Job satisfaction	2,120	<0,05	0,232	H3 accepted
Retaining talent →Job satisfaction	2,522	<0,05	0,274	H4 accepted



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Based on table 3 which depicts that attracting talent, developing talent, retaining talent has positive significant impact on job satisfaction are partially. The result based on the beta value, attracting talent have 21,1% impact on the job satisfaction; developing talent have 23,2% impact on the job satisfaction; retaining talent have 27,4% impact on the job satisfaction. The result of the beta value which briefs that if there is 1% change in the attracting talent, developing talent, and retaining talent then 21,1%; 23,2%; 27,4% change will be seen in the job satisfaction and any attracting talent, developing talent, and retaining talent precludes the same directional change in the job satisfaction

## **5. Conclusion**

Job satisfaction in Telkom University is high, it means that Telkom University was appropriate in the desire of employees within provides employment, pay, promotion opportunities, supervision, co-worker, and working conditions so that gives a sense of satisfaction to the employees. The findings indicated the positive and significant impact of attracting talent, developing talent, retaining talent on the job satisfaction. According to the positive effect of attracting talent, developing talent, retaining talent on job satisfaction are considered as the variables which have an important role in right and appropriate implementing the policies related to talent management. Based on the findings, we can understand that process of attracting talent in Telkom University within talent planning process, recruitment, selection, and orientation were appropriate to get the best people and put the employees in accordance with the capabilities and skills possessed. Their suitability jobs with the skills and abilities of employees are expected to encourage employees to produce a good performance and will lead to his job satisfaction. Process of developing talent in Telkom University was appropriate to explores the potential of employee development into competencies are needed organizational in present and the future. Employees who are given opportunities to grow and develop themselves having a higher job satisfaction. The process of retaining talent in Telkom University was appropriate within process of career planning, succession planning, and keeping the talent in order to not leave the organization. The succession planning it means that promotion opportunities which gives a different effect on job satisfaction because of differences in remuneration.

## **6. Recommendation**

Process of attracting talent, researchers gave suggestions to the Telkom University to considered several things in succession planning with several steps, that is to identify key positions for succession, identifying competencies, prepare two to three successor for each position, individual learning plans, evaluation succession program. So that, organizations could ensure that all the key positions of leadership have regenerated a sustainable way.

The process of developing talent, researchers gave two alternative suggestions. The first alternative on determining development and learning, the best way of Telkom University uses HAV Matrix (Human Asset Value) to mapping the talent based on performance and potential of employees. After that the maaping for each employees in HAV Matrix, learning and development programs could be adapted to each category. The second alternative for development in talent management system could be done by all organizations that provide a positive work environment, recognition and rewards for appropriate behaviour, involved of the team to improves corporate performance, developing the potential and skills, evaluates and acknowledges the talent. The collaboration both alternatives could be determined process of developing talent are effectively and



efficiently in Telkom University. The process of attracting talent, researcher gives advice to internal or external procurers should be suitable in needs, budget, and organizations policy at Telkom University. Suggestions for further research, hopefully to do several research about talent management that could be affect on dependent variable excepted job satisfaction, for example job performance, employee loyalty that could be affect to talent management. This study only focuses on Telkom University as an academic category, further research could be take in another object which in the company or industry. Hopefully, would gives a benefit to solving problem about talent management in the company or industry

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## **Business Growth Strategy : Collaboration -Literature Review-**

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### **Abstract**

The characteristic of life is growth, so does the business. An excellent business is a business that is experiencing growth. Most of researchers believe that business growth occurred by implementing a collaborative strategy, but other researchers doubt on that fact. Researchers also believe that company's ability such as dynamic capability and supply chain management can improve growth business performance. By using these capabilities does collaborative strategy become unnecessary?. The Journal is intended to explore the different point of views as well as describing how the relation between Collaboration and other parameters is. The method used in this paper is just a literature review which collecting the existed previous researchs, then reconstructed into a research paradigm for next research. The result of literature reviews creates a management model that relates between collaborative strategy, competitive strategy, supply chain management and dynamic capability into a single comprehensive form to improve growth business performance.

*Keyword:* Business Performance; Collaborative Strategy;; Competitive Strategy; Dynamic Capability; Supply Chain Management.

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### **1. Introduction**

Penrose (1959), a researcher who initiated the research on business growth stated that business growth is limited by three elements, such as: Internal Firm Ability, External Firm Condition, and Internal External Factors of the Firm. Following Penrose (1959) there were also several researchs on business growth. The reasearch concerning the Internal Firm ability has revealed a concept of Resouse Base View (Barney 1996), Dynamic Capability (Teece. DJ, et al 1997), Core Competence (Prahalad, C. K., & Hamel, G. (2006), and etc. Thereafter, reasearch on the external firm condition has developed the concept of 'Management-Strategic' (Ansoff 1965),

'Low of comparative advantage' (Deardorf, AV 1980), Competitive strategy concept (Porter, ME 1980), 'Structure of competition and competitive advantage' (Porter 1985), Cooperative strategy (Dyer, J. H., & Singh, H. (1998), Strategic operation management (Brown, S, et al 2000), Partnership strategy (Lasker, RD, et al 2001), Alliance Strategy (Ireland, RD, et al 2002), Coopetition strategy (Morish, MH, et al 2007) and others. Meanwhile, the research for internal-external firm has created the uncertainty and risk concept by Greene, M, et al (1968) and Williams, C. A., & Heins, R. M (1985).

Those results of conducted researchs have given impact to the company business growth, **nevertheless** there were no research that spesificaly and comprehensively relate the concept of collaborative strategy with other parameter such as competitive strategy, dynamic capability, and supply chain management, all together creating a model management to develop a company business growth.

## 2. Literature Review

### 2.1 Type of Collaboration

According to Gee, EP (2000) Collaborative Strategy is an attempt of the firm to optimize its business performance through togetherness and cooperation with other parties that mutually beneficial. While Lasker, RD., et al (2001), stated that Collaborative Strategy is a process through several concerning parties, who cooperate together and constructively finding solutions and resolving problems.

Thus, collaborative strategy is triggered by the similar problems that are considered by the company, and then solve it with mutually beneficial relationship with other parties.

Types of collaboration according to Le Roy, F., & Sanou, FH (2014) perspective are constructed from the cooperative pattern with the competition pattern itself, therefore it creates 4 types of relation as seen on Table-1, and 2 types of these relation are types of collaboration (cooperative and coopetitive)

Table-1 : Type of Relation between Collaboration and Competition

Relation	Low Collaboration	High Collaboration
Low Competition	Co-exist	Cooperative
High Competition	Aggressive	Coopetitive

Source : Le Roy (2014)

Type of other collaborations according to Ireland, RD., et al (2002) is alliance. Ireland, RD, et al (2002) stated that alliance is the cooperation between two or more companies in order to increase their company performances, also increasing their competitive positions by sharing resources among those companies that cooperates. While type of collaboration that involved all internal firm potential is described by Wheelen, T.L., et al. (2015) by the concept of Synergy. According to Wheelen, et al (2015) the cooperation between business units or functions units in a firm, therefore the impact of that cooperation among them is able to increase company's income higer than not developing a cooperation.

Therefore, the form of collaboration is devided into external collaboration and internal collaboration. External Collaboration are : **Cooperative, coopetive, and alliance;** whilst collaboration that involves function units of internal firm is **synergy**.

### 2.2 Collaborative Strategy

Several researchs are conducted to increase *business performance* as resumed on Table-2.

Table-2 The Researchs on Collaborative Strategy



Inter relation	Collaborative Strategy	Business Performance
Collaborative Strategy	-	- Eisenhardt, K. M., & Schoonhoven, C. B. (1996) - Stank, T. P., et al (2001), - Cao, M., & Zhang, Q. (2011), - Morris, M. H, et al (2007), - Rajasekar, J., & Fouts, P. (2009) - Le Roy, F., & Sanou, F. H. (2014)
Competitive Strategy	- Dyer JH (1996) - Dyer JH&Singh (1998) - Doh JP (2000) - Lasker, et al (2001) - Ireland, et al (2002)	- Porter, M. E. (1991) - Bharadwaj, S. G., et al (1993) - Deligönül, Z. S., & Çavuşgil, S. T. (1997), - Klein, J. (2002), - Costinot, A., & Donaldson, D. (2012),.
Supply Chain Management	- Stonebarker, PW&Liao J (2004) - Talavera, MG V (2008) - Chang KP&Graham G. (2012) - Yan, J, et al (2014) - Kafi F&Fatemi SMT (2014)	- Morash, E. A. (2001) - Akdogan, A. A., & Demirtas, O. (2014), - Zhou, H., et al (2014) - Harsasi, M. (2015). - Handfield, R. B., et al (2015)
Dynamic Capability	- Wernerfelt, B (1984) - Griffith DA&Harvey, MG (2001) - Ensign, PC (2004) - Wang, CL&Ahmed, PK (2007) - Barker, J., et al (2011)	- Teece, D. J. (2007), - Delgado, M., et al (2012) - Lin, Y., & Wu, L. Y. (2014), - Tovstiga, G. (2014,) - Teece, D.J. (2014)

synthesa various sources

This table describes how the interrelationship between several variables, from the results of previous research as follows :

- A. Collaborative Strategy positive impact on business growth
- B. Competitive strategy correlates with collaborative strategy and competitive strategy positive impact on business performance.
- C. Supply chain management positive impact on collaborative strategies as well as supply chain management positive impact on business performance.
- D. Dynamic capability as a positive influence on the collaborative strategy and also positively affect the dynamic capability of the business performance.

From these research, it is understood that business growth can be realized by collaborative strategy together with competitive strategy, and Collaborative strategy will be more effective with the support of supply chain management, and support of dynamic capability.

### 2.3 Next Research Objective

This journal is concerned with how the effect of collaboration on business performance, and how to realize its strategy of collaboration, it is also found that there are gaps that need to be followed up by further empirical research. The results of previous research shows the majority researchers gave positive results, but some are still doubtful.

Chang, K. P., & Graham, G. (2012) concluded that in complex business environment it is suggested to do collaboration. The result of the research revealed that the act of collaboration will lower the cost, therefore collaboration will fix business performance. This result is compatible with the relation object between collaboration and business performance, according to : Cao, M., & Zhang, Q. (2011) who stated that collaboration will give significant impact to company's business performance

However, the researcher Talavera, M. G. V. (2008) reported about the company in Philippines, eventhough the researcher have concluded that collaboration give impact to business performance, but in the reality

there were not many companies that adopted collaboration as their business strategy.

Whereas the research of Nakano, M. (2009) stated that Internal collaborative give positive influence to logistics production performance, while external collaborative do not affect logistics production performance. Hooks, J., & Palakshappa, N. (2009) reported that the majority of electrical companies in New Zealand have already done the collaboration, because it is obliged by the regulation.

Masteika, I., & Čepinskis, J. (2015) stated that the result of their research is the combination of dynamic capability with supply chain management that gives positive impact to the business performance. It is similar to the result study of Teece, D. J. (2014) that dynamic capability becomes one of the factors to increase business performance. Also similar to the result study of Morash, E. A. (2001) that Supply chain capabilities gives positive impact to business performance. The similar statement also delivered by Vanpoucke, E., et al (2014) who concluded that integrated supply chain management gives positive impact to cost efficiency.

The result of this study is not in accordance to other results of studies. Wang, C. L., & Ahmed, P. K. (2007) concluded that the impact of dynamic capability to the business performance is complex. The research result of Beske, P. (2012) stated that the impact of dynamic capability and supply chain management to the performance is necessary to be taken to further study. Likewise, research results of Nedzinskas, Š., et al (2013) stated that the Dynamic Capability gives positive impact on non-financial performance of the company, but there was no impact to the financial performance of the company.

This Confusion need to be taken to further research with reseach objective as follows :

- A. Is the dynamic capability and supply chain management affects positively influencing collaborative startegy? either simultaneously or partial
- B. Is the dynamic capability and supply chain management affects positively affect competitive startegy? either simultaneously or partial
- C. Is the dynamic capability and supply chain management busines affect positively affect performance? either simultaneously or partial
- D. Is the Strategy and Competitive Strategy Collaborative affect positively to busnisness peformance? either simultaneously or partial
- E. Is the dynamic capability and supply chain management busines affect positively affect performance, through a collaborative strategy? either simultaneously or partial
- F. Do dynamic capability and supply chain management busines affect positively affect performance, through a collaborative strategy? either simultaneously or partial

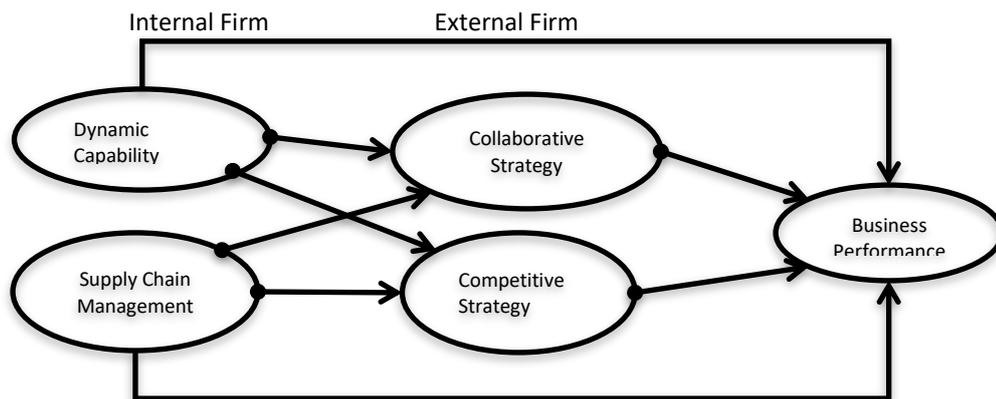
The reseach paradigm will be examined later in the doctoral program Universitas Padjadjaran as follow on picture-1

### 3. Data and Methodology

BPS (Central Bureau of Statistics Indonesia Authority) has issued its monthly report "Laporan Bulanan Data Sosial Ekonomi Maret 2017" that the industrial development of information and telecommunications technology has growth since 2012 until 2015, the year 2012 amounted to 4.24; in 2013 amounted to 4.50; 2014 at 4.59; and in 2015 amounted to 4.83 on a scale of 0-10. This data is good enough to be a strategic collaborative research object for business growth in the information and telecommunication industry.

In this paper only a literature review of previous studies and construct future research plans, but in the next research plan submitted research methodology as follows: The object of research is collaboration on digital business telco in Indonesia. Analysis Unit In this study is all business units and subsidiaries of all companies digital telco in Indonesia and listed on the Jakarta stock exchange, which is about 42 units of analysis. Each unit of analysis will be sampled with quetioner to 5 people, bringing the total to 210 samples. Statistical analysis will use the PLS.





Picture -1 : The Research Paradigm on Business Growth Strategy Research

The methodology used is quantitative, descriptive, and samples for all the units of analysis. Sources of data obtained as primary data and secondary data. Primary data needed from each of these companies is the response of the questionnaire related to the variable that is the object of this research, and interviews with officials or staff involved and make observations. Secondary data were obtained from the annual reports of each company, which is accessed from the website of each company.

#### 4. Discussion : Collaboration Effectiveness

Collaboration Effectiveness would be even better if the contribution or its impact on business performance is getting better. Effectively Collaboration Strategy can be optimized by identifying what factors that influence Collaboration, also what factors that goes along Collaboration could increase business growth. On the picture-1 of business growth research paradigm, it describes on how the position and the relation of collaboration with other parameters in the business growth context.

Hypothesis concerning collaboration can be described as follow :

- A. Dynamic Capability and Supply Chain Management give positive impact to Collaborative Strategy simultaneously or partial.
- B. Dynamic Capability and Supply Chain Management give positive impact to Business Performance through Collaborative Strategy simultaneously or partial.  
This hypothesis indicates that the effectiveness of collaboration to improve business performance is influenced by dynamic capability supply chain system of the firm simultaneously or partial.
- C. *Collaborative Strategy and Competitive Strategy* give positive impact to *Business Performance*, simultaneously or partial.  
This hypothesis indicates that the effectiveness of collaboration to improve business performance will be more effective by harmonizing competitive strategy simultaneously

##### 4.1 Dynamic Capability

According to Helfat, et al (2009), Winter SG (2003), and Wang, CL & Ahmed, PK (2007), Dynamic Capability is the company capability to response to the change of internal or external condition of the company by creating, adding or modifying all company resources in internal or external condition of the company. The company's capability according to Wang CL & Ahmed, PK (2007) consist of : Adaptive Capability, Absorptive Capability, and Innovative Capability. Adaptive capability is the capability to adjust itself to the change of environment internally and externally. Then, Absorptive Capability is the company's capability to detect the environmental changes that give negative impact to the firm. Meanwhile, Innovative Capability is the capability of the company to develop new products or fixing the existed products.

Beside the adaptive capability, absorptive capability, and innovative capability, according to Winter SG (2003) the company need to add one more capability that describes New Capability of company that is relevant to the issues faced by the company.

The research will prove that collaboration Strategy will not be effective if the company doesn't have the dynamic capability.

#### 4.2 Supply Chain Management

The definition of *Supply Chain Management* according to Swink, M., et al (2011) is a management of products supplies and services, start from designing process until the act of delivery to the customer. Including the process that consist of involving units from supplier line until delivered to the customer, whether it is a material flow or informations flow.

Cohen, S., & Roussel (2004) described 5 (five) pilars that turn supply chain management system into something that is able to increase company performance. Those five pilars are : harmonizing supply chain management that is operated with its business strategy, developing the end to end process of design, building exact collaboration, operating advanced supply chain management organization, using relevant key performance indicator to boost the supply chain management performance. Cohen, S., & Roussel (2004) believe that by implementing those Five pilars, the company will get excellent business performance.

Collaboration related to supply chain management occurs on two different processes, which are collaboration on the process of product and services supply, with collaboration on the competition process in the market. Collaboration at the level of product and goods supply according to Cohen, S., & Roussel (2004) is the effort to decrease production and services cost, therefore the impact of business performance will be getting better. On the contrary, concerning the Collaboration on the competition process in the market according to Cohen, S., & Roussel (2004) is that supply chain management should adapt that strategy. The adaptation is intended to make the system works flexible, identifying which part of the system that needs to be strengthen and which part of it that needs to be strengthen by the external party.

The research will prove that supply chain management will impact to make more effectively collaboration strategy.

#### 4.3 Competitive Strategy

According to Barney, JB (1997) the *competitive strategy* is the company effort to reach high bussiness performance level in the market and industry above competitor. Barney, JB (1997) differentiate between *competitive strategy* done by the business unit and *competitive strategy* done by the corporation. *Competitive strategy* done by business units is Cost leadership, Product Differentiation, Flexibility, and Tacit Colution. Meanwhile *competitive strategy* done by the company are *Vertical Integration strategies, Strategic Alliance, Merger and Acquistions, and International Strategies*. From the description of Barney, JB (1997) the essension between competitive strategy and collaboration strategy are used simultaneously, because actually the essence of *Vertical Integration strategies, Strategic Alliance, Merger and Acquistions, and International Strategies and tacit colution* is collaboration, and the collaboration is used to be the way to receive better business growth than the competitor, and that is essentially a competitive strategy.

The Barney, JB (1997) point of view has strengthen the hyphothesis that collaboration strategy and competitive strategy will give positive impact to the business growth simultaneously or partial. Therefore, Collaboration Effectiveness will be much even better to be implemented simultaneously with competitive strategy.

### 5. Conclusion and Recommendation

- A. Collaboration is one of the solutions that is necessary to be taken by the company to solve any problems faced by the company, cooperated with other parties who have similar concern.



- B. Collaboration Strategy could give positive impact on business growth.
- C. The integrated Collaboration Strategic, Competitive Strategic, Dynamic Capability, and Supply chain management could be a management model, in improving business growth. The comprehensive research on that management model is necessary to be conducted.
- D. Collaboration Effectiveness will be getting better if the contribution or its impact on business performance is also getting better.

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# Underwriter's Reputation, Return On Equity, Debt To Equity, Ownership Concentration And Inflation Of Underpricing When Initial Public Offering On The Indonesia Stock Exchange 2010 – 2016

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## Abstract

Underpricing become one phenomenon that often occurs in every capital market in some countries with different underpricing, at which time the company did the first time public offering, the price is determined by the issuer (company) and the underwriters (underwriter). Meanwhile, in the secondary market price is determined by the results of the mechanism of supply and demand. Underpricing is a condition which indicates that the stock price in the primary market is lower than the first day the stock market.

This study aimed to examine the effect of the underwriter's reputation, Return on Equity, Debt to Equity Ownership Concentration and inflation on the level of underpricing. This research uses descriptive and verification. The population of this research is a company conducting an initial public offering in the period 2010-2016. The sampling method used in this research is purposive sampling with a total sample of 118 companies. The data used in this research is secondary data from the prospectus and financial statements of the company. The analytical method used in this research is descriptive analysis and multiple regression analysis.

Based on the results of the study, showed that the underwriter reputation, Debt to Equity and Ownership Concentration simultaneously significant effect on the level of underpricing. Partially, Return on Equity, and inflation did not significantly affect the level of underpricing.

*Keywords : Underpricing, Initial Public Offering, Return on Equity, Debt to Equity, Ownership Concentration and Inflation.*

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## 1. Introduction

Development of the business world give rise to stiff competition among businesses. Each of the companies vying to be the best in its field. Many businesses think that by making the company as one of the companies that go public will improve the company's image. This is not entirely wrong, because in fact the best companies in Indonesia is largely a public company or companies that have gone public, There are several reasons for a company to go public include: To obtain additional capital, enhance corporate image, the issuer better known community, gain access to a broader investor and enhance shareholder value. A company is said to have become a public company if the company has made an initial public offering process in which before the shares offered in the secondary market first offered in the primary market. Companies must meet the disclosure obligations on both the days before and after the Initial Public Offering process. Before a company is a public company, in general, the owners of capital (investors) only have limited information related to corporate issuers (companies that will make the process of Initial Public Offering) exposed through the prospectus. For investors, buying shares of companies that conduct a public offering will provide another alternative to earn income. By buying shares or bonds, investors will receive income from other sources, namely capital gains, dividends and interest on the bonds (Widoatmodjo, 2009). If the price is determined on the secondary market in the first day (closing price) is lower than the price set in the primary market is referred to as overprice. Conversely, if the stock price specified on the secondary market in the first day is higher than the share price set in the primary market is referred to as underpricing.

Underpricing conditions intended to signal the company's intrinsic value to potential investors. For this purpose

it is firms that conduct Initial Public Offering hinted to publish a prospectus which contains a variety of financial and non financial information company to provide certainty in the future. Underwriter good reputation will give a good signal also on the market and vice versa. Because the market is relatively familiar with underwriters who are in good standing, and the market believes that the underwriter with a good reputation will not guarantee a low quality company. So the higher the underwriter reputation reflects the company's lower and lower the level of uncertainty of the future stock price

Return on equity shows the company's ability to earn income using the equity of the company. A high return on equity would be a positive signal to investors of the company which resulted in the company's stock will be more sought after by investors.

Debt to Equity Ratio is one one of the solvency analysis tools. This ratio indicates the company's ability to meet long-term liabilities (Subramanyam and Wild, 2012). Companies with high debt to equity showed that corporate funding of creditors getting higher, so the company can mean higher risk.

Companies with concentrated ownership (concentrated) is a company controlled by a shareholder who has the greatest proportion of the total stock ownership of shares outstanding (Atmaja et al., 2009 in Darmadi and Gunawan, 2013).

High inflation causes the price of goods increased in general. These conditions affect the cost of production and the selling price of goods, which will be higher. High inflation led to declining profits of a company, thus causing less competitive equity securities (Ang, 1997).

Based on this background, the formulation of the problem in this study is whether the underwriter reputation, return on equity, debt to equity, concentration of ownership and inflation affect underpricing. The purpose of this study was to whether the effect of underwriter reputation, return on equity, debt to equity, concentration of ownership and inflation to the level of underpricing shares on the Indonesia Stock Exchange Period 2010-2016.

The purpose of this paper is to examine whether and how underpricing is associater with underwriter reputation, return on equity, debt to equity, ownership concentration and inflation among firms conducting initial public offering (IPOs) in the Indonesian equity market.

Table 1. *Underpricing company's*

Years	<i>averages Underpricing</i>
2010	30,53%
2011	20,14%
2012	28,83%
2013	25,42%
2014	27,70%
2015	31,12%
2016	27,58%

Source : [www.e-bursa.com](http://www.e-bursa.com)

## 2. Basic Theory and Methodology

### 2.1. Basic theory

#### 2.1.1. Initial Public Offering

The company carries out a variety of ways to meet their capital needs in developing their business. The company has a variety of alternative sources of funding coming from the company that retained earnings and accumulated depreciation, while alternative funding from outside the company is through opt-in mechanism which is



generally done by selling shares to the public or commonly known as going public (Sunariyah 2010: 32 ). The decision of a company to conduct an Initial Public Offering in which a company first sold shares to the public (public). According to Sherman (2005) Initial Public Offering is defined as "a legal process where the company registers its securities to the Securities Exchange Commission (SEC) for sale to the general public investors".

According Darmadji and Fakhruddin (2011: 1), capital markets (capital market) is a place of being sold a variety of long-term financial instruments, such as debt, equities (stocks), derivative instruments, and other instruments. The stock market is a means of funding for companies and other institutions (eg, government), and as a means for investing activities. Thus, capital market infrastructures facilitate trading activities and other related activities. Initial Public Offering occurs only in the primary market (primary market), the market for companies that conduct a public offering for the first time to sell their shares to investors.

### 2.1.2. Underwriter reputation

Underwriter or underwriter called, serves in conducting the guarantee of a public offering of shares or bonds for the first time, namely when to go public. Underwriting process is referred to as the underwriter. These securities companies that will market and guarantee the absence of securities sold or issued or offered by a company.

### 2.1.3. Return on Equity

The impact return on equity is the company's stock price in the secondary market will be higher than the prices in the primary market are causing underpricing, formula for calculating return on equity is as follows (Subramanyam and Wild, 2012: 44):

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Total equity}} \times 100\%$$

Variable return on equity is related to signaling theory (signal theory) because of good quality companies would deliberately send a signal to the market, so the market is expected to differentiate the good quality and bad quality company.

### 2.1.4. Debt to Equity

Debt to Equity Ratio is one one of the solvency analysis tools. This ratio indicates the company's ability to meet long-term liabilities formula used to obtain DER is as follows (Subramanyam and Wild, 2012: 45):

$$\text{Debt to Equity} = \frac{\text{Total Debt}}{\text{Total Equity}} \times 100\%$$

Variable debt to equity is related to signaling theory (signal theory) because of good quality companies would deliberately send a signal to the market, so the market is expected to differentiate the good quality and bad quality company.

### 1.1.5. Ownership concentration

Companies with concentrated ownership (concentrated) is a company controlled by a shareholder who has the greatest proportion of the total stock ownership of shares outstanding (Atmaja et al., 2009 in Darmadi and Gunawan, 2013). By doing so, they will remain a majority shareholder in the company.

$$\text{Ownership Concentration} = \frac{\text{Number of the largest stock holdings}}{\text{Totalshares}}$$

Variable ownership concentration is associated with agency theory (agency theory) where the relationship

between the shareholders (shareholders) as a principal and as agent management. Management is a party contracted by the shareholders to work in the interests of shareholders.

### 1.1.6. Inflation

High inflation causes the price of goods increased in general. These conditions affect the cost of production and the selling price of goods, which will be higher. High inflation led to declining profits of a company, thus causing less competitive equity securities (Ang, 1997). The variable inflation can not be in relationship existing theories because in this case the inflation is a macro variable and will directly affect the company.

## 2.2. Methodology

The population used in this research is all companies doing Initial Public Offering (IPO) in Indonesia Stock Exchange 2010-2014. The sampling technique used by the author is purposive sampling and obtained a total sample of 118 companies.

The analysis technique used in this research is regression analysis because it can explain how much influence between the dependent variable and independent variables, either partially or simultaneously. The analysis used to test the hypothesis is multiple regression (multiple regression) is to test the strength of the relationship between the dependent variable and independent variables (Ghozali, 2005) .. In order to test hypotheses in this study, it will use regression model as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

Information :

Y:

Underpricing

$\alpha$ : Constants

X1: Reputation Underwriter

X2: Return on Equity

X3: Debt to Equity

X4: Ownership Concentration

X5: Inflation

$\beta_1 - \beta_5$ : partial regression coefficients for X1 - X5  $\epsilon$ :

Factor bully / residuals (errors)

Based on the processing results obtained multiple regression equation as follows:

$$Y = 9,16 - 7,55 X_1 - 0,51 X_2 + 0,49 X_3 + 0,38 X_4 + 1,57 X_5 + \epsilon$$

### 3.1. Underwriter Reputation influence on the level of Underpricing

Based on the statistical t-test, underwriter reputation variables significantly influence the level of underpricing. It can be seen from the probability value  $0.048 < 0.05$ . It can be concluded that the underwriter reputation variables have a significant effect on underpricing. This is consistent with the theory that the higher the level of underpricing underwriter reputation will be lower because of the uncertainty in the pricing of the IPO will be on the wane. Underwriter reputation has coefficient of -7.55 means that if the underwriter reputation (X1) was increased by 1 (one) then the variable underpricing decreased by 7.55. thus the underwriter reputation variables influence significantly the negative direction. Agency theory in this study proved to be due to the underwriters in this case obtain better information about the issuer's shares demand, compared to the issuer itself. Similarly, according to investors, underwriters are considered to have more complete information about the condition of the issuer that the underwriter that has a high reputation will set the IPO price in accordance with the conditions



of the company. The higher the reputation of underwriters eat will affect the level of underpricing. The results are consistent with research conducted by Kristiantari (2012) and Riyadi (2013) proved that the reputation underwriter yan negative effect on underpricing. This suggests that a highly reputable underwriter bolder give a high price as a consequence of the quality of the bail, so that a low level of underpricing.

### **3.2. Effect of Return on Equity to Level Underpricing**

Based on the statistical t-test, the variable return on equity does not significantly influence the level of underpricing. It can be seen from the probability value  $0.131 > 0.05$ . It can be concluded that the variable return on equity does not have a significant effect on underpricing. Return on equity has a coefficient of -0.51 means that if the return on equity (X2) increased by 1 (one) then the variable underpricing decreased by -0.51. thus the variable return on equity does not influence significantly the negative direction.

Return on equity which describes the ability of their own capital to generate profits for shareholders showed no significant effect on the level of underpricing. This study supports the results of research conducted by Martani, et al. (2012) which stated that no significant relationship between ROE by underpricing. Return on equity has no effect on underpricing because investors are not only concerned with return on equity of companies that go public, but also pay attention to the return on equity of other companies in similar industries.

### **3.3. Effect of Debt to Equity to Level Underpricing**

Based on the statistical t-test, underwriter reputation variables significantly influence the level of underpricing. It can be seen from the probability value  $0.002 < 0.05$ . It can be concluded that the variable debt to equity have a significant effect on underpricing. Debt to equity has a coefficient of 0.49 means that if the debt to equity (X3) increased by 1 (one) then the variable underpricing decreased by 0.49 thus variable debt to equity have a significant effect in a positive direction.

Variable debt to equity is related to signaling theory (signal theory) because of good quality companies would deliberately send a signal to the market, so the market is expected to differentiate good and bad quality company. Signaling theory in this study proved to be due to the signals given by the company that are shown in the debt to equity that is greater then the level of underpricing would be high because when companies make a profit but it has a great debt there is an obligation that must be paid prior to the debts before distributing such profits to the shareholders.

The higher the value the higher the risk DER means the issuer's shares, the higher the rate of return expected by investors, which means also the higher level of underpricingnya (Suyatmin in Aini, 2013). In line with research conducted by Vitello (2010) and Wahyusari (2013) suggested a significant relationship (positive) between DER by underpricing.

### **3.4. Effect of Ownership Concentration on Rate Underpricing**

Based on the statistical t-test, underwriter reputation variables significantly influence the level of underpricing. It can be seen from the probability value  $0.000 < 0.05$ . It can be concluded that the variable concentration of ownership has a significant effect on underpricing. Concentration of ownership has a coefficient of 0.38 means that if the debt to equity (X4) increased by 1 (one) then the variable underpricing decreased by 0.38 thus significant effect of ownership concentration variables with a positive direction.

In the agency theory in this study proved for pemedang majority stake would not sell their shares to new investors because they still hoped to profit from the shares they own so that the majority shareholders to buy back shares of the company at the time of its initial public offering, it will bring up the agency problem between controlling and minority shareholders (Shleifer and Vishny, 1997 in Darmadi and Gunawan, 2013). The concentration of ownership is considered as a negative signal for the quality of the company, so the company



established a policy of underpricing in order to attract attention of the public to buy shares of the company's IPO.

### 3.5. Effect of Inflation to Level Underpricing

Based on the results of the t test statistic inflation variables significantly influence the level of underpricing. It can be seen from the probability value  $0.077 > 0.05$ . It can be concluded that the variable inflation has a significant effect on underpricing. Inflation has a coefficient of 1.57 means that if inflation (X5) increased by 1 (one) then the variable underpricing increased by 1.57 thus inflation variables have significant influence with a positive direction.

### 3.6. Conclusion

Underwriter reputation, return on equity, debt to equity, concentration of ownership and inflation. Jointly affect the level of underpricing, underwriters Reputation have a significant influence on the level of underpricing, Return on equity does not have a significant effect on the level of underpricing. Debt to equity has a significant influence on the level of underpricing, ownership concentration has a significant influence on the level of underpricing, inflation does not have a significant effect on the level of underpricing.

For investors or prospective investors who will invest in the stock market by buying shares listed on the Indonesia Stock Exchange should consider factors that significantly affect the level of underpricing. The Profit Opportunity in getting when investors buy shares when the company sold its shares in the primary market and sell them in the secondary market with the intention to benefit from the difference between the buying and selling stocks because the gains can be more than 27.09%. Because the price of shares purchased at below market prices so the benefits to be obtained even above average.

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## **Impact of Task-Technology Fit & Habitual Use on Individual Performance Using Partial Latest Square Structural Equation Modeling Methods**

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### **Abstract**

This study discusses whether the task-technology fit on academic support technology and habits in using these devices has an impact on the individual performance of lecturers. Based on a survey in 97 full-time lecturers at Telkom University, the results of this study indicate the impact of task-technology fit in the context of academic support technology on lecturer individual performance is positive and significant. While the impact of habitual use or habit of using academic support technology on lecturer individual performance is positive but not significant. This study also identified that the task mobility which part of task characteristics and technology (reliability, accessibility, and overall quality) characteristic that are found to be positively influenced on task-technology fit for academic support technology, but there is one variable that not influenced to task-technology fit, that is task feedback which another part of task characteristics. This study found that external factors such as perceived critical mass and the reputation of academic support technology has positive and significant influence to habitual use of academic support technology, while the individual internal factor such as self efficacy and trust has not significant influence on habitual use of academic support technology. This study using structural equation modeling with partial latest square (PLS-SEM) to identify the main variables contained in endogenous latent variables. The present findings enable researchers and practitioners to understand the impact of academic support technology that has been used in supporting activities of research, public service and teaching on the individual performance of lecturers at educational organization.

*Keywords: Task-Technology Fit; Habitual Use; Individual Performance; Academic Support Technology; PLS-SEM*

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### **Introduction**

Information and communication technology or ICT in the world is increasingly growing by leaps and bound. The development of this technology is driven by social lifestyle and fast-moving industry (Rachbini, 2017). The rapid development of technology is directly to the existing competition in many areas due to the openness and equal opportunities possessed by each other. Various areas of the organization have a support system in the form of technology that can enhance the creativity of its employees in accordance with requirements which are computer-based systems that can improve performance, the process of thinking and assist in problem solving. Assistive technologies here can be defined as a combination of computer technology and telecommunications with other technology such as hardware, software, databases, and telecommunications devices which connected to the network technology such as the Internet and used as the organization's information system (Ani, 2006:2). The government through the Ministry of Communications and Information Technology focuses on the development of telecommunications infrastructure, developing startup, adapting policies and national cyber defender to improving Indonesia's competitiveness globally goals (Kominfo, 2016). In addition to infrastructure, the government through the Ministry of Research, Technology and Higher Education together with state-owned enterprises to cooperate for the implementation of ICT in higher education (Kemenristekdikti. 2016).

Industrial growth is rapid and faster with their information and communication technology shows the need for studies that evaluated the impact of the use of information and communication technologies supporting the

performance, so it can be known whether these technologies can impact the performance of a person in performing his duties (Mayers, 2014: 2). According to Goodhue (1995: 213) model of the technology chain-performance or TTF (Task-Technology Fit) is a model that much comprehensive to understand the relation between information technology with the performance. In this study, the performance in question is the performance of faculty who use technology in implementing academic support teaching, research and service. According Erno in Widhi (2016), the first step in advancing the education system is improving a lot of teachers quality. With the quality of teaching is good, the education system and educational technology can be run properly. With this research, researcher expected to determine the performance of the technology in an educational institution such as the University and can be used as a source of implementable by other educational institutions.

## Literature Review

### Task-Technology Fit

The task-technology fit was developed by Goodhue and Thompson in 1995. It is the level of technological capabilities to help people to perform the task. Task-Technology Fit is the relationship between the suitability of the task, the ability of individuals and functionality of the technology. Compliance is more detailed technological tasks can be defined as an ideal profile formed from a collection of task dependencies internally consistent with the elements of the technology used will result in the performance of executive duties (Joyiganto, 2008: 494). The variables used were measured by Goodhue (1993) in Goodhue (1995: 222) with a domain user decision-making tasks are supported by information technology. These variables are the characteristics of the task, technology characteristics and individual characteristics (Goodhue, 1995: 217).

Goodhue (1995: 216) defines a task as an activity undertaken by individuals with change inputs into outputs. In the model of task-technology fit, characteristics of tasks can be defined as activities that use the input of information obtained from the system information is then processed by the individual to produce an output corresponding to the purpose of the task (Goodhue, 1995: 216). In the characteristics of the task, there are two factors used in this study is the task of mobility and task feedback (Chung, 2014: 95). Task mobility is defined as the activities carried out by individuals using mobile technology devices so they can move easily (Gebauer, Shaw and Cribbins 2010: Chung, 2014: 95). Junglas in Chung (2014: 95) states that the task of mobility could replace the characteristics of the task that has been developed by Goodhue. This is because the presence of wireless technologies and mobile devices such as smartphones are changing the way people work in completing the assignment and use of technology (Liu 2011: Chung, 2014: 95). Subsequently, Sims in Chung (2014: 95) defines a feedback task as providing feedback on the activities of certain individuals in the form of assessment work has been done to the individual. Feedback in this study can be given by stakeholders such as the work environment, students, and staff about how good lecturers to do a job. Task feedback is relevant variables to replace the specific organizational characteristics of the task that uses a variety of technologies in carrying out the activity (Chung, 2014: 95).

Goodhue (1995: 213) defines the technology as a tool used by individuals to help their tasks completed. technological characteristics is a technology used by certain individuals to meet its needs and the technology used an organization to support its operations. Chung (2014: 97) also describes factors that exist on the characteristics of such technology is system reliability, system accessibility, and quality systems. Wixon in Chung (2014: 95) said that system reliability is a factor that affects an operating system. According to Wixom in Chung (2014: 95) system accessibility is the ease in accessing information from an information system that is used. Ease of access is an important factor of the reliability of an information system. The quality system is a complement of system reliability and system accessibility (Chung, 2014: 95). This study uses the System Reliability, Accessibility and System quality as the relevance of the characteristics of the technology developed by Goodhue (Chung, 2014: 95).



## Habitual Use

The individual characteristics as the dimension of research conducted by Goodhue is not enough detail to describe the performance in using information technology, this study need an external factors that are involved in order to more comprehensive results (Goodhue, 1995: 213). Limayen in Chung (2014: 96) provide an advice in conducting performance assessment based on using information system. First, the user habits in using information technology. The point is people who are accustomed to the use of certain information technology automatically have studied how the technology works. Habitual use or can be called habitual use a person's basic concepts in learning something (Chung, 2014: 96). Second, Limayen in Chung (2014: 96) suggests the use of habitual use for the frequency of individuals in using information technology provides a comprehensive relationship to the performance generated. In this study, the technology used is the academic support technology devices in educational organizations. However, the habit of using the technology is not only influenced by internal factors are derived from the task in the work environment, but of external factors also influence the use of technology (Chung, 2014: 97).

There are two characteristics used in this study is self-efficacy and trust. Self-efficacy or self-efficacy is defined as a person's ability to use information systems. It was also discovered that self-efficacy has a relationship to the actual usage of information technology (Compeau & Higgins, 1995; Luarn & Lin, 2005; Chung, 2014: 97). The belief here is an individual's belief in using information technology that the technology has benefits for themselves (McKnight, 2002; Chung, 2014: 97). The conviction was a significant influence of the habitual use of information technology. On external factors as well, there are two characteristics that is perceived critical mass and reputation. Is the influence of the social environment that comes from coworkers using a technology specific information that affects the individual directly or indirectly to use the same technology (Lou, 2000; Chung, 2014: 97). According Donney in Chung (2014: 97) reputation is a general view of an information technology from users of these technologies. In this study, the academic reputation of assistive technologies used have the possibility of influencing individuals in using information and communication technology.

## Individual Performance

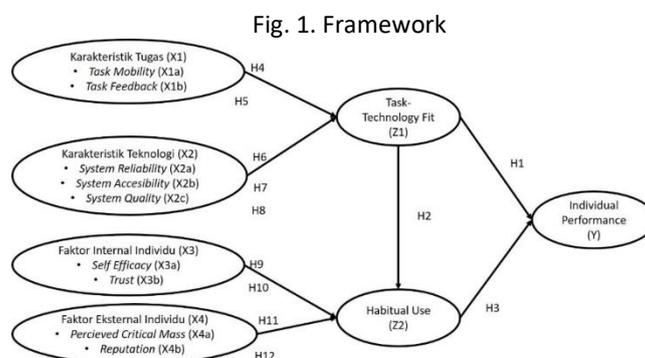
According to Fahmi (2010: 2), the performance is the result obtained by a good organization that is profit-oriented organizations and non-profit oriented generated during a period of time. Armstrong and Baron in Fahmi (2010: 2) says the performance is the result of work that has a strong relationship with the organization's strategic objectives, customer satisfaction, and contribute to the economy. In this study, individuals destination is a lecturer at the Telkom University which has a primary function in Tridharma of universities, namely research, community service and teaching. The main task is to implement the lecturers function in college to the work load of at least commensurate with twelve (12) credits and a maximum of 16 (sixteen) credits each semester according to the academic qualification (Directorate of Higher Education , 2010). This study investigates whether the facility is the technology used to support the main task as a lecturer has an effect on the performance of individual lecturer at Telkom University.

## Theoretical Framework

Goodhue (1995: 230) states that the technology evaluation research is influenced by many factors, the more complex the factors used the diagnostic results of research will describe the individual needs of the detail of the technology. The model that fairly comprehensively to evaluate the performance of technology that has been used is task-technology fit with a focus on the characteristics of the task, technology, and individuals (Goodhue, 1995: 213). Evaluation of increasingly complex technology is able to provide more detailed diagnosis on the technology required by each individual (Goodhue, 1995: 230). So Chung (2014: 93) in his study suggests that, using a factor of user habits or habitual use in the use of technology, has significant influence on creativity and individual performance. It is influenced by external factors, namely reputation of technology and environmental perceptions toward the technology. Chung (2014: 97) also uses internal individual characteristics, task characteristics, technology characteristics and task-technology fit as his research variable. Use of the Organization agility as moderator on Chung (2014: 97) had little moderator effect on the individual performance,



so this study did not use these variables (Chung, 2014: 104). According to the criteria of correlation required by Sugiyono (2015: 257), perceived job performance does not have a strong relationship on the individual performance with 0.544 R square value, so that variable is not used in this study because the results of the Chung's research provide to adjusting construct which will be used in future studies (Chung, 2014: 109). Framework of this study on figure 1



## Research Hypothesis

This study uses a model of the Task-technology fit (TTF), which was considered quite comprehensively evaluating the information technology used by an organization that aims to improve the performance of members of his organization (Goodhue: 1995). The research hypothesis is adopted from Chung's (2014: 98) research which was adjusted by this research context.

### H<sup>1</sup> Task-technology fit within the context of academic support technology devices positively influence on lecturer performance

This hypothesis can be answered by using another construct namely task mobility, task feedback, system (reliability, accessibility and overall quality) on H<sup>4</sup> to H<sup>8</sup> which influencing task-technology fit in the context of academic support technology. Task mobility describe the lecturer doing task when using technology and task feedback is how about the feedback taken by lecturer when using technology in educational environment. While for system construct describe the reliability of academic support technology which used in their environment, its accessibility and overall quality of academic support technology which used in Telkom University

### H<sup>2</sup> Task-technology fit within the context of academic support technology devices positively influence on lecturer habitual use of that technology

This hypothesis will describe how much influence of TTF model on lecturer habitual use of academic support technology which influenced by respectively constructs.

### H<sup>3</sup> Habitual use of academic support technology positively influence on lecturer individual performance

Third, it will be explained how lecturer habits of using academic support technology on lecturer individual performance which influenced by self efficacy and trust for internal individual factor and perceived critical mass with reputation for external factor on H<sup>9</sup> to H<sup>12</sup>. This study has twelve hypothesis to know how technology was working on lecturer individual performance in Telkom University. The hypothesis of this study measured by H<sub>0</sub> and H<sub>1</sub>. If the path coefficient value is positive with significant of t statistic in inner model assessment, H<sub>0</sub> rejected and H<sub>1</sub> accepted. If the path coefficient has negative value or t statistic less than table, H<sub>0</sub> accepted.

## Research Methodology

This study uses a quantitative method. Quantitative method is a scientific method that is concrete, objective, measurable, rational and systematic research in which using data in the form of figures and statistical analysis. The data collection was done by using a questionnaire. The sampling technique used is stratified proportionate random sampling based on the faculty at Telkom University. With a 10% margin of error, this study had a 97 respondents. The analysis technique used is PLS-SEM using Smart PLS application to test the hypothesis of this study. PLS is used because it is considered quite comprehensively to test complex models but has a small sample. PLS also allow this study to test the hypothesis without assuming the data is normally distributed (Chin, Marcolin and Newsted, 2003; Chung, 2014: 101).

In PLS, there are two elements to examine the path model, that is test the measurement model (outer model) and structural models (Hair, 2014: 12). Outer model was used to test the validity and reliability which consists of four steps, namely an indicator reliability provided that if the value of the loading factor  $> 0.50$  then considered valid indicator or item (Hair, 2015; Garson (2016: 60). Internal consistency reliability was used to test the reliability of the construct or variable, provided that if the composite reliability value  $> 0.70$  then constructs said to be reliable (Hair, 2014: 102). Convergent validity is used to determine the extent to which constructs can be correlated with other constructs in a reflective approach to the provision if the value of average variance extracted (AVE)  $> 0.50$  then constructs said to be good and if  $AVE \leq 0.50$  then the construct not so good (Hair, 2014: 102). The fourth stage is the discriminant validity with the provisions of the outer indicator loadings on the construct must be greater than all the cross loadings with other constructs or the square root of AVE should be greater than the AVE value of that construct then constructs as valid (Hair, 2014: 107). The next element is to test structural models (inner model) used to answer the research hypothesis and measure how well the existing models in this study. Path coefficient value used to determine whether there is influence between the construct and the value of the t statistic used to determine the significance of a construct. Testing how well the model using adjusted R square value and  $Q^2$  to test the relevance predictive analysis. This study has 40 indicator as instrument research which has been adjusted by eliminating invalid indicators. This study found all construct were reliable with composite reliability testing, so the model of this study close enough for future research.

## Research Result

This study has 97 respondent with percentage of 54% or 52 respondents were male and 46% or 45 respondents were women. In this study, the questionnaire was conducted in seven Faculty of the Faculty of Business Economics (FEB) amounted to 13 respondents, Faculty of Informatics (FIF) amounted to 14 respondents, Faculty of Applied Sciences (FIT) amounted to 18 respondents, Faculty of Business Communication (FKB) amounted to 10 respondents, Faculty of Engineering Industry (FRI) a total of 11 respondents, Faculty of Creative Industries (FIK) a total of 11 respondents, and faculty of Electrical Engineering (FTE) amounted to 20 respondents. This study used proportionate stratified random sampling as data collection techniques.

Adjusted R-square value ( $R^2_{adj}$ ) is used to assess how much the accuracy of endogenous latent variables. The table 1. shows the adjusted R-square outputs using Smart PLS 3.0.

Table 1. R Square Value Output of Smart PLS 3.0

Construct	$R^2$	$R^2_{adj}$
Individual Performance	.343	.329
Habitual Use	.395	.362
Task-Technology Fit	.570	.547

Hair (2014: 176) recommends the use of  $R^2$  adjusted as confident of determinant value to avoid refraction. In the construct of individual performance is affected by habitual use constructs and task-technology fit for .329, or 32.9%, while 67.1% are influenced by other constructs beyond this study. The construct of habitual use value which influenced by self efficacy, trust, perceived critical mass, reputation and task-technology fit construct is .362, or 36.2%, while 63.8% are influenced by other constructs beyond this study. Task-technology fit construct



which affected by task mobility, task feedback, system reliability, system accessibility and quality system amounted to .547 or 54.7%, while 45.3% are influenced by other constructs beyond this study.  $R^2$  value in Table 2. is calculated by  $Q^2$  formula. For this research model,  $Q^2$  value or Relevance predictive value is 0,836 or 83.6%, so it can be concluded that the model in this study can explain the construct individual performance, habitual use and task-technology fit data is affected by the constructs in this study for 83.6%.

### Hypothesis Testing Result

To test the hypothesis, the value of t statistic resulting from Smart PLS output compared with the value of t table. In addition, the number of original samples used to determine the effect of latent constructs between the indicator and other construct. Testing criteria with a significance level of 10% is determined as follows: If t statistic > t table, ie, greater than 1.66 then the hypothesis is accepted. If t statistic  $\leq$  t table, ie less than or equal to 1.66 then the hypothesis is rejected. If the path coefficient value is positive, then there is a positive influence between constructs. If the value of path coefficient worth negative, then there is no effect. Table 2 shows an output of smart PLS to answer the hypothesis.

Table 2. Hypothesis Testing

Hypothesis	Relation	Path Coefficient	t statistics	t table (10%)	Information
H1	TTF, IP	.489	4.416	1.66	H <sup>0</sup> rejected
H2	TTF, HUI	.363	2.882	1.66	H <sup>0</sup> rejected
H3	HUI, IP	.151	1.478	1.66	H <sup>0</sup> accepted
H4	TM, TTF	.153	2.593	1.66	H <sup>0</sup> rejected
H5	TF, TTF	-.046	.465	1.66	H <sup>0</sup> accepted
H6	SR, TTF	.542	5.666	1.66	H <sup>0</sup> rejected
H7	SA, TTF	.295	3.688	1.66	H <sup>0</sup> rejected
H8	SQ, TTF	.042	.427	1.66	H <sup>0</sup> accepted
H9	SE, HUI	.113	.878	1.66	H <sup>0</sup> accepted
H10	T, HUI	.044	.368	1.66	H <sup>0</sup> accepted
H11	PCM, HUI	.161	1.401	1.66	H <sup>0</sup> accepted
H12	R, HUI	.225	2.511	1.66	H <sup>0</sup> rejected

### Discussion & Result

The result showed that H1: There is a positive and significant influence on Task-technology fit to the performance of lecturer at Telkom University, the path coefficient value of 0.489 and t value is significant at 4.416. The presence of the technologies at the University is able to facilitate the work of academics at Telkom University. The respondents have felt the benefits of the technology that suits its needs as a lecturer. According Marniati (2015) technology is a priority in order to improve the quality of education. With the technology, expected to academia in general and in particular the teacher force capable of improving the quality of education (Widhi, 2016).

The technology based on teaching needs is an important factor for the application of technology in education (Rachbini, 2015). In H2: There is a positive and significant influence between task-technology fit within the context of the Academic Support technology to habitual use of Telkom University Lecturer in the path coefficient value of 0.363 and t value is significant at 2,882. The availability of appropriate technology, respondents can do its job properly. This is in line with Chung's (2014: 105) research states that the technology can help an organization through good habits that carried workers to improve productivity of the organization.

H3 shows habitual use has not significant positive effect on lecturer performance at Telkom University with path coefficient value of 0.151 and t statistic is not significant at 1.478. Respondents from seven different faculties have different habits in their daily activities of teaching, research and community service as a lecturer. According to Chung (2014: 105) says the technology for enterprise organizations have significant effects for the



productivity of the employees. This finding shows there is a difference between the application of technology in education with the organization of the company.

H4 explained that the path coefficient of 0.153 and t value is significant at 2,593. These results prove that there is a positive and significant impact on task mobility with task-technology fit within the context of the Academic support technology. Technological developments give effect to the mobility of respondents task as a lecturer, with an appropriate technology will simplify the task of lecturers. According to Voigt et al. (2012) in Chung (2014: 105) whose said that the appropriate technology is able to provide the ease of communication and collaboration in working on a job. H5 showed no effect on the task feedback on task-technology fit with path coefficient value of -0.046 and t value is not significant at 0.465. we can see that respondent did not get good feedback for his work during a lecturer at Telkom University. This is consistent with the statement from interview session with Sandi (Information System Staff of Telkom University, January 12, 2017) that the lack of feedback given by stakeholders such as students, faculty and staff have an impact on an inaccurate assessment of performance. But not in line with Ching's (2014: 104) research who found that the task feedback on the organization of the company have a positive influence on employee performance. H6 explained there is a significant and positive effect on the system reliability to the task-technology fit with path coefficient value of 0.542 and t value significant at 5.666. Academic support technology devices provided said to be reliable and facilitate lecturer in their job. This is in line with the statement of Eko (2010) that a reliable technology will have a positive influence on the productivity of individuals and Chung (2014: 104) in his research said reliability technology make a company's employees working easier. H7 describes the system accessibility positive and significant effect on the task-technology fit with path coefficient value of 0.295 and t value is significant at 3.688. The availability of academic support technology that are reliable and easily accessible have been perceived by the respondents that have a significant influence on the resulting performance. This is in line with the results of Chung's (2014: 104) research who states that accessible technology can help employees do the work. H8 revealed that there is positive but not significant effect on the quality system to -task-fit technology in the context of ICT devices supporting academic at the University of Telkom with path coefficient value of 0.042 and t value is not significant at 0.427. This proves that good quality of an academic information system has not significant effect on the suitability of existing tasks. H8 is not in line with research Chung (2014: 104) who say the quality of a significant effect on the suitability of the technology as well as the task of impact on a good performance.

H9 explained that self-efficacy has a positive effect but not significant to the habitual use by the path coefficient value of 0.113 and t value is not significant at 0.878. The ability of respondents in using technology academic support positive effect on basic skills in using the technology (Chung, 2014: 96), but not significant because it is influenced by other factors. H10 explained there is positive but not significant in the trust of the habitual use by the path coefficient value of 0.044 and t value is not significant at 0.368. This shows the confidence of respondents in using technology academic support not significant effect on the habit of using technology that has not kept pace with McKnight (2002) in the Chung (2014: 97) that trusts have a significant effect on the habitual use of technology users. H11 explained there is positive and not significant at perceived critical mass against the habitual use by the path coefficient value of 0.161 and t value is not significant at 1.401. This shows the respondents will use an academic support technology devices because the work environment is also using that technology, but the effect is not significant. This is in line with research of Lou (2000) in Chung (2014: 97) states that a co-worker is able to influence someone in the use of certain information technology although in this study is said to be insignificant influence. H12 explained there is a significant and positive effect on the reputation of academic support technology against habitual use by the path coefficient value of 0.225 and t value is significant at 2.511. This proves that the respondent uses a particular academic support technology significantly influenced by the reputation of the technology in the work environment. This is in line with research of Chung (2014: 105) who states that employees will use a certain technology because of the perception of his or her co-workers for these technologies. Researcher hope for the future study must be able to adjust the variable for next study in accordance to their research object and goals. This study has six hypothesis which accepted and six other has rejected. So, the future research can use that result to adjust their research.

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## The Relationship of Good Public Governance and Easy of Doing Business Performance: An Exploratory Study

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### Abstract

This study aims to investigate the relationship of good public governance and easy of doing business performance. Motivation of the study was driven by slowing down global economy and competition among countries around the world to attract Foreign Direct Investment (FDI). Foreign investors will consider investing their capital in certain country if in that country adopting easy of doing business practice. The study was intended to reveal, whether the country that apply good practice of public governance will also lead good practice in terms of easy of doing business for foreign investor.

The study adopted exploratory research design which are public governance and easy of doing business performance treated as two independent variables. Public governance variable was represented by attributes namely public governance, effectiveness government, regulatory quality, control of corruption, rule of law and political stability. World Governance Index (WGI) was adopted to measure Public Governance and Distance to Frontier (DtF) value is representing measurement of easy of doing business performance. The study applied bivariate correlation analysis and involved 188 countries member of World Bank

The results show that all public governance attributes are positively and significantly associated with easy of doing business performance. Pearson correlation coefficient indicates that all attributes of public governance have strong correlation (Pearson correlation  $(r) > 0.6$ ), except for political stability attribute (Pearson correlation  $(r) = 0.584$ ). The result implies that practice of good public governance in governmental institution have potential impact on performance of the government in terms of streamlining bureaucracy of doing business in that country.

*Keywords:* Public Governance; Easy of doing buiseness; Foreign Direct Investment; World Governance Index; Distance to Frontier

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### 1. Introduction

During the last decade, good governance has become a topic of great interest for both scholars and public policy organizations, especially starting from the premise that good governance influences economic prosperity (Knack and Keefer, 1995, Ngobo and Fouda, 2012, Mauro, 1995). Curiosity of researchers in finding effect of good governance on various aspects is continuously spreading. In additional, empirical evidence of positive impact of good governance on public sector is still inconclusive. Therefore, research on good governance in public sector is challenging to be conducted. Constructing good governance is never ending process and the nation build with good governance principles is believed can lead the state toward economic prosperity

Fundamental requirement in achieving economic prosperity is easy of doing business. The country with simple procedure in doing business will attract investor both local and international in term of spending capital in business sector. With more business sectors opened, it will increase job market demand, and at the end affecting citizen's prosperity. In this case, role of government in streamlining procedure of doing business is fundamental. Easiness of doing business must represent an issue of major concern for government and the public sector, and one of the major interests of government should be more accessible business regulations and regulatory

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processes, given the relevance of business environment outputs for the public sector (Bota-Avram, 2014). Effective governments should properly answer to citizen needs, promote politically neutral managers, and develop a framework of pro-business policies (Andrews, 2008).

Public governance refers to the formal and informal arrangements that determine how public decisions are made and how public actions are carried out (OECD, 2011). Public governance is important for investors and their businesses. It helps build trust and provides rules and stability needed for planning investment in the medium and long term. It facilitates a smooth and productive interaction between the state and the general public, no longer based on rigid traditional “control and command” approaches, but on flexibility, guidance, communication and persuasion (OECD, 2011).

Public Governance by many scholars is closely associated with easiness of doing business (Bota Avram, 2014, Ngobo and Fouda 2012, Çule and Fulton (2013). The concept of public good governance became rather significant in the early 1990s when international aid agencies realized that poor governance across many developing countries was a major obstacle to their economic development (Ngobo and Fouda (2012). Good governance leads to a transparent environment for conducting public affairs, being a promoter of free market policies, justice, and the rule of law (Ngobo and Fouda, 2012). Therefore, the effects of good governance are no doubt felt on the business and economic environment. Good governance implies fair regulatory frameworks, accountability, and transparent policy making, all these factors having direct influences on economic activity (Bota-Avram, 2014).

There is no doubt that the public and private sectors are depending on each other to activate efficiently and to achieve their objectives, therefore the public sector should facilitate, through an appropriate regulatory framework and control of corruption, the effectiveness of the business sector (Bota-Avram, 2014). According to Çule and Fulton (2013), the influence of governance over the business environment is given by the supposition that an economy with a moderate level of bureaucracy, a high concern for legislative compliance, and good instruments for controlling corruption is expected to create and maintain a business environment that stimulates economic performance.

There is an emerging consensus amongst economists, political scientists and international business scholars that FDI inflows to developing nations are conditioned by the host country’s governing institutions, and that countries possessing strong institutions (i.e. competent regulatory agencies, efficient legislatures, transparent judiciaries, etc. (Alemu, 2013). Many governance studies have truly proved the positive relationship between the quality of governance systems and more effective allocations of economic resources, which finally influence the stimulation of economic growth and the competitiveness of business environment (Price et al, 2011. It implies that institutions are importance for economic growth (Keefer and Knack (1997). Research findings revealed that the government institutions played important role for the economic success and growth in East Asia (Rodrik, 1997). Good governance increases FDI inflows (Globerman et al, 2006) and the level of FDI inflows is significantly positively influenced by all governance indicators ( Bissoon, 2012)

Good governance institutions that guarantee economic freedom plausibly have the capacity to provide the growth-enhancing kind of incentives for several reasons. They promote a high return on productive efforts through low taxation, an independent legal system, and the protection of private property, they foster a dynamic, experimentally organized economy in which a large amount of business trial and error can take place (Johansson 2001). Globerman and Shapiro (2003) argue that the governance infrastructure of a country would help to define its investment environment, and thus creates favourable conditions for economic growth. Recent empirical evidence tends to confirm the hypothesis that cross-country differences in growth and productivity are related to differences in governance infrastructure (Kaufmann, Kraay, & ZoidoLobaton, 1999b)

World Bank defines attributes of public governance into five dimensions, namely, government effectiveness, control of corruption, rule of law, accountability and regulatory quality. Most studies conclude that public governance had positive impact on Foreign Direct Investment (FDI) and easiness of doing business. However, detail information about attributes of public governance affecting FDI and easiness of doing business is still not



revealed clearly. Therefore, conducting study about the relationship of public of governance with easiness of doing business is relevance. Scientifically, study of the relationship of public governance attributes on easiness doing business will enrich previous research findings in the same area of study. Practically, the findings is expected can contributes the insight for public policy makers in terms of constructing management of government with good governance principles.

## **2. Literature and Hypothesis Development**

### **2.1 Public Accountability and Easy of Doing Business**

Public accountability which measures capacity of government to ensure proper responsiveness to society and includes different aspects of the political process, civil liberties and political rights, measuring the extent to which citizens are able to take part in the selection of their governments (Bota-Avram, 2014). Public accountability captures the extent to which citizens of a country are able to participate in the selection of governments (Alemu, 2013). Public accountability reflects the involvement of the citizen in running the government through their voice in general election. The government, as representative of the citizen, therefore must be accountable to citizen for every policy taken. The countries with high score index voice and accountability, it indicates that those countries are countries that put a weight the democracy.

Public accountability is responsible for providing a free investment climate from future violations of the foreign investors' rights (Inter-American Development Bank, 2001, Siddharthan, 2009). A study by Stasavage (2002) found a strong relationship between the presence of political 'checks and balances' and the FDI flows. In line with study by Stasavage, research findings by Globerman & Shapiro (2002) and Méon, P.G. and K. Sekkat (2007) are also indicating the same result that public accountability contributes positively in rising FDI inflows. Meanwhile, one of the crucial factor that determine the magnitude of FDI inflows is simplification of investment procedures. Since there is logical relationship between public governance, FDI and investment procedure, therefore, the hypothesis can be formulated as follows:

*Hypothesis 1: Public accountability is positively and significantly associated with easy of doing business performance*

### **2.2 Regulatory Quality and Easy of Doing Business**

Regulatory quality is quality of state to manage the resources and the rules of the game for the general interest (Rhodes, 1997). Regulatory quality is designed to provide estimates over the effects of the policies which are perceived as market-unfriendly, such as price controls or inadequate bank supervisions, or excessive regulation which might affect business development (Bota Avram, 2014). Regulatory quality encourages the entry of foreign investors by eliminating market unfriendly policies such as price controls, government intervention, and restrictions on capital movement (Fazio and Talamo, 2008). A sound regulatory environment for public and for the business sector economic activity, sound institutions, and government authority accountable to citizens are considered to be crucial to successful economic development (Bota Avram, 2014 and Kray and Tawara (2010).

Regulatory quality measures the market-friendly policies such as lifting price controls or inadequate bank supervision as well as other efforts to lessen excessive regulations in areas of foreign trade and business development (Alemu, 2013). Regulatory clarity and certainty are valued by businesses and citizens (OECD, 2011). Regulations which encourage market dynamism, innovation and competitiveness improve economic performance (OECD, 2011). Regulations which are poorly designed or weakly applied can slow business responsiveness, divert resources away from productive investments, hamper entry into markets, reduce job creation and generally discourage entrepreneurship (OECD, 2011). The quality of public services, which is shaped by regulation inside government as well as regulation for private sector providers, significantly influences the investment climate (OECD, 2011). Based on literature mentioned, therefore, the hypothesis can be formulated as follows:



*Hypothesis 2: Regulatory quality is positively and significantly associated with easy of doing business performance*

### **2.3 Rule of Law and Easy of Doing Business**

Rule of law includes some indicators that estimate the extent to which public and citizens have confidence in and abide by the rules of society, including the effectiveness of the judiciary system and the security of property rights (Bota-Avram, 2014). It also measures the extent to which agents have confidence in and abide by the rules of the society, including the effectiveness and predictability of the judiciary, and the enforceability of contracts. Rule of law is very important for the company that are doing business in certain country. Without any rule of law enforcement, they will face any kind of uncertainty or risk regarding their business. Piracy of product is an example of common threats faced by the companies. They need some assurance that their product innovations are protected by rule of law. It is rational to argue that inventions and innovations can be promoted only when they are well protected through protection of intellectual properties (Alemu 2013)

Rule of Law stimulates current decision making that maximizes the long-term value of assets, because future returns will be protected in the presence of the rule of law (Hoff and Stiglitz, 2005). The country with rules of law more favour to business entities will get more priority from venture capital to invest their money. These conditions encourage FDI and presumably private domestic investment as well, by protecting privately held assets from arbitrary direct or indirect appropriation. Good governance must necessarily ensure a framework of good rules that clearly establish and clarify property rights, rules that are meant to enhance the predictability of economic interactions between various contractual partners (Bota Avram, 2014). Nothing contributes more to investor confidence about regulation than predictability and the recognition that rules achieve their objectives (OECD, 2011). Study by Johnson et al (1998) shows that the unofficial economy is positively influenced by the existence of more corruption and when the rule of law is weaker. Based on the literature mentioned above, therefore, the hypothesis can be formulated follows:

*Hypothesis 3: Rule of law is positively and significantly associated with easy of doing business performance*

### **2.4 Effectiveness Government and Easy of Doing Business**

Government effectiveness evaluates the perception over the inputs necessary for effective governance, such as the quality of public service provision, the competence of civil servants, the level of bureaucracy, the independence of the civil services from political influences and the credibility of government (Bota Avram, 2014). Government Effectiveness facilitates foreign investors' activity through the reduction of heavy bureaucracy, procedures and the overall time it takes for any agent to complete them (Inter-American Development Bank, 2001; OECD, 2002). The effectiveness of government activity is meant to serve the interest of the general population and the cooperation between public and private sectors is crucial for ensuring the good of the society (Bota Avram, 2014). Effective governance matters and, even more, it is a determinant factor for the effectiveness of the business environment.

Role of government in solving societal issues bases for ensuring a normative function of social and economic institutions (Kooiman, 1999). It refers the quality of public service provision, the quality of bureaucracy, and the credibility of the government's commitment to policies (Alemu 2013) In other words, government effectiveness captures the capacity of the state to implement sound policies (Rammal and Zurbruegg, 2006). Innovative mechanisms to monitor and evaluate public management are commonly used to improve transparency and build credibility, important determinants of investment (OECD, 2011). Sedik (2012) who studies on MENA countries found that government effectiveness has a positive and significant impact on FDI inflows. Therefore, the hypothesis can be formulated as follows:

*Hypothesis 4: Effectiveness government is positively and significant associated with easy of doing business performance*



## 2.5 Political Stability and Easy of Doing Business

Political stability is essential if markets are to work effectively in guiding resource allocation and fostering confidence of economic agents in the economy specially to attract multinationals in investing their capital in the host country (Alemu, 2013). Political stability and absence of violence refers to the possibility of violent changes in government's structure and combines several indicators which express the potential likelihood that the government in power could be overthrown through unconstitutional or violent changes (Bota Avram, 2014). The influence of political factors in the process of governance should not be ignored. Domestic political situation will determine the orientation and priority of the country in terms of management of the government.

Political stability is essential if markets are to work effectively in guiding resource allocation and fostering confidence of economic agents in the economy specially to attract multinationals in investing their capital in the host country (Alemu, 2013). Political Stability and absence of violence are two factors that ensure the continuity of MNCs' activities and FDI projects in the host countries (Inter-American Development Bank, 2001). FDI is a long-term investment, and any kind of threat will impede the future return flow and this is not desired by foreign investors (Fazio and Talamo, 2008). Moreover, most multinational companies avoid FDI in cases of high political risk and move towards other forms of international business (Meier, 2006). Study in Latin America countries by Amal et al (2010) shows that political stability has a positive and significant effect on inward FDI. Based on the literature mentioned above, therefore, the hypothesis can be proposed as follows:

*Hypothesis 5: Political stability is positively and significantly associated with easy of doing business performance*

## 2.6 Control of Corruption and Easy of Doing Business

Corruption has a very strong negative effect on private sector organization that are doing business ( Alemu, 2013). According to Vittal (2001), if China manages to reduce red tape and corruption and enhance better rule of law and property protection, it can even double its FDI. Corruption distorts competition and adds uncertainty to business operations, both of which can reduce levels of foreign and domestic investment and hence economic development (OECD, 2011). Corruption can be considered a form of taxation; it does not only reduce FDI inflows, but also contributes to changing the types of inward FDI (Dunning, 1993). Moreover, some bureaucratic regulations come as a result of widespread corruption and are not intended to correct market distortions or even protect investors (Alam, Mian and Smith, 2006).

Pervasive corruption leads to inefficient long term plans due to uncertainty, and causes an ambiguity about return predictability (Sabri, 2008). A higher fiscal burden and a high level of corruption are strongly associated with larger unofficial economies (Friedman *et al.* (2000). Control of corruption can attract more foreign investors by reducing heavy bureaucracy and providing fast and efficient government services (Méon and Sekkat, 2005; Swaleheen and Stansel, 2007). The effects of corruption are significant on economic growth and investment (Mauro, 1995). It effects on public investment cannot be ignored while they are quite significant (Tanzi and Davoodi,1997). Corruption influences negatively the attractiveness for international investors (Wei, 1997). Based on the literature mentioned above, therefore, the hypothesis can be formulated as follows:

*Hypothesis 6: Control of corruption is positively and significantly associated with easy of doing business performance*

## 3. Methodology

### 3.1 Population and Sample

Population of this research is countries registered officially as member of world Bank. Until today (2017), total number of members in World Bank is 214 countries (Population). Meanwhile, the sample was involved in this research is 188 countries of world Bank members. Purposive sampling method was applied in this research. It refers to the purpose of availability the data in certain period of time of research investigation. The sample



represents five continents namely Europe, America, Asia, Australia and Africa

### 3.2 Variable, Measurement and Data

This research involved two independent variables namely public governance and easy of doing business performance. Those variables are treated as two independent variables due to the research's design is exploratory. Public governance attributes are represented by independent variable public accountability, regulatory quality, rule of law, effectiveness of government, political stability and control of corruption. Attributes of public governance was measured using Corporate Governance Index (CGI) issued by World Bank. Meanwhile, variable easy of doing business performance was measured using Distance to Frontier (DtF) score released by World Bank. The data was used in this research is secondary data, which is official publication of Worldwide Governance Index (WGI) and Distance to Frontier (DtF) score from World Bank organization. The data is an open publication and it was downloaded directly from official websites of sources data.

### 3.3 Analysis

Descriptive statistics analysis and bivariate correlation analysis were applied in this research. Descriptive statistics analysis was intended to describe the basic features of the data used in the study. They provide simple summaries about the sample and the measures. Meanwhile, bivariate correlation analysis in this study was used to test the degree of correlation between two independent variables. Furthermore, bivariate correlation analysis was used to justify the acceptance of proposed hypothesis. Pearson Correlation method was chosen in this research due to the data is categorized as interval scale.

## 4. Results

### 4.1 Descriptive Statistic

World Bank Releases Worldwide Governance Indicator in interval value from minimum value of -2.5 (Weak public governance performance) to +2.5 (strong public governance performance). Measurement of public governance uses six aggregate indicators. They are based on 31 underlying data sources reporting the perceptions of governance of a large number of survey respondents and expert assessments worldwide. As shown in Table 1, public governance attributes of 180 sample's countries show that the score is at moderate value (Average value of Mean equal to -0.0534). Standard deviation is also indicating that the sample's countries have homogeneity characteristics in terms of performance of public governance. It is supported by the statistic descriptive that the average value of standard deviation is relatively small (0.96688). Even though there were always outliers with extreme performance (weak or strong), however in general, it can be concluded that the samples are relatively have the same characteristic in terms of its public governance performance.

Table 1. Descriptive statistic of public governance

No	Variables	N	Minimum	Maximum	Mean	Std. Deviation
1	Public Accountability	188	-2.04	1.70	-0.0210	0.96283
2	Effectiveness Government	188	-2.17	2.25	-0.0513	0.97849
3	Regulatory Quality	188	-2.24	2.26	-0.0295	0.95686
4	Control of Corruption	188	-1.83	2.29	-0.0674	0.97960
5	Rule of Law	188	-1.99	2.07	-0.0535	0.96065
6	Political Stability	188	-2.94	1.49	-0.0976	0.96286
<b>AVERAGE</b>					<b>-0.0534</b>	<b>0.96688</b>

World Bank developed easy of doing business index using Distance to Frontier (Dtf) interval scale from 0 (worst) to 100 (the best). Table 2 indicates that Mean value of easy of doing business of 180 countries is 60.2879. With consideration 0 is the worst and 100 is the best, therefore, it can be concluded that performance of easy of doing business is on moderate level. Information generated from Table 2 shows that standard deviation value is on



high level mode (13.07213). It indicates that the variation value of easy of doing business among samples is relatively large. Large standard deviation explains that the samples have heterogeneity in terms of easy of doing business performance. It implies that the countries included in the research have characteristic both in extremely good and extremely bad in terms of their easy of doing business performance.

Table 2. Descriptive statistic of easiness of doing business

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Easy of doing business	188	26.40	86.70	60.2879	13.07213

### Correlation Analysis

Correlation is another way of assessing the relationship between variables. To be more precise, it measures the extent of correspondence between the ordering of two random variables. Correlation denotes the interdependency among the variables for correlating two phenomena. This research was developed to identify the relationships between two independent variables. Since the purpose of the research is investigating the relationship between two independent variables, bivariate correlation statistical analysis is believed as the right one. The results of the correlation are intended to analysis the degree of the relationship between two independence variables. Comprehensive information about the results of the correlation are presented in table 3 as follows:

Table 3. Correlation Matrix

		Pearson Correlation Matrix						
		Public Accountability	Government Effectiveness	Regulatory Quality	Control Corruption	Rule of Law	Political Stability	Easiness Doing Business
Public Accountability		1						
Government Effectiveness		0.681*	1					
Regulatory Quality		0.701*	0.935*	1				
Control Corruption		0.754*	0.907*	0.868*	1			
Rule of Law		0.763*	0.944*	0.929*	0.953*	1		
Political Stability		0.709*	0.676*	0.633*	0.747*	0.736*	1	
Easiness Doing Business		0.606*	0.865*	0.881*	0.744*	0.816*	0.584*	1

\*Correlation is significant at the 0.01 level (1-tailed).

In this research, design of the correlation analysis is one way in term of the direction of the correlation, which is a positive correlation. The argumentation of using one-way correlation analysis test is due to strong literature supporting the direction of the relationship between two independent variables. Pearson Correlation Matrix as presented in table 3 indicates that among attributes of public governance (public accountability, regulatory quality, rule of law, effectiveness government, political stability and control of corruption) have strong correlation ( $r > 0.6$ ). It implies that attributes of public governance constitute as integral indicator measurement and show linearity of correlation. Integrality and linearity have implication that performance of one attribute of public government enable to predict performance of other attributes of public governance. If one attribute of public governance is getting high score, it will also lead to high score the rest of public governance attributes.

### Hypothesis Testing

In this research, there were six hypotheses proposed and the summary of the hypothesis is presented in Table

4. The hypotheses predicted that public governance has positive and significant association with easy of doing business performance. Specifically, the hypothesis proposes that attributes of public governance namely public accountability, government effectiveness, regulatory quality, control of corruption, rule of law and political stability are positively and significantly associated with easy of doing business performance. Since the research is exploratory, the hypotheses were not intended to reveal impact or influence of good public governance practice on easy of doing business performance. The hypotheses were designed to get understanding about the relationship between public governance practice and the performance of the easy of doing business. Summary of the hypothesis testing is presented in Table 4 as follows:

Table 4. Summary of Hypothesis Testing

Hypothesis	Pearson Correlation Coefficient	Conclusion of Proposed Hypothesis
H1: Public accountability is positively and significantly associated with easy of doing business performance	0.606*	Supported
H2: Effectiveness government is positively and significantly associated with easy of doing business performance	0.865*	Supported
H3: Regulatory quality is positively and significantly associated with easy of doing business performance	0.881*	Supported
H4: Control of corruption is positively and significantly associated easy of doing business performance	0.744*	Supported
H5: Rule of law is positively and significantly associated with easy of doing business performance	0.816*	Supported
H6: Political stability is positively and significantly associated easy of doing business performance	0.584*	Supported

\*. Correlation is significant at the 0.01 level (1-tailed).

Based on information summarized in table 4, it concludes that all proposed hypotheses are supported. All public governance attributes show positive and significant correlation with easy of doing business performance. However, there is a note for correlation between political stability and easy of doing business performance. Even though the correlation is positively and significantly, however the degree of correlation is relatively moderate ( $r = 0.584$ ). It means that political stability as attribute of public governance has no convincing power to predict easy of doing business performance. However, in general we can still rely on public governance attributes in overall to predict easy of doing business performance. The argumentation is supported by statistics results that the rest of public governance attributes show strong correlation with easy of doing business performance ( $r > 0.6$ ).

Based on correlation analysis as depicted in table 4, it implies that the country that has high score of public governance, therefore, easy of doing business performance of that country will be also high. It means that practice of good public governance among governmental agencies, it will have impact on easy of doing business performance for private sector. Efforts of the government in terms of implementing principles of good public governance have a contribution on how private sector dealing with bureaucracy to start the business. Therefore, the government has significant roles in creating good atmosphere that facilitates private sector organization doing their business.

## Conclusion

The research concludes that public governance namely public accountability, effectiveness government, regulatory quality, control of corruption, rule of law and political stability are positively and significantly associated with easy of doing business performance. In general, the degree of correlation of public governance and easy of doing business performance is strong, even though there is one attribute (political stability) of public governance indicates moderate correlation. Referring to the result of the research, it implies that performance of the public governance will determine easy of doing business performance. Government plays important role in terms of conditioning infrastructure of business environment that is friendly to private sector organization. It supports the theoretical framework that application of good government principles in governmental institutions



will affect atmosphere of business environment, in this case is easy of doing business among private organizations.

In order to achieve conducive environment for starting up business among private sector organization, the state must have a commitment to combat corruption practice. By eradicating corruption behaviour among state's officials, possibilities for in appropriate business practice that destruct and endanger the business environment can be minimized. Regulatory quality determines the achievement of the goal of regulation itself. By having law and regulations that truly consider efforts to streamline bureaucracy, complicated procedures to fulfil government's requirement can be avoided. Domestic political stability enables the state to continue the national development program without any interferer. The state will have an attention to develop the nation related good business practice if the domestic political condition is stable. Effectiveness government enables developing infrastructure of good business practice among private sector. Lastly, public accountability forces private sector behave positively in terms of responsibility toward stakeholder.

For further research, extension of time period of investigations is suggested. Longitudinal data panel with more countries involved is recommended. Furthermore, micro level analysis of best practice of easy of doing business is potential object of the research to be conducted. By conducting more details investigation of best practice easy of doing business, we will get more specific information about the role of public governance. Since this research is explorative study, which is considering the association among independent variables, in the future model of analysis using multiple regression analysis is recommended. Using multiple regression analysis, the accumulative impact of public governance attributes toward easy of doing business performance will be discovered. Therefore, analysis impact of good public governance practice toward easy of doing business performance using multiple regression is relevance to be investigated.

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## Analysis of Alternative Investment to Utilize The Vacant Land of CV XXX

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### Abstract

The research described in this paper was conducted to help CV XXX choosing the best expansion alternative for its current business. CV XXX is a distribution company based in Cimahi, with area of distribution covering Cimahi and Bandung Barat Districts. To compete better in current market situation, CV XXX intended to expand its business while at the same time utilize CV XXX owner's unused land there. CV XXX then needed to consider the following two options for the expansion: (1) to open another distribution company or (2) to build a futsal arena for rent; by calculating those options' valuation using DCF analysis (option that provides a higher value to CV XXX will be chosen).

The result then showed that the option to open another distribution company is more favorable since it produces higher expected value than the futsal arena option. Distribution company option value amounted to Rp 9,093,296,121, while on the other hand futsal arena option produces only a value amounted to Rp 907,923,134.

*Keywords: Bandung District; Distribution Company; Valuation; Investment; Expansion*

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### Introduction

As one of the most anticipated developing countries in Asia, Indonesia offers a promising growth and further developments in its economic condition, shown by a growing GDP trend. In line with Indonesian GDP's growth, GDP annual growth in Bandung District is also showing a positive trend, with a support of many industry sectors that were dominated by factories, wholesaler-retailers, and agricultures. CV XXX as one of distribution company in Bandung, also considers this positive growing trend as a perfect timing to expand its business.

In its daily business, CV XXX faces a growing and tighter competition between distributor and other outlets. In addition, numerous growth of online marketplaces also brings another threat to this industry. Considering those situations, business expansion becomes a crucial thing for CV XXX to maintain its existence.

Some time ago, CV XXX's owner brought a new 1,800 m<sup>2</sup> landsite which located in Kutawaringin Area, Bandung and until now it has not been utilized. Thus, there was an opportunity for CV XXX to use that unutilized area. Taking into account the location, surrounding market and accesibility to that landsite, CV XXX then considered several options: (1) to open another distribution company which will be owned by the same team as current CV XXX's owners (2) to build a sport arena for rent (3) to open a food court or (4) to utilize the area as a supporting / transit warehouse. The owner chose two options to create another consumer goods distribution company which cover Bandung District area; or build a sport arena; since those two options offered a higher ROI value, compared with other options.

### Research Question

By examining the external and internal environment of CV XXX, which one would be the best investment option using valuation method?

## **Business Issue Exploration**

To understand further whether the decision of CV XXX's owners to expand its business is needed or not, a thorough internal and external analysis should be conducted.

### *Conceptual Framework*

To help CV XXX's owners understand their business situation better and later choose the best option to use the described landsite, some researchs and observations were done. Started from assessing the current condition by examine the external environment and internal environment, analyzing the SWOT of CV XXX, searching firm's problem, assessing available options, understanding business model of those options, and conducting valuation analysis of those options. Thus we can jump to conclusion which one is the most valuable option is.

## **2.2. External Analysis**

### **A. General Environment Analysis**

In this paper, PESTEL model would be used to conduct general environment analysis. PESTEL framework can help identifying how future trends in Politics (highlights the role of governments); Economic (refers to macro-economic factors); Social (includes changing cultures and demographics); Technological (influences innovations); Environmental (focuses 'green' issues); and Legal (embraces legislative constraints or changes) might impinge on organizations.

### **B. Industry Analysis**

Porter's Five Forces framework is particularly useful in understanding the attractiveness of particular industries or sectors and potential threats from outside the present set of competitors. Originally developed as a way of assessing the attractiveness (profit potential) of different industries, this framework can provide a useful starting point for strategic analysis even where profit criteria may not apply. The five forces are: the threat of entry into an industry; the threat of substitutes to the industry's products or services; the power of buyers, the power of suppliers, and the extent of rivalry between competitors in the industry.

## **2.3. Internal Analysis**

Internal analysis is conducted based on CV XXX's organization structure, resources, capabilities, core competencies, competitive advantages and risks analysis.

## **2.4. SWOT and TOWS Analysis**

SWOT analysis is used to identify company's strengths and weaknesses and its environmental threats and opportunities. The key objective of SWOT analysis is to determine how to position the firm so it can take advantage of opportunities while simultaneously avoiding or minimizing environmental threats. From the SWOT analysis; author can make TOWS analysis, that lead to root cause of this research which is the need of CV XXX to expand its business in order to compete with the current business situation and make sure CV XXX's business sustainability.

The output of these paper will then showed the best business expansion option, based on the overall value given to CV XXX. Only one expansion option will be chosen due to equity and land size limitation.

## **Methodology**

As discussed before, CV XXX needed to choose an option that give highest value from two available options, which are: (1) open another distribution company (2) build a futsal arena.

In order to choose the most valuable option between those two, a valuation using discounted cash flow theory is conducted. Valuation method is chosen instead of capital budgeting method since valuation method considers the investment's sustainability, even after the time period used on financial analysis is over. To do valuation, free cash flow, discount rate, terminal value and terminal growth should be estimated.



### A. Valuation

According to Gitman (2015:291), valuation is the process that links risk and return to determine the worth of an asset. It is relatively simple process that can be applied to expected streams of benefits from bonds, stocks, income properties, oil wells, and so on. To determine an asset's worth at a given point of time, the time-value-of-money techniques (such as discounted cash flow techniques) can be used.

### B. Discounted cash flow

Discounted Cash Flow is a tool relates the value of an asset to the present value (PV) of expected future cash flows on the assets, using discount rate. (Damodaran, A., 2012)

### C. Discount rate (WACC)

WACC,  $r_a$ , is the expected average future cost of capital over the long run; found by weighting the cost of each specific type of capital by its proportion in the firm's capital structure.

### D. Terminal Value

One of approach in valuation is going concern approach, assuming that the firm continuously delivers cash flows in perpetuity. Since cash flow can not be estimated forever, closure in discounted cash flows valuation is generally imposed by stopping the estimation of cash flows sometime in the future and then computing a terminal value that reflects the value of the firm at that point.

In this paper, the cash flow beyond the terminal year is assumed to grow at a constant rate forever.

Since the company is purely domestic company, the growth rate in the domestic economy will be the limiting value, thus GDP growth can be considered as the stable growth rate (5%).

## Data Processing and Modelling

Below are some assumptions that will be used to help estimate the free cash flow. Three cash flow scenarios were analyzed in this paper to help CV XXX determined its best option:

Table 1. Variable of Distribution Company Valuation

Variabel	Increase in yearly Sales Price	Increase in yearly Sales Quantity	Increase in Operational Expense	Beta
Optimistic	10%	35%	15%	1.25
Most likely	5%	30%	20%	1.5
Pesimistic	0%	25%	25%	1.75

The variables on most likely scenario were taken from CV XXX's historical data. Eventhough, area coverage are different between Cimahi & Bandung Barat District and Bandung District, but author believes that the sales growth will not different significantly, supported by increment of GDP and size of population in new area. Assumptions in optimistic and pessimistic scenarios are based on researches and interviews conducted to CV XXX's owners. Sales Price and Sales Quantity will be used to calculate sales estimation and Beta will be used to calculate WACC.

Table 2. Variable of Futsal Arena Valuation

Variabel	Increase in yearly Sales Price	Additional yearly Occupancy rate	Increase in Operational Expense
Optimistic	15%	1%	2%
Most likely	10%	0%	7%
Pesimistic	5%	-1%	12%

All of those assumptions in Table 2 are based on observations and interviews. Sales Price and Occupancy rate will be used to calculate sales estimation.

To make valuation using discounted cash flow, discount rate must be calculated first, as shown in tables below.

Table 3. Cost of capital calculation for distribution company option in most likely scenario

Parameter	Amount	Description	Reference
Risk Free rate	6.6%	ORI Rate	<a href="http://www.kemenkeu.go.id/ORI#10">http://www.kemenkeu.go.id/ORI#10</a> hal ORI
Risk Premium	8.82%	Equity Risk Premium	Damodaran, Indonesia Equity Risk Premium
Coefficient	1.50	Beta	WICO's stock from <a href="http://www.reuters.com">www.reuters.com</a>
Re (cost of equity)	= risk free + (beta*risk premium) 19.83%		
Rd (cost of debt)	= rate * (1-tax shield)		<a href="http://www.bi.go.id/id/perbankan/suku-bunga-dasar/Default.aspx">http://www.bi.go.id/id/perbankan/suku-bunga-dasar/Default.aspx</a>



after tax 8.15% \*average of 'suku bunga dasar kredit ritel' (omitting some banks that are not applicable)

Cost of Capital	Amount	Weight	Cost
Equity	1,000,000,000	20%	19.83%
Loan	3,891,333,333	80%	8.15%
Total	4,891,333,333	100%	
<b>WACC</b>	= E/V * Re + D/V * Rd * (1-Tc)= 10.54%		

In most likely scenario, author use beta = 1.5 which based on benchmark to a listed company (PT Wicaksana Overseas International (WICO)) plus some points since this new distribution company is riskier and has smaller area coverage. Similar reason as most likely scenario, beta used in pessimistic scenario is assumed to be 1.75. For optimistic scenario, author use beta = 1.25 which is WICO's beta with assumption that in optimistic scenario, this new distribution company is less risky. In addition, to fulfill the total investment amounted to Rp 4.8 billion, the owners of CV XXX will invest one billion as the equity amount.

On the other hand, the cost of capital calculation of futsal arena option is a bit different than distribution company option. Beta used for this most likely, optimistic and pessimistic scenarios calculation is 1.82; taken from average of beta from public listed property companies that rent spaces for sport such as PT Sentul City (BKSL), Agung Podomoro Land (APLN), Modernland Realty (MDLN), Ciputra Development (CTRA), and Intiland Development (DILD), which are similar to futsal arena's business. Meanwhile, the cost of debt and equity amount are equal to the distribution company option.

Table 4. Cost of capital calculation for futsal arena option

Cost of Capital	Amount	Weight	Cost
Equity	1,000,000,000	26%	22.69%
Loan	2,826,900,000	74%	8.15%
Total	3,826,900,000	100%	
<b>WACC</b>	= E/V * Re + D/V * Rd * (1-Tc) = 11.95%		

From those scenarios and discount rate calculation, a projection cash flow in most likely scenario can be calculated as shown in Table 5 below.

Table 5. Projection cash flow of Distribution Company Option in Most Likely Scenario

	2017	2018	2019	2020	2021	2022
Quantity		96,398	124,893	161,811	209,642	271,612
Average Price		323,658	338,321	353,649	369,670	386,418
<b>Sales</b>		31,200,000,000	42,253,971,606	57,224,298,606	77,498,522,068	104,955,780,480
Sales Return		156,000,000	211,269,858	286,121,493	387,492,610	524,778,902
<b>Net Sales</b>		31,044,000,000	42,042,701,748	56,938,177,113	77,111,029,457	104,431,001,578
COGS		29,172,000,000	39,507,463,452	53,504,719,197	72,461,118,133	98,133,654,749
<b>Gross Profit</b>		<b>1,872,000,000</b>	<b>2,535,238,296</b>	<b>3,433,457,916</b>	<b>4,649,911,324</b>	<b>6,297,346,829</b>
Land rent fee		40,000,000	40,000,000	40,000,000	40,000,000	40,000,000
Operational expense		1,425,380,000	1,715,617,485	2,064,953,454	2,485,421,608	2,991,505,961
Bank guarantee fee		17,500,000	22,672,972	29,375,068	38,058,291	49,308,263
Depreciation		256,375,000	275,125,000	293,625,000	293,625,000	318,625,000
<b>EBIT</b>		<b>126,495,000</b>	<b>481,822,839</b>	<b>1,005,504,395</b>	<b>1,780,306,425</b>	<b>2,897,907,605</b>
Tax, 25%		31,623,750	120,455,710	251,376,098	445,076,606	724,476,901
<b>NAT</b>		<b>94,871,250</b>	<b>361,367,129</b>	<b>754,128,296</b>	<b>1,335,229,818</b>	<b>2,173,430,703</b>
<b>Net Working Capital</b>		<b>191,086,375</b>	<b>238,612,176</b>	<b>337,999,503</b>	<b>360,767,808</b>	<b>635,378,107</b>
<b>CAPEX</b>	<b>4,891,333,333</b>	<b>100,000,000</b>	<b>125,000,000</b>	<b>100,000,000</b>	<b>163,000,000</b>	<b>-</b>
<b>Free Cash Flow</b>	<b>(-4,891,333,333)</b>	<b>66,409,874</b>	<b>272,879,952</b>	<b>609,753,793</b>	<b>1,117,587,011</b>	<b>1,856,677,596</b>
<b>Terminal Value</b>						<b>14,735,536,474</b>
<b>TOTAL FREE CASH FLOW</b>	<b>(-4,891,333,333)</b>	<b>66,409,874</b>	<b>272,879,952</b>	<b>609,753,793</b>	<b>1,117,587,011</b>	<b>16,592,214,070</b>

The average sales price and sales quantity number in 2018 were taken from projection given by XYZ Principal (brand owner). Then the projection number in year 2019 until 2022 is based on assumption in Table 1. The calculation of optimistic and pessimistic scenarios also uses the same approach.

On the other hand, the projection cash flow of futsal arena option in most likely scenario are describe in Table 6.

Table 6. Projection cash flow of Futsal Arena Option in Most Likely Scenario

	2017	2018	2019	2020	2021	2022
<i>weekdays</i>						
morning		25,920,000	28,512,000	31,363,200	34,499,520	37,949,472
afternoon		192,000,000	211,200,000	232,320,000	255,552,000	281,107,200
evening		345,600,000	380,160,000	418,176,000	459,993,600	505,992,960
<i>weekend</i>						
morning		103,680,000	114,048,000	125,452,800	137,998,080	151,797,888
afternoon		92,160,000	101,376,000	111,513,600	122,664,960	134,931,456
evening		161,280,000	177,408,000	195,148,800	214,663,680	236,130,048
<b>Total Sales</b>		<b>920,640,000</b>	<b>1,012,704,000</b>	<b>1,113,974,400</b>	<b>1,225,371,840</b>	<b>1,347,909,024</b>
Land rent fee		40,000,000	40,000,000	40,000,000	40,000,000	40,000,000
Operational expense		77,300,000	82,711,000	88,500,770	94,695,824	101,324,532
Depreciation		209,937,500	209,937,500	209,937,500	209,937,500	209,937,500
<b>EBIT</b>		<b>593,402,500</b>	<b>680,055,500</b>	<b>775,536,130</b>	<b>880,738,516</b>	<b>996,646,992</b>
Tax, 25%		148,350,625	170,013,875	193,884,033	220,184,629	249,161,748
<b>NAT</b>		<b>445,051,875</b>	<b>510,041,625</b>	<b>581,652,097</b>	<b>660,553,887</b>	<b>747,485,244</b>
<b>Net Working Capital</b>		<b>298,947,875</b>	<b>240,737,525</b>	<b>230,419,599</b>	<b>217,214,278</b>	<b>231,299,127</b>
<b>CAPEX</b>	<b>3,826,900,000</b>	-	-	-	<b>12,600,000</b>	-
<b>Free Cash Flow</b>	<b>(3,826,900,000)</b>	<b>356,041,500</b>	<b>479,241,600</b>	<b>561,169,998</b>	<b>640,677,109</b>	<b>726,123,617</b>
<b>Terminal Value</b>						<b>4,739,215,338</b>
<b>TOTAL FREE CASH FLOW</b>	<b>(3,826,900,000)</b>	<b>356,041,500</b>	<b>479,241,600</b>	<b>561,169,998</b>	<b>640,677,109</b>	<b>5,465,338,956</b>

In futsal arena option, revenue is calculated from multiplying base price by occupancy rate (gathered from observations and interviews with some futsal arena's owner around Kutawaringin). Then the projection number in year 2019 until 2022 is based on assumption in Table 2. The calculation of optimistic and pessimistic scenario also uses the same approach.

Based on that valuation calculation, value of each scenario can be gathered. To get more insight, the values from each scenario are multiplied with probability expected percentage to get expected value of each option, as shown in table 7 and 8.

Table 7. New distribution company expected value

Description	Value	Probability expected	Expected Value
Optimistic	20,662,607,584	30%	6,198,782,275
Most likely	6,647,610,121	50%	3,323,805,060
Pesimistic	(2,146,456,073)	20%	(429,291,214)
<b>Total</b>			<b>9,093,296,121</b>

Table 8. Futsal arena expected value

Description	Value	Probability expected	Expected Value
Optimistic	1,915,981,945	30%	574,794,584
Most likely	790,111,406	50%	395,055,703
Pesimistic	309,635,769	20%	61,927,153
<b>Total</b>			<b>907,923,134</b>

Probability expected percentage based on CV XXX's last few years condition, mostly similar to most likely scenario. Based on expected value comparison in Table 7 and 8, distribution company project is more favorable than futsal arena project since distribution company project give higher expected value.

## Conclusion

After considering all internal and external analysis above, it is clear that CV XXX need to expand its business to keep growing and establish a sustainable business. From the two most possible options for the expansion, a

three scenarios valuation analysis and possible risk adjustment provide an output that the first option is the best option.

This option to open a new distribution company offers higher expected value (Rp 9,093,296,121) compared with the option to build and rent a sport arena (Rp 907,923,134).

### **Suggestion**

Based on all description above, CV XXX is suggested to utilize the unused area by opening a new distribution company, while at the same time keep an eye to possible economic developments and conditions that may provide another insights in the future. In addition to that, Sales Price and Sales Quantity are also a very important variables to increase CV XXX's value. Thus, since CV XXX does not have any control over the product's sales price, it becomes really important for the company to focus on the Sales Quantity growth over time. Therefore, CV XXX should conduct some business initiatives to support the Sales Quantity growth which in the end will make sure CV XXX's business sustainability.

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## Advertising Promotion Strategy and Quality of Service Effect Against Customer Loyalty (A Study on Customers of Modern Market in Ciamis Region)

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### ABSTRACT

This article was focused on the influence of promotional strategies of thrust and quality of service on customer loyalty to customers of modern market in Ciamis region. This article was backwarded by the increasing number of modern market customers caused by advertising promotion strategies and quality of service that impact on increasing loyalty customers. The formulation of the problem in this article were advertising promotion strategies influence on customer loyalty, service quality influence on customer loyalty, and advertising promotion strategies and service quality influence on customer loyalty. In the meantime, hypothesis of work in this article were: (1) Advertising promotion strategy has a positive effect on customer loyalty, (2) Service Quality has positive effect on customer loyalty, and (3) Advertising promotion strategy and service quality have positive effect to customer loyalty.

The method employed in making this article was done to get deliniation of the influence of advertising promotion strategy and quality of service to customer loyalty to customers of modern market in Ciamis Region. Moreover, data were obtained through data collection techniques in the field using explanatory survey methodology.

Customers loyalty influenced by advertising promotion strategy equal to 58,06%. This means that customer loyalty is affected only a small part of advertising promotion strategy that is equal to 58.06%. Thus  $t_{count} > t_{table}$  is  $8.717 > 1.667$ . Then the null hypothesis ( $H_0$ ) is rejected. This means that advertising promotion Strategy positih influence on customer loyalty.

Customer loyalty is influenced by the service quality of 24.60%. This means that customer loyalty is only affected by a small portion of service quality of 24.60%. Thus  $t_{count} > t_{table}$  is  $2.3 > 1.667$ . Then the null hypothesis ( $H_0$ ) is rejected. This means that the quality of service positih influence on customer loyalty.

Customers loyalty influenced by the promotion of advertising and service quality of 58.06%. This means that customer loyalty is affected only a small part of promotion strategy advertisin and service quality that is equal to 58.06%. Thus  $t_{count} > t_{table}$  is  $8.717 > 1.667$ . Then the null hypothesis ( $H_0$ ) is rejected. This means that the promotion of advertising strategy and service quality positih influence on customer loyalty. Thus, the third hypothesis can be accepted and tested the truth. The conclusion is advertising promotion strategy has a positive effect on customer loyalty, meaning that if the use of advertising promotion strategy is more appropriate then the customer will be more loyal, Quality Service positively influence to customer loyalty, it means the better service quality will be more loyal customers, Advertisng and quality of service have a positive and high impact on customer loyalty, meaning the more appropriate promotion strategy and the better the service quality will be more loyal customers.

*Keywords: The more appropriate promotion strategy and the better the quality of service, the higher the customer loyalty.*

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### 1. Introduction

Marketing activities is a function that directly defines corporate objectives and activities that have a wide range, because not only internal but also external of the company. As expressed by Kotler & Keller (2009: 6) state that

"marketing is a social and managerial process in which individuals or groups aim to meet their needs and desires through creativity, supply and exchange of product value with others". The most basic concept of marketing is how a company can meet customer requirement and conduct environmental analysis (Walker, 1999: 94).

The existence of a change of trade paradigm in Indonesia market not only traditional market but also developing what is called modern market. With the development of modern market, the core concept, trend, and marketing task also changed. The core concept of marketing is a set of concepts creating a foundation for marketing management and holistic marketing orientation (Kotler Keller, 2009: 29).

In this era of globalization there has been a very tight competition among Retail Companies, even among individuals. Thus, it is demanded an innovation based competition. In fact, with the growing integration of the world economy, almost all companies, especially retail businesses, will face demanding and demanding customers. Such customers always demand better quality, lower prices, timely supply, and excellent service. Thus only an efficient, effective and innovative retail and productive company that will remain capable of surviving even a winner in competition, while those unable to compete will suffer a setback and do not even rule out becoming bankrupt.

Business or retail business in Indonesia has developed quite rapidly in recent years with various formats and types, especially the growth of minimarket either under shelter or not. This proves that growth in the field of trade is increasing rapidly. This is as a result of the development of manufacturing enterprises and market opportunities are quite open, as well as government efforts to encourage the development of retail business. The Government plays a role in safeguarding the national retail, through regulations and laws. Retail companies in Indonesia are still controlled by foreign investors, Foreign investment in Indonesia in the form of: 1) franchise system partnerships such as Body Shop, JC Penney, and Mark & Spencer; 2) technical cooperation cooperation such as Sogo and Seibu, and 3) joint venture partnership. (Christina Whidya Utami, 2006: 19).

Retail business as a difficult business to differentiate, so retail requires relationship effort to realize customer retention and customer loyalty. The relationship effort is an active business of retail in contributing to customer expectations for realizing customer retention through the delivery of core products and services that create sustainable relationships or create customer loyalty. Modern market growing and developing in Indonesia generally and in Ciamis in particular consists of two forms of modern markets namely minimarkets and Depstor.

With the regulation and the paradigm will trigger competition both between traditional markets with other traditional markets, as well as between modern markets with other modern markets. To illustrate how the competition that occurs between traditional markets with other traditional markets and modern markets with other modern markets as in the picture below:

To achieve its marketing objectives, the company must be able to feel and understand the needs of customers more than its competitors. Hence, as to create products and services offered have high value in front of customers. Therefore, it is necessary to marketing strategy of service formulated through marketing mix which responded directly by customer can create competitive advantage, because if customer requirement fulfilled with marketing mix performance offered, it will reach competitive advantage that can last long and finally will Achieve company goals.

On the other hand, in one of the indicators in this study that will the authors say is one of the marketing mix that is the promotion mix. Promotional mix is a promotional tool that we know includes advertising activities, personal selling, sales promotion, public relations (PR), word of mouth, direct marketing, and Publications, (Rambat Lupiyoadi, A, Hamdani, 2008: 120).

Judging from the marketing mix, marketing promotion or communication is expected to contribute to the creation of customer perceptions that will shape customer value so that directly or indirectly will influence the development of room occupancy rate. Allegations are very logical, because in the current era of information technology, communication becomes an important tool in order to offer products or services. One of the factors



that influence the demand for a product or service is the proper promotion to introduce the product or service offered to the consumer.

In marketing strategy, it can be stated that the promotion strategy in marketing is the effort of the company producing the product to direct the person or the society to get to know the product of the company, then understand it, change the attitude, like and believe until finally buy and always remember the company's product (Fandy Tjiptono, 2008 : 222).

Associated with promotions made to trading companies, promotional strategies in trade are marketing management efforts to disseminate information about the existence and variety of products offered, affecting customers through providing an understanding of the marketing mix so that customers change their attitude toward liking and believing in the existence and quality of products and Service to then buy the product repeatedly.

Promosi menurut Tjiptono (2008:219) adalah "suatu bentuk komunikasi pemasaran, yakni aktivitas pemasaran yang berusaha menyebarkan informasi, mempengaruhi atau membujuk, dan/atau mengingatkan pasar sasaran atas perusahaan dan produknya agar bersedia menerima, membeli, dan loyal pada produk yang ditawarkan perusahaan yang bersangkutan."

Promotion by Tjiptono (2008: 219) is "a form of marketing communication, ie marketing activities that seek to disseminate information, influence or persuade, and / or remind the target market of the company and its products to be willing to accept, buy and loyal to the products the company offers concerned." Promotion objectives are also presented Rossiter and Percy in Tjiptono (2008: 222) by classifying the purpose of promotion as the effect of communication:

1. Growing customer perception of a need (category need).
2. Introducing and providing an understanding of the product to the consumer (brand awareness).
3. Encouraging to make a selection of a product (brand attitude).
4. Persuading consumers to buy products (brand purchase intention).
5. Balancing the weakness of other marketing mix elements (purchase facilitation).
6. Embedding the image of the product and the company (positioning).

Associated with the stages in the process of purchasing the product, the marketing promotion activity contributes to the appearance of the following in a potential buyer or buyer:

1. Awareness of products offered. Love (interest) and try to find out more
2. Try (trial) to compare with expectations
3. Take action (act) to buy or not to buy
4. Follow-up (follow-up) through the activity of buying back or move the brand

In an attempt to assess the objectivity of decision-making using promotional media, Tjiptono (2008: 242) proposes five criteria that should be the basis of the assessment. The five criteria are:

1. Thoroughness, namely the decision of media selection based on the process of consideration of all aspects of interest.
2. Progressiveness, ie the maximum impact of the selection of a media.
3. Measure mindedness, ie decision making has considered aspects of exposure, such as frequency, audience quality, range, and so forth.
4. Practically, that media selection has been based on facts, not on an emotional basis.
5. Optimistic, ie the process of selecting the media provides input for the experience of decision makers.

According to Luo Xueming and Cristian Homburg (2007) there is significant evidence that customer satisfaction



is an important driver of corporate profitability and still largely ignores the two outcomes between customer satisfaction, that of a company's advertising and the efficiency of promotion and human resource performance. Based on the analysis of large-scale longitudinal secondary data from various sources found that customer satisfaction improves the efficiency of future advertising and promotional investment. In the same case, Kotler & Keller (2009: 23) states that the promotion mix consists of: sales promotion, advertising, sales force, public relations / public relations, and direct pemaaran. The five elements of the promotion mix mentioned above can be described as follows, (Kotler & Keller, 2009: 244-280) :

**Sales Promotion:** A key element in marketing campaigns, are a range of mostly short-term incentive tools designed to stimulate the purchase of certain products or services faster and larger by customers or merchants.

**Advertising:** is any form of nonpersonal presentation and promotion of ideas, goods or services by a particular sponsor to be paid. Ads can be a cost-effective way to spread messages, whether to build brand preferences or to educate people. **Personal Selling or Salesperson:** is an oral presentation in a conversation with one or more potential buyers with the goal of creating a sale. **Public relations:** includes programs designed to promote or protect the image of the company or its respective products. **Direct marketing:** is the use of all direct customer channels to reach and deliver goods or services to customers without the use of a marketing intermediary.

Quality of service is complex and most often discussed in marketing disciplines. The quality of service described in general and thoroughly evaluated in services is even a multidimensional conception built through an evaluation of the construction of a number of service-related attributes. It is for this reason that the notion of the concept of service quality continues to evolve, especially the need for a model to assess the quality of service provided by the modern market.

Taking into account the understanding of the quality of service of some experts aforementioned, the factors that affect the quality of service, target and superior service benefits that reflect the application of service quality, the understanding related to the quality of service, as well as the grouping of the tasks and skills of modern market employees, it can be concluded that the quality of modern market is the level of performance excellence or the actions, benefits and functions of modern market employees in the operations of the company to serve customer needs appropriately and satisfactorily and in accordance with customer expectations.

According Tjiptono (2007: 140) customer service quality model perceived that the customer consists of two main dimensions, namely:

1. **Technical Quality** (outcome dimension), related to the quality of customer perceived service output. This component can be broken down into three types according to Zeithaml et al. Which consists of: search quality (quality that can be evaluated customer before buying), experience quality (quality that can only be evaluated by customers after buying or consuming services), and credence quality (a quality that is difficult to evaluate customers even if the service has been consumed).
2. **Functional Quality** (process-related dimension), relating to the quality of service delivery or the process of transferring the technical quality, output or outcome of the services of the service provider to the customer.

The dimension of service quality is also stated by Gronroos in Tjiptono (2007: 136), which formulates the service quality dimension as follows:

1. *Professionalism and Skills*  
This first criterion is an outcome-related criteria in which the customer realizes that service providers, employees, operational systems, and physical resources possess the knowledge and skills required to solve customer problems professionally.
2. *Attitudes and Behavior*  
This criterion is a process-related criteria. Customers feel that company employees are paying attention to them and are trying to help in solving their problems spontaneously and happily.



3. *Accessibility and Flexibility*

This criterion is a process-related criteria. Customers feel that the service provider, location, working hours, employees and operating systems are designed and operated in such a way that customers can access easily. It is also designed with the intention of being flexible in customizing customer requests and desires.

4. *Realibility and Trustworthiness*

This criterion is a process-related criteria in which the customer understands that whatever happens, they can entrust everything to the service provider along with the employees and the system.

5. *Service Recovery*

The customer realizes that if there is a mistake or if something unexpected happens, the service provider will take immediate action to control the situation and find an appropriate solution.

6. *Reputation and Credibility*

Tjiptono (2008: 78) states that today's superior service quality is seen as a tool to gain competitive advantage in several organizations or companies. Superior service quality and consistency can foster customer satisfaction which in turn will provide various benefits. Kotler in Tjiptono (2007: 121) states that the quality of service should start from the needs and customer satisfaction and positive perceptions of the quality of service.

Tanner (1998: 13, No. 6) explains that, after making a purchase, there are several possible customer actions that need to be evaluated (post purchase evaluation), namely: (1) no longer buy, (2) Repurchase, (3) buy again repeatedly and invite others to buy the product (refferall). Buying back is done by the customer if they are satisfied, and if the product / service performance is improved according to customer's expectation, then the customer will have high loyalty to the product / service (Horovitz, 2000: 73). Roger J. Best, (2008: 38) states that the rating of customer satisfaction measurement is very dissatisfied, dissatisfied, somewhat dissatisfied, somewhat satisfied, and very satisfied.

Service loyalty is more likely to be felt for the customer of an organization or company than a tangible product customer, and according to Macintosh (1998) because service loyalty is more dependent on the development of interpersonal relationship as opposed to loyalty with tangible products. This means more service loyalty depends on the development of interpersonal relationships as opposed to loyalty to tangible products. Furthermore, according to Zeithaml (1981) "Furthermore, the influence of percerfed risk is greater in the case of service, as customer loyalty may act as a barrier to customer switching behavior". This means that the influence for greater customer loyalty is felt in service products, this is reinforced in the opinon of Snyder (1986) "indeed, it has been demontrated that loyalty is more prevalent among service customers than among the customer of tangible product". It means it has been proven that customer loyalty is more among service customers than tangible product customers. Thus, intangible traits such as reliability and trust play a major role in fostering or maintaining loyalty.

Loyalty according to Liljander (1995), "Loyalty is frequently observed behavior" loyalty is often defined as the actual behavior that encourages the performance of service organizations, but behavioral measures such as purchasing and buying wholesale are criticized for lack of basic conceptions and have a narrow sense of view Which focuses on the results of what is actually a dynamic process, for example a low degree of repeat purchase of a particular service may be the result and situational factors such as infidelity, varietal search and lack of buyer preferences or preferences.

Loyal customers are the most valuable asset for the company in improving the profitability of the company. To be able to make loyal customers, emphasize the importance of the company seize new customers and retain customers, need a high commitment both in terms of funds and human resources so that product quality is really in accordance with the wishes of customers. If the customer is satisfied, it is expected that he will not switch to another company (Blackwell, Miniard, Engel, 2001: 273).

The marketing company's paradigm shift from satisfaction to customer loyalty is also stated by Bothe, (2000: 107) who states that "future corporate orientation is shifting from a conventional approach to contemporary appraisal." The conventional approach emphasizes customer satisfaction, cost reduction, market share and



market research, while the contemporary approach focuses more on customer loyalty, customer retention, and lifelong customers. The relationship between customer satisfaction and customer loyalty according to Schnaars (1998: 204) can be divided into four groups, namely: (1) failures, where the level of satisfaction and loyalty is low or in this case not satisfied and not loyal ; (2) defector (crossing), namely high customer satisfaction but low loyalty; (3) forced loyalty, where customer satisfaction is low but loyalty is high. This can happen because customers feel attached to corporate loyalty promotion programs; (4) successes, where the level of customer satisfaction and customer loyalty is high. Conditions like this is very possible the occurrence of word of mouth communication (WOM) is positive for the company.

In which loyalty leads more to the behavior shown by "routine purchases based on decision-making units". Furthermore, Griffin (2000: 35) states that customer loyalty levels can be classified into:

**Suspect**, covering all the people who might buy the company's products. The company calls it suspect because they believe they will buy the company's products but they do not know anything about the company and the products offered. **Prospect**, are those who have the need for a product and have the ability to get it. They already know about the company and the products it offers. **Disqualified Prospect**, which is the prospect who already knows the existence of the company's products, but they do not "have needs" of the product, or they do not have the purchasing power to get it ". **First time customer**, the customer who buys for the first time. **Repeat customers**, customers who have purchased the same product twice, or purchased two different products on two different occasions. Clients, the customers who buy all the products the company offers, they need. The company's relationship with this type of customer "has been very strong and long lasting", they are not budging with the competitor's product. Advocates (advocates / advocates), ie customer product companies that encourage or encourage their friends to consume products offered by the company.

Furthermore Griffin (2000: 89) states the criteria of loyal customers are: (1) Repeat purchase (buyback); (2) Retention, where the customer only purchases products from the company; (3) Related sales of services, where customers want to utilize the same products in the future; (4) Referrals or refers to others, where customers advise others to consume products.

Based on the above problems, the writer set the title of the article entitled "**Advertising Promotion Strategy and Quality of Service Effect Against Customer Loyalty (A Study on Customers of Modern Market in Ciamis Region)**"

## 1. Objectives

Problems that can be answered through this article are (i) The influence of promotional strategy to push loyalty pelanggan on modern market customers in Ciamis Region (ii) Influence of service quality to the loyalty of modern market customers in Ciamis Region, and (iii) the influence of doron promotion strategy and quality Service to the loyalty of modern market transactions in Ciamis Region.

Meanwhile, the hypothesis in this article are: (1) Promotion strategy has a positive effect on customer loyalty, (2) Quality of service positively affects customer loyalty, and (3) Promotion strategy of thrust and service quality have positive effect on customer loyalty.

## 2. Material and Method

The method employed in making this article was done to get deliniation of the influence of advertising promotion strategy and quality of service to customer loyalty to customers of modern market in Ciamis Region. Moreover, data were obtained through data collection techniques in the field using explanatory survey methodology.

Based on consideration of research objectives, this research used verification and descriptive problem. The nature of the verification research basically wanted to test the truth of a hypothesis implemented through data collection in the field. Given the nature of this study was descriptive and verifikatif implemented through data



collection in the field, the research method used was descriptive survey method and explanatory survey method.

This type of research is causalitas, because it will be tested causal effect between free and non-free variable. The unit of analysis in this study was individual, because only the respondent community. Furthermore, time horizon in this study was cross-sectional, because information from some populations (respondent sample) were collected directly at the chosen place in order to know the opinion of some populations on the object which was being studied. The type of data needed in this study was primary data and secondary data. Primary data was the set of information obtained in survey by interview method and using structured questionnaire. Secondary data were obtained by reviewing data obtained from the recipient community, studying documents, research reports, publications and other literature supporting research.

According to Nasir (1999: 99), "Design research is all the necessary processes in planning and conducting research". In this research, the research design used was explanatory survey. In this connection, Rusidi (2003: 38) further elaborated that:

Survey research explanatory, as stated Kerlinger in Sugiyono (1988: 3) were:

Research conducted on large and small population, but the data studied is data from samples taken from the population, so that the relative incidence of events, distribution and relationships between variables, sociological and psychological.

Research is done by collecting qualitative data, which then presented in the form of numbers (quantified) to be tested verifikatif in accordance with the data analysis design.

### 3. Results

SPSS veri 17 estimation results, each indicator of research, need to be explained further. The explanation is needed because each variable was measured indirectly, but formed by a number of indicators that need to be reviewed role to form the variables. For more details, it will be discussed in each hypothesis.

As a result of calculation using SPSS version 17 program seen in recapitulation table result of correlation calculation between independent variables to dependent variable as follow:

Table 1

Recapitulation results of calculation of correlation between independent variable to the dependent variable

Variable	Correlation ( r )	t/f count	p-value
Advertising Promotion Strategy on Customer Loyalty	0,531	2,477	0,000
Quality of Service to Customer Loyalty	0,619	3,421	0,000
Advertising Promotion Strategy and Service Quality to Customer Loyalty	0,845	7,823	0,000

Source; Results of SPSS Processing

Based on table 1, it can be seen that all independent variables have a high enough correlation level to the devenden variable. For further research will discuss how the influence of each independent variable to the dependent variable either partially or simultaneously. Besides, the writer will discuss how the results of hypothesis testing work which has been predicted on the preliminary investigator in this article.

### 4. Discusion

#### The Influence of Advertising Promotion Strategy (X1) On Customer Loyalty (Y)

Testing the influence of Promotion Strategies Advertisin (X1) on Customer Loyalty (Y) was done by calculation as follows:



$$\begin{aligned}\text{Coefficient of Determination (CD)} &= r^2 \times 100 \\ &= 0,531^2 \times 100 \\ &= 28,10 \%\end{aligned}$$

Therefore, customer loyalty influenced by advertising promotion strategy equal to 28,10%. This meant that the loyalty of the customer was influenced by a small promotional strategy of advertising that was equal to 28.10%.

While to test the hypothesis used t test. To test whether the hypothesis was accepted or not compare between  $t_{\text{count}}$  with  $t_{\text{critical}}$  as follows  $2,477 > 1,667$

Testing Criteria:

- Reject  $H_0$  if  $t_{\text{count}} > t_{\text{table}}$ , meaning significant correlation coefficient and influence of advertising promotion strategy to Customer Loyalty.
- Reject  $H_0$  if  $t_{\text{count}} < t_{\text{table}}$ , meaning correlation coefficient was not significant and there was no influence from advertising promotion strategy on customers loyalty.

Thus  $t_{\text{count}} > t_{\text{table}}$  was  $2.447 > 1.667$ . Then the null hypothesis ( $H_0$ ) was rejected. This meant that advertising promotion strategy positively influence on motivation. Thus, the first hypothesis could be accepted and tested its truth.

### **Effect of Service Quality (X2) on Customer Loyalty (Y)**

Testing the influence of Service Quality (X2) on Customer Loyalty (Y) is done by calculation as follows:

$$\begin{aligned}\text{Coefficient of Determination (CD)} &= r^2 \times 100 \\ &= 0,619^2 \times 100 \\ &= 38,30 \%\end{aligned}$$

Therefore, customer loyalty was affected by Pelayann Quality of 38.30%. This meant that customer loyalty was affected by a small portion of Service Quality of 38.30%.

While to test the hypothesis by comparing thtung with tkritis namely:  $3.421 > 1.667$ .

Testing Criteria:

- Reject  $H_0$  if  $t_{\text{count}} > t_{\text{table}}$ , meaning significant correlation coefficient and the influence of Quality Service to Quality Service.
- Reject  $H_0$  if  $t_{\text{count}} < t_{\text{table}}$ , meaning that the correlation coefficient was not significant and there was no influence from the quality of service to customer loyalty.

Thus  $t_{\text{count}} > t_{\text{table}}$  was  $3.421 > 1.667$ . Then the null hypothesis ( $H_0$ ) was rejected. This meant that the quality of service positively influence on customer loyalty. Thus, the second hypothesis could be accepted and tested the truth.

### **The Influence of Advertising Promotion Strategy (X1) and Quality of Service to Customer Loyalty (Y)**

Testing the influence of Promotion Advertising Strategy (X1) and Quality of Service (X2) on Customer Loyalty (Y) was done by calculation as follows:

$$\begin{aligned}\text{Coefficient of Determination (CD)} &= r^2 \times 100 \\ &= 0,845^2 \times 100 \\ &= 71,40 \%\end{aligned}$$

Therefore, customer loyalty influenced by advertsing promotion strategy equal to 71,40%. This meant that customer loyalty was influenced largely by the Advertising Promotion Strategy (X1) and Quality of Service (X2) that was equal to 71.40%.

While to test the hypothesis used F test that was by comparing  $F_{\text{count}}$  with  $F_{\text{table}}$ :  $7,823 > 3,667$

Testing Criteria:



- Reject  $H_0$  if  $F_{count} > F_{table}$ , it meant positive correlation coefficient and influence of Promotion Advertising Strategy (X1) and Quality of Service (X2) to Customer Loyalty.
- Reject  $H_0$  if  $F_{count} < F_{table}$ , meaning the correlation coefficient was not positive and no influence from Promotion Advertising Strategy (X1) and Quality of Service (X2) to Customer Loyalty (Y)

Thus the  $F_{count} > F_{table}$  was  $7.823 > 3.667$ . Then the null hypothesis ( $H_0$ ) was rejected. This meant that Advertising Promotion Strategy (X1) and Quality of Service (X2) positively influenced on Customer Loyalty (Y). Thus, the third hypothesis could be accepted and tested the truth.

Theoretically, the Working Climate affected motivation according to experts' opinion. Besides Working Climate influence on Employee Performance. This was evidenced by the opinions of experts. While Loyalty was strongly influenced by Promotion Advertising Strategy in accordance with the study of experts stating that Customer Loyalty was strongly influenced by Strategy Promotion Advertising.

## 5. Conclusion

According to the results of analysis and hypothesis tests which have been done in previous discussion, thus, it can be deduced from the results of research as follows:

- 1) Advertising promotion strategy based on customer perception of modern market in Ciamis Region is in strong category. By using SPSS calculation it is found that Promotion Advertising strategic variable has bigger  $t_{count}$  than  $t_{critical}$ , all indicator of advertising promotion strategy is significant. Koevsen correlation test denominator correlation that advertising promotion strategy positively affect and signivikan on customer loyalty. This means that the more appropriate promotional strategies used by the modern market will be more loyal consumers. The first hypothesis is truth-tested and has significant significance or significance due to p-value 0,0000.
- 2) Quality of service based on customer perception of modern market in Ciamis Region is in Good category. By using SPSS calculation, it is found that Service Quality Variables have bigger  $t_{count}$  than  $t_{critical}$ , all indicator of service quality is significant. Based on correlation coefficient test that quality of service is positive and significant to customer loyalty. It means that the better and the right quality of service will be more loyal consumers. The second hypothesis is tested and has a significant significance level because p-value is 0.0000.
- 3) The influence of advertising promotion strategy and service quality simultaneously including high category. Partially influence of advertising promotion strategy and service quality to customer loyalty each including high enough category. This indicates that the selection and use of advertising promotion strategy and service quality can improve customer loyalty, advertising promotion strategy should get serious attention from the company (modern market) so that customers can express satisfaction in assessing the quality of service resulting in satisfaction for customers. Other variables that may affect customer loyalty are strategic variables of price promotion and the internal and external environment of the individual. Thus Hypothesis 01 and Hypothesis 02 rejected, it means there is a significant influence advertising promotional strategy on customer loyalty because  $t_{count} > t_{critical}$  and there is significant influence of service quality to customer loyalty because  $t_{count} > t_{critical}$ . This means that the more precise promotional advertising strategy employrd by the modern post and better service quality, the loyalty of customers will be more loyal.

## 6. Acknowledgement

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## The Role Of The Board Of Commissioners In Earnings Management

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### Abstract

The company's management tries to make the company's performance look very good, which aims to attract investor interest to invest, besides that management has the motive to get bigger compensation by showing good company performance. To show good corporate performance then management will apply earnings management that is by applying adjustments to financial statements. To prevent management from applying earnings management to the detriment of investors, it is necessary to supervise the behavior of management in making the financial statements by applying corporate governance, one of the corporate governance mechanisms is the company must have the board of commissioner responsible for overseeing the company's management activities in managing the company.

An indicator of the board of commissioners used is the composition of the independent commissioner, the number of board of commissioner's meeting, the board of commissioner's education and for the measurement of earnings management using Modified Jones Model. In this research, the data used is financial data of mining company sub-sector that listed in Indonesia Stock Exchange year 2012 - 2014.

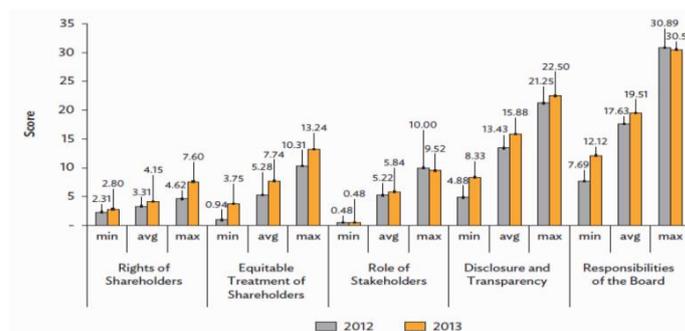
The results of this study conclude that the composition of the independent board of commissioners can reduce the occurrence of earnings management, the number of meetings involving the board of commissioners can prevent the occurrence of earnings management and education background board of commissioners cannot prevent the occurrence of earnings management.

Suggestions for further research, for the educational background of the board of commissioners, should use a percentage of the total members of the board of commissioners who have the background of financial education.

*Keywords: Board Of Commissioners; Earnings Management*

### 1. Background

Corporate governance in Indonesia gained great attention with the government establishing the National Committee on Corporate Governance Policy in 1999, with the implementation of corporate governance encouraging companies to be transparent and efficient and accountable by optimizing the functioning of the Board of Commissioners. However, the implementation of GCG in Indonesia is still at an unsatisfactory level (Asian Development Bank, 2014) as shown in Figure 1.



**Figure 1**  
**Corporate Governance Improvement from 2012 to 2013 in terms of OECD Principles in Indonesia**

Avg = *average*, max = *maximum*, min = *minimum*, OECD = *Organisation for Economic Co-operation and Development*.

Note: Maximum score earned for Rights of Shareholders is 10 points, Equitable Treatment of Shareholders is 15 points, Role of Stakeholders is 10 points, Disclosure and Transparency are 25 points and Responsibility of the Board is 40 points

In implementing good corporate governance depends on the application of securities and corporate law, good accounting standards, strong regulations, an efficient judicial system and a strong determination to fight corruption applied by governments and companies in Asia (Barton et al, 2004 ). Corporate governance is a proposed concept for improving corporate performance through supervision or monitoring of management performance and ensuring accountability of management to stakeholders by establishing on the regulatory framework (Nasution & Setiawan, 2007) (Mulyadi & Anwar, 2015)

Implementation of good corporate governance required the company to overcome the problems that arise as a result of agency problems. Agency problems arise from the owner of the fund (principal) and management (agent). Jensen and Meckling (1976) stated that the agency problem is management as the recipient of the mandate of the principal, not always acting in the operating company to maximize the interests of the principal. To minimize the agency problems, the company must have the composition of the board of commissioners who come from outside the company so that it can affect the action of earnings management. (Boediono, 2005) (Cornett, Marcus, & Tehranian, 2008) results of research conducted by (Chen, Elder, & Hsieh, 2007) Companies that have independent commissioners will tend not to apply earnings management.

## 2. Literature Review

In companies listed on the stock exchange, there will be two interests namely, the interests of shareholders as a principal of profits for shareholders in the form of dividends and the interests of management as an agent that is getting a bonus or a larger salary, therefore, the possibility of management will apply earnings management for achieving management goals (Jensen & Meckling 1976).

With the existence of these differences of interest then required a good corporate governance, corporate governance as a normative framework is, the company rules in carrying out its operations - with regulations issued by the legal system, the court system, the stock market, and labor law (Claessens & Yurtoglu, 2013)

Nasution & Setiawan, (2007) stated composition of the board of commissioners negatively affects earnings management. This indicates that corporate governance mechanism proposed through the existence of independent parties in the board of commissioners can reduce the acts of earnings management that occurred.

Management will tend not to earn earnings management when firms have more oversight by the independent board of commissioners (Cornett et al., 2008) this is in line with research conducted by (Chen et al., 2007)

### Hypothesis

The hypothesis in this research is "There is significant influence from the independent commissioner, board of commissioner meeting, board of commissioner's education to earnings management level"

## 3. Research Methods

In this research, the data used is financial data of mining company sub-sector that listed in Indonesia Stock Exchange year 2012 – 2014.

In this study, the variables used are the board of commissioners and earnings management as a dependent variable. Measurements performed for each variable are as follows:

1. The proportion of the board of commissioners of independence is measured by dividing the number of members of the board of commissioners who come from outside the company (independent) to the total of all members of the board of commissioners of the company.
2. A total number of meetings conducted by the board of commissioners.
3. Education background of the board of commissioner, if the background of financial education hence will be given value 1, if not, then 0.
4. Earnings management using the formula:

Modified Jones Model (Dechow et al., 1995).  $TA = NIit - CFOit$

#### 4. RESULTS AND RESEARCH ANALYSIS

Table 1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
X <sub>1</sub>	60	,25	,75	,4130	,11341
X <sub>2</sub>	60	,00	17,00	5,7333	4,33694
X <sub>3</sub>	60	,00	1,00	,9333	,25155
Y	60	-	915692449840,00	-	1337674839735,6
Valid N (listwise)	60	6001385652000,00		608816365563,9666	1200

From Table 4.1 shows the results of the descriptive analysis as follows:

1. Average variable percentage Independent Commissioner 41.3 %
2. Average variable number of independent commissioners meeting 5.7 times a year
3. Average independent education commissioner variables 0.93

Average variable earnings management -6.088.163 has the meaning that the average coal mining subsector companies do decrease income.

Table 2 Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,277 <sup>a</sup>	,076	,027	1319507577872,58600

a. Predictors: (Constant), x<sub>3</sub>, x<sub>2</sub>, x<sub>1</sub>

According to Table 2, the adjusted R<sup>2</sup> of 27%, which means the percentage of independent commissioners, the number of independent commissioners' meeting and the financial background of the independent commissioner influence the earnings management by 27%, the results include the small influence of it in line with test result's f or influence simultaneously in Table 3 below:

Table 3 ANOVA f test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	80714507433020200 00000000,000	3	269048358110067 3000000000,000	1,545	,213 <sup>b</sup>
	Residual	97501613891537980 000000000,000	56	174110024806317 8300000000,000		
	Total	10557306463484000 0000000000,000	59			



- a. Dependent Variable: y
- b. Predictors: (Constant), x3, x2, x1

Table 3 shows the value of 1.54 with a significance level of 0.213 > 0.05 which mean that simultaneously the independent percentage of independent commissioners, the number of independent board of commissioners and the financial background of the independent commissioner have no effect on earnings management. This is strengthened by the result of t-test that is the partial influence test in Table 4.

Table 4 t test.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
(Constant)	-822243116156,403	902613533617,051		-,911	,366	
1	x <sub>1</sub>	1530136379098,443	1676573163114,884	,130	,913	,365
	x <sub>2</sub>	85779893934,639	43614854764,631	,278	1,967	,054
	x <sub>3</sub>	-975347463429,091	720900055819,928	-,183	-1,353	,182

- a. Dependent Variable: y

Based on Table 4 above it can be seen the effect of partial influence percentage of independent commissioners, the number of independent board of commissioners meeting and the background of financial education to earnings management as follows:

- X1 sig of 0.366 where 0.366 > 0.05 then X1 has no effect
- X2 sig of 0.054 where 0.054 > 0.05 then X2 has no effect
- X3 sig is 0.182 where 0.182 > 0.05 then X3 has no effect

**Discussion**

Based on Table 4 then known regression equation as follows

$$Y = -8.222 + 1.530 + 8.577 - 9.7534$$

From the equation, it is known that the constant value of -8.222 has the meaning of the company's earnings management income decreasing. It is in accordance with Table 4.1 which states the average or mean for earnings management of -6.088.163.

Based on Table 4 it is known that the composition of the board of commissioners or the percentage of the independent board of commissioners has no effect on earnings management but has a positive direction of +1.530 which means although no effect but can reduce the occurrence of earnings management

Based on Table 4 which states the frequency of meetings of the board of commissioners has no effect but has a positive direction of +8.577 which means the board of commissioners can oversee the performance of management so as to reduce the occurrence of earnings management.

Based on Table 4 it is known that the educational background of commissioners who have education in the field of finance does not have influence on earnings management but have negative direction equal to -9.7534 this is contrary to the function of the board of commissioner who can reduce the happening of earnings management, with negative direction of educational background of finance give an opportunity. To management to make earnings management, with good financial knowledge earnings management is done decreasing income with the aim of tax avoidance is to avoid excessive tax avoidance but without violating the law.

**5. Conclusions**

- 1) The composition of the independent board of commissioners can reduce the occurrence of earnings management.

- 2) The number of meetings involving the board of commissioners can prevent the occurrence of earnings management.
- 3) The background of the board of commissioners' education cannot prevent the occurrence of income management decreasing income.

For further research; For educational background, the board of commissioners should use a percentage of the total members of the board of commissioners who have the background of financial education.

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## Risk Mapping on Financial Technology

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### Abstract

Financial Technology (Fintech) is an innovation in the financial industry. The ease that are offered in this service making fintech as a solution to the financing requirement. This innovation also has risks, risk that is inherent in the software and service provided to the customer or the user of fintech application i.e. community and perpetrator of the UMKM. This research uses a risk-mapping approach which is divided into three parts namely pure risk, speculative risk, and money laundry/terrorism risk. The methodology used is the descriptive statistics.

*Keywords: Risk; fintech*

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### A. Background

Digital industrial development since 2015 until 2017 is very rapid. The spotlight from The Media The Ministry of Communications and Information of Republic of Indonesia reveals that Indonesia holds the number of people that is very large about 250 million people and it make Indonesia as a big market. Smartphone user in Indonesia also growing rapidly. Research institutions of digital marketing, Emarketer, estimate at 2018 the number of active smartphone users in Indonesia will be more than 100 million people. It makes Indonesia as the biggest four country with active smartphone user in the world after China, India, and America.

In line with growth of the use of smartphone, development of digital based industrial is very fast. Start-up industry become more variegated as a response toward the needs of smartphone users who keep growing every year.

The development of technology encourage creativity various parties to develop start up industry in Indonesia. The financial industry is also enliven start up industry. This innovation is known to financial services industry based on technology or fintech (financial technology).

The Financial Services Authority (OJK) issue regulations OJK Number 77/POJK.01/2016 about Loan Money Services Based on Information Technology (LPMUBTI). After the rules were issued, in the early year, there have been 37 fintech companies listed on OJK. Companies that already enrolled in OJK is the type of savings and loan fintech. Meanwhile, another fintech like the agency, or supporters of financial sector is not including in the context of fintech treaty.

Fintech offer an ease and new services in the middle gap between financial institutions and non financial with the community. But this innovation also has risks, both the risk inherent in the software or the services provided to consumers or fintech application users that is the community and UMKMs agents.

### B. Methodology

This research using descriptive statistics analysis that is provide a description or a description of a data viewed from the average (mean), standard deviations, variant, maximum, minimum, sum, range, kurtosis and skewness (slant distribution) (Ghozali (2013)). This analysis used to transform lab data in the form of tabulation data in the form of table and charts so that it will be easy to understand and interpret.

### C. The development of UMKM sector

Sector growth of Small-Medium Enterprises (UMKM) in Indonesia within 5 years from 2009 to 2013 is quite fast.

Table 1. UMKM Growth 2009-2013

Indicator	Denomination	2009	2010	2011	2012	2013
The amount of UMKM	Unit	52.764.603	53.823.732	55.206.444	56.534.592	57.895.721
The amount of UMKM labor	Person	96.211.332	99.401.775	101.722.458	107.657.509	114.144.082
Contributions of PDB UMKM (constant price)	Rp. Billion	1.212.599	1.282.572	1.369.326	1.451.460	1.536.919

Source: www.bps.go.id

Based on information in the table 1 the number of UMKM units since 2009 until 2013 increasing every year and expected to keep growing in later years. This sector is a sector that is growing fast in the middle of digital economy era and creative industry, this sector also create labor quite a lot in Indonesia along with the increasing of UMKM every year. Bank Indonesia mention that the distribution of credits to UMKM sector experienced growth and in general the growth is higher compared to the total bank credits. So that UMKM is a market that has bright prospects for financial services industry that moves in the fields of funding or distribution of financing.

### D. Fund Need and Fintech

According to the definition of Bank Indonesia UMKM credit is all the provision of money or bill that can be equalized with it in the Indonesian unit (the rupiah) and foreign currencies, based on the approval or the agreement of loan between bank rapporteur with a bank and the third party that is not bank which satisfies the criteria of business according to the prevailing regulations. But UMKM not only received loans from banks, they can also obtain loans through funding institution which is not bank and in the last 2 years they can also obtain loans through fintech. The following are the examples of fintech that gives ease loans:

Table 2 Website Fintech and Offered Facility

Websites Fintech Name	Funding Facilities and Loans Offered
1 <a href="https://uangteman.com/">https://uangteman.com/</a>	The very fast process, security details, unsecured, transparent nominal amount paid at the beginning, spread in Indonesia.
2 <a href="https://drupiah.com/">https://drupiah.com/</a>	Quick, only a few minutes, a simple procedure, transparent loans amount, the period and a total return bills
3 <a href="https://amartha.com/">https://amartha.com/</a>	Prevent debt burden excess, justice for borrowers and investors, the sharing system/the margin that is responsible, secrecy and security data, transparent, punctuality respond to help
4 <a href="https://www.taralite.com/">https://www.taralite.com/</a>	Loans for online merchant without collateral, interests ranging from 0,99 % monthly flat
5 <a href="https://www.investree.id/">https://www.investree.id/</a>	Attractive return, measurable risk, with the process of simple application — 100% online— you can start fund from Rp. 5,000,000 to Business Loan and Rp 1,000,000 to Employee Loan
6 <a href="https://modalku.co.id/">https://modalku.co.id/</a>	Transparency over the risk and return and provide lenders and services are just in time for borrowers and lenders
7 <a href="https://www.koinworks.com/">https://www.koinworks.com/</a>	Safe investment, make arrangements portfolios and leading partners
8 <a href="https://mekar.id/">https://mekar.id/</a>	Funding for various sectors in Indonesia, Interests 10 % per year, The investment choices varied, Investment guaranteed
9 <a href="https://pinjam.co.id/">https://pinjam.co.id/</a>	The capital cost more efficient, assessment online 24 hours, The Easier Process, The Reliable Partner, Privacy & Comfort Transactions, Security Awake

Source: <http://www.duwitmu.com> processed



Through information in the table 1.2 it can be seen that fintech provide the ease on the consumer among them; fast process, simple procedure, loans without collateral and the cost as well as lower risk. Where they do not or rarely given by banking industry or funding. The financial industry based on technology try to understand the characteristic of Indonesia community better and investors of UMKM in the needs of funding when they are not successfully in looking for funding through banking and financing but because of low by its terms and system.

### E. Risk Mapping on fintech

Fintech innovation gave the quite large impact in the financial industry in Indonesia. But this innovation is absent from risk. Risk arose because there is a condition of uncertainty. Fintech gave a facility for borrowers of funds and the ease has the stood up risk. In this research, mapping risk divided into three parts i.e pure risk, speculative risk (Hanafi , 2009) and money laundry/terrorism risk.

- Pure Risk  
The risk where there is only possible loss. In this case, fintech having legal risk which is contract risk is not conforming as expected, documentation is not right. If dispute that cause the funds, partners and borrowers funds unable to fulfill its obligation it will cause harm. There is little information about risk in singular complex transactions, much less what happens at higher levels of aggregation because of recent innovation, market opacity, data fragmentation, incomplete knowledge and conflicting interests by Hwang (2015).
- Speculative Risk  
The risk where we expect the loss and also advantage
  1. Credit risk, a risk because counterparty failed to fulfill their obligations to a company. Fintech promised the fast funding to the borrowers. But if UMKM who run by borrowers is down and experience loss prolonged there is a potential borrowers cannot pay their obligations.
  2. Operational risk, operational activities risk does not run smoothly and result in a loss: system failure, human error, less control and procedure. Fintech is the financial industry based on technology then the system and the good control is a thing that become a top priority in giving its services. But when the system and control not functioning maximum there will be a potential that company has affected by hacker, viruses and data stealing that result in a loss. Innovative instruments more desirable, efficient and effective, but also more vulnerable to abuse and misuse. These characteristics include the ease of access to the system, the shortness of execution times, the possibility to carry out transactions without a direct contact with the counterpart, the availability of an anonymity regime and the consequent dissimulation of the actual identity of the economic actors that have carried out the transaction by Merlonghi (2010).
- Money Laundry/Terrorism Risk  
The ease of transaction and new method given in the start up era made fintech as a source of funding required by the community as well as UMKM. But the need for transparency of funds and the allocation of funds in fintech to ensure that source and allocation of funds is legal. The availability of specific IT and communication technologies permits the transfer of monetary values in electronic form both between users (peer-to-peer) and between a user and a system merchant, without necessarily having to go through the intervention of either a centralized structure or the traditional financial intermediaries. Moreover, these payment instruments can easily be used in an international context, as they appear to be indifferent to geographical distances and barriers. They also offer an opportunity to “spread” a financial crime across different jurisdictions: thus, a crime can be committed in one country and then be judged in another country, with the consequence that the ascertainment of responsibilities and sanctions may become very burdensome and uncertain. It can actually be very difficult to identify the law that is applicable in case of controversies, illicit actions and abuses, and to gather evidence regarding the transactions that have been carried out by Merlonghi (2010). Funds that are destined for terrorist organisations could easily be transferred through virtual environments undetected due to the fact that transactions are likely to be for relatively small values and, therefore, more likely to blend very easily with the millions of transactions that take place in these environments every day. In addition, the use of anonymous payment methods and the use of privacy enhancing software ensure that there is very little chance of identifying the real-world identity of those who perform these transactions or those who receive the funds by Irwin (2014).



## F. Conclusion

Development of start up industry and innovation in the financial industry gave a different service in the financial industry. Fintech is an innovation that present to answer the needs of the community and UMKM perpetrator toward the ease of getting fund that is not given by banking industry and financing. But fintech as the financial industry based on technology also having risk. Mapping risk into three parts namely pure risk, speculative risk and money laundry/terrorism risk. All the three risks tending to map losses that would happen if the uncertainty really happened. Pure risk and speculative risk were also found in the financial conventional industry. The other, money laundry/terrorism risk is a new approach of risk identification of the method or system that runs on fintech because this industry is easy to get source funding in general.

Several ways to mitigate the risk is to apply KYC (Know Your Client) both the giver or of the recipients as well, any regulations that distinguish fintech services with the kind of financial conventional industry, the determination regulations of the cost and interest and oversight of fintech performance at regular intervals.

Therefore it will be required deeper analysis when it comes to borrow fund through fintech one of them is to ensure that fintech was registered in authority financial services (OJK), transparency from a partner that give or borrow fund, clarity and transparency risk contract and return any period of.

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## **Adopting real life entrepreneurs' experiences into youth entrepreneurial learning process model**

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### **Abstract**

Most entrepreneurship education emphasizes on teaching and learning about entrepreneurship with business plan and entrepreneurial characteristics or personalities as the popular topics. Whilst learning to become entrepreneurial still needs further improvement in the teaching and learning process. Entrepreneurship education therefore could adopt the process of how entrepreneurs develop their entrepreneurial attitude, behaviour and skills in their real lifelong learning experiences. This research aims to develop a model for entrepreneurial learning process based on the real lifelong entrepreneurs' learning experiences. The research covers the literature review on the concept of entrepreneurship, entrepreneurial learning, and the field work. The social constructivist and interpretive approach are used as qualitative research. The research used a semi structured and direct interviews with Indonesian entrepreneurs to analyse rich qualitative data on the real lifelong entrepreneurs' learning experiences. The analysis on entrepreneurs' narratives identified important learning experiences which can be classified into the 5 basis or pillar of youth entrepreneurial learning process. The findings and supported by the literature reviews are therefore used to conceptualize a model for entrepreneurial learning which consists of starting up and nurturing learning stages as well as five elements of teaching and learning process such as learning goals, learning contents, learning strategy and methods, learning contexts, and learning assessment. The entrepreneurship educators can adopt the model to improve their entrepreneurship teaching methods and approaches to a more contextual and students' centred learning process.

*Keywords: entrepreneurship education, nurturing, starting up, entrepreneurs' narratives*

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### **1. Introduction**

Entrepreneurship has become an important new and unique discipline within the social sciences, and its study involves a multidisciplinary approach. The multidisciplinary perspectives throw up different interpretations and definitions of entrepreneurship and the entrepreneur, and yet they identify entrepreneurship as a dynamic and evolving field of research (Sharma and Chrisman, 1999; Shane and Venkataraman, 2000; Ucbasaran et.al.,2001). The dynamic perspective of the psychological and social view, as well as the shift of focus to the individual level of entrepreneurship research leads one to recognise entrepreneurial learning as a new and interesting field. In addition, the important role of entrepreneurship in economic developments such as the creation of SMEs and self-employment clearly indicates that entrepreneurship, its understanding and development is vitally important for inclusion in formal education where most youth people learn to develop their competencies.

However as most entrepreneurship education in Indonesia is still emphasized on knowledge acquisition and lacks of entrepreneurial attitude and behaviour development in its learning process, the learning goals particularly at a tertiary level mostly focus in developing a business plan.

## 2. Understanding entrepreneurship

### 2.2 Personality traits approach

The entrepreneurship research on this psychological dimension argued that entrepreneurs were a group of people different from the rest of the majority (Murphy, et.al.2006), and try to answer the question: who is an entrepreneur? (Chell, 2008). Accordingly, David McClelland popularized the concept of the “need for achievement motive” as the hallmark of entrepreneurship (Landström, 2005). In addition to the “need for achievement” (NAch), Rotter’s “locus of control” (LOC), and “risk taking propensity” characteristics are blended together as the Big Three (Chell, 2008). The personality approach still gains support from a number of researchers who set out to explain the entrepreneurship phenomenon (Llewellyn and Wilson, 2003; Cantner et.al., 2011; John et.al., 2008). However, some scholars disagree with this approach. Drucker (1985) argues that entrepreneurship pertains to behavioural notion rather than to traits. Gartner (1989, p.48) early criticised the personality traits approach and asserted that “who is an entrepreneur” was the wrong question instead the question should be ‘why’an entrepreneur creates a new venture. Personality traits is “a static analysis approach” and lacks general application (Kobia & Sikalieh, 2010, p.116); they may be too simple to describe entrepreneurs who create business ventures in a dynamic and various circumstances (Okhomina, 2010). Volkman, et.al. (2010, p.10) reiterates that studying the entrepreneur’s behaviour and actions is more meaningful than profiling a successful entrepreneur with characteristics. Furthermore, Davidsson (2007, p.293) argues that those characteristics cannot predict the unique entrepreneurial behaviour and are not easily “teachable and learnable”.

### 2.3 Behavioural approach

Intensifying critics on personality traits approach has led to the development of entrepreneurial behaviour research (Jones & Wadhani, 2007), and to focus the research more on the environment and social background which influence entrepreneurial behaviour rather than on individuals (Llewellyn & Wilson, 2003), or shifting from personality traits to entrepreneurial process in the social context (Bygrave & Hofer, 1991). Being an entrepreneurial process the behaviour manifests the entrepreneur’s responses and reactions to the contextual environment, it describes the dynamic nature of entrepreneur’s behaviour compared to the static nature of the so called entrepreneur’s traits. Based on the action rather than on the doer, some researchers propose definitions of “entrepreneurial behaviour”. It is what entrepreneurs perform (Mair, 2002), in forms of entrepreneurial actions (Bateman & Crant, 1993).

### 2.4 Entrepreneurial learning

Entrepreneurial learning is fundamental to the process of entrepreneurship development (Deakins et al, 2000), either for training existing entrepreneurs to develop their business (Lalita Rani, 1996), or educating potential entrepreneurs whilst in formal education. As suggested by Gartner (1989), that entrepreneurship research shift from studying who are entrepreneurs to what they do or how they act, the analysis then focuses on entrepreneurial behaviours that can be learned and taught. Most researchers refer to entrepreneurial learning as linked up to the behavioural approach of entrepreneurship process such as the concept of ‘venture creation’ or ‘opportunity recognition and exploitation’.

### 2.5 Behavioural learning

Entrepreneurship education is about changing or developing students’ behaviour as Scheiner (2009). Fayolle and Kyrö (2008) adds that building students’awareness and interest are crucial prior to entrepreneurial action. Developing students’ entrepreneurial behaviour in a learning environment is not teaching about entrepreneurial traits to the students. These learning processes for developing an entrepreneurial attitude and behaviour cannot be done in isolated classroom activities but it needs students’ involvement in a broader context and environment; it needs to adopt inclusive perspectives that portray how entrepreneurs “live and learn” (Gibb, 2002, p.135), it cannot be done devoid of “social context” (Rae, 2003, p.543), or industry liaison (Carsrud, 2009,



p.47).

### 3. The research methodology.

This research is to answer “what can be adopted from entrepreneur’s real experiences into youth entrepreneurial learning process?”

Ten people with various business activities ranged from 25 to 69 years of ages were directly interviewed in their premises using a semi structured interview. The social constructivist and interpretive approach are used as qualitative research to acknowledge what actually ‘out there’ exists as the entrepreneurs’ learning in their social and cultural environment. This existence presumably creates new knowledge of entrepreneurial learning, particularly in the local social and cultural context. Based on the biographical interview used as the research method, the analysis and interpretation of the entrepreneurs’ learning are summarized and categorized under the important headings as basis for entrepreneurial learning process.

### 4. Findings from the narrative interpretations.

The entrepreneurs’ accounts were recorded, transcribed and then analysed through relevant key words identification and cross cases analysis. Furthermore the interpretation on the entrepreneurs’ narratives resulted in five distinct learning process elements i.e: learning goals, learning contents, learning strategy and method, learning contexts, and learning resources as shown in Table 4.1

**Table 4.1**  
**Entrepreneurial learning process elements**

Elements	Entrepreneur’s learning experiences
Learning contents	Practices: communication (understanding customers, build relationship), functional skills (selling, marketing, finance, human resources), technical skills Attitude : courage, self confidence, hardworking, opportunity alert, smart, reliable, economical
Learning contexts	Hardship during the childhood, social and business networking, routine business operation, handling problems
Learning approach or methods	Effectuation, bootstrapping, trial & error, learning by doing, problem solving, DIY, self study, observation, action learning, experiential learning, social learning, opportunity centred learning
Learning stages	Nurturing (help parent’s business, respond to difficult life, make money by selling); Starting-up (DIY, saving, direct selling, bootstrapping)
Learning resources	Family (through mentoring, parent support, family business skills training); Network (friends, communities, business association) Education (education level, extracurricular activities)

### 5. Conceptualization of the learning process model.

The findings on the learning process elements above as revealed from the narrative analysis and interpretation (see Table 4.1) and supported by related references are used to develop the model for entrepreneurial learning as follow. The central point of the model is “the youth entrepreneurial learning process” covering “the nurturing stage” and the “starting-up stage” which represent the learning stage. The learning processes in each stage incorporate the essential five elements or “pillars” .

#### Learning goals.

The first essential pillar is learning goals which guide stakeholders and those who are concerned with the



entrepreneurship education to progress on the right direction. The common goal of an entrepreneurship education is to increase start-up venturing by new entrepreneurs. But for an entrepreneurship education at a formal education it could be one of the goal sets, as Hytti (2002, p.5) classifies three types of goals: “learning to become entrepreneurial, learning to understand about entrepreneurship, and learning to become an entrepreneur”. Kirby (2007, p.31) also proposes three goals of the entrepreneurship education: “teaching about entrepreneurs.... teaching for enterprise...and teaching through enterprise”. Likewise Liñán (2004, pp.10-12) suggests four levels in entrepreneurship education: “entrepreneurship awareness education; education for start-up; education for entrepreneurial dynamism; and continuing education for entrepreneur”. These aims or types of entrepreneurship education in this study will be called “learning goals” to emphasize that the students are aware of, and own, the learning process. The learning goals are blended together or “co-exist” (Hytti 2002, p.14) in whole contents of entrepreneurship education.

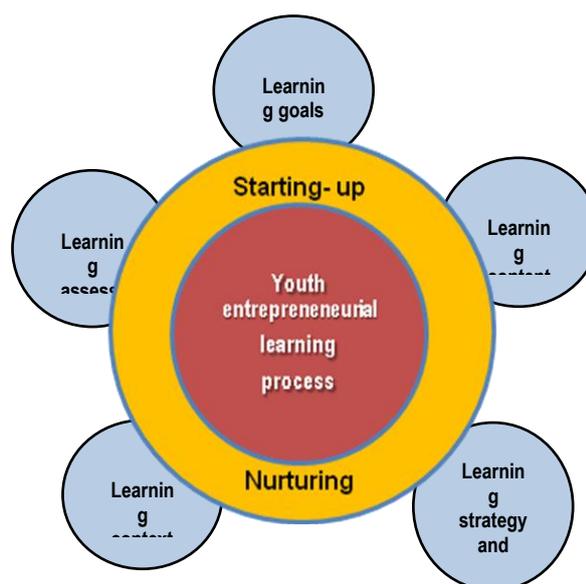


Figure 5.1  
Five pillars model for youth entrepreneurial learning x

### Learning content

The Second Pillar is the “learning content” that comprises firstly *Entrepreneurial attitude* to be developed and embraced in all activities. Entrepreneurial learning activities should trigger and shape positive learners’ attitude toward entrepreneurship career and self employment. Athayde (2009) revealed in a study that an entrepreneurship program can improve students’ positive attitude toward self-employment. Secondly *Productive skills* which can be improved through fostering the students’ hobbies or interests, a reasonable extension of the do-it-yourself (DIY) culture as Bartel (2004, p.21) describes : DIY life styles as “ making – and teaching others to make – soap, lip gloss, candles, bags, food, clothing – the list goes on and on”. This DIY skill should be fostered in entrepreneurial learning process as in Germany it is categorized as the shadow economy that can create 5% of GDP (Buehn et al., 2009). The third content is ICT skill by which young people as potential entrepreneurs could take advantage of technology for doing business. Forth content is *Business and economic skills* in which students can practice market research, financial literacy, selling and marketing, communication, leadership, organizational skills.



### **Learning strategy and methods**

Dansereau (1985, p.210) defines learning strategy as “a set of steps or processes that can facilitate the acquisition, storage /or utilization of information”. Soni (2004, pp.5-1) sees from the teaching side as “a broader outline of arranging instruction using a variety of methods, techniques and communication media resources” Banthiya (in Soni, 2004, p,5-10) defines the method “as an arranging of learning events adopted by the teacher to facilitate learning to occur in the students or trainees”. The ‘learning strategy’ should be inquisitive or inductive in nature by using various learner-active methods such as action learning, experiential learning, social learning, and opportunity centred learning, trial and error, and learning by doing.

### **Learning contexts**

The Fourth Pillar is “learning contexts” in which entrepreneurial learning must take place. Traditional teaching and learning activities put most emphasis on the cognitive aspect, by which students learn the theory inside the classroom detached from the real world outside the classroom. This cannot be done in entrepreneurship education, because as Malmberg (2004 in Nyseth & Viken, 2009) argues, that the entrepreneurial process takes place within the social, cultural, industrial context, legal and regulation context in which entrepreneurs are engaged.

### **Learning assessments**

The teacher makes the formative assessment during the learning process to ensure the student can achieve the best. While the summative assessment is generally conducted at the end of the course programme in order to evaluate the students’ attainment. For cognitive learning achievements, the teacher together with investors can evaluate the students’ work on a project document, such as Business Plan, but for affective domain assessment, such as entrepreneurial attitude, this may involve using a particular test model to measure achievement, personal control, creativity, leadership, and intuition (Athayde, 2009). However, the summative assessment in entrepreneurship education, researchers argue, is not to focus of the course programme, rather formative assessment is recognized as more important for evaluating the needs for learning; a shift from “assessment of learning” to “assessment for learning” (Lans & Gullicker, 2010, p.54). The business mentor can take part in formative assessment to provide valuable and expert feedback for the students. In addition peer assessment can be used to improve students’ performance (Wood, 2005) within the group which is mostly the format of a project work. Peer assessment is important in the learning process, as “it shifts the learning and assessment focus from lecturer-centred to student-centred” (Jones & English, 2004, p.421).

## **6. Conclusion**

The model derived from this research is clearly different in prescribing how to teach and get students learn and engage in entrepreneurship education especially in Indonesia as an emerging economic country. Even though the model developed and recommended here seems to be generic and does not provide detailed description in each pillar, it easily helps the teacher or user to grasp an inclusive framework of an entrepreneurial learning that empirically based on the entrepreneurs’ experiences.

As far as entrepreneurship education concerned the teacher need to keep up with the more developed and effective teaching and learning strategies and methods. The model proposed here invite the teachers now to emphasize more on students’ active learning process. Based on the model, the teacher or users need to develop relevant teaching and learning process that is suitable for the changing environment – an adoption process. However there is a challenge that through an entrepreneurship education the learners should not only be able to respond to the environment but also change the environment, as Cope argues (2005, p.392) that Entrepreneurial learning does not happen in static and predictable circumstances, but rather in disruptive and unstable situation. Thus, this notion should inspire the teacher or user to involve the stakeholders particularly the entrepreneurs to update the learning process that endow the learners’ creativity to change the environment at their best.



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## **Business Model Analysis of Organic Rice Farmers Group (Study Case in Sarinah Organic Farmers Group, Bumiwangi Village, Ciparay, Bandung Regency, West Java Province)**

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### **Abstract**

Indonesia is one of the leading countries that produce rice in the Asian continent. One of the leading Indonesian rice is organic rice that is in demand by consumers in the country and abroad. One of the businesses in the organic rice which is currently being developed is Sarinah Organic Farmers Group in Bandung Regency, West Java. This study will analyse Sarinah business model and provide input in the development of the business. This study uses a qualitative method with case study techniques in Sarinah Organic Farmers Group. The analytical tool used is Business Model Canvas that used to describe the applied business model. Business models are analysed through the Business Design process. The design process is business done through storytelling techniques, map empathy and prototyping. Business design process is done through storytelling techniques, empathy map, and prototyping. There are nine blocks analysed in each Business Model Canvas element: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. Based on the research result, in the scale of farmers group, Sarinah Organic Farmers Group business model is quite advanced and could be use for similar organic rice farming in West Java especially and Indonesia in general. One of the recommendations for this study is give advices to Sarinah Organic Farmers Group to maximize member development and partnership with key partners with prospect the organic rice business in the Sarinah Organic Farmers Group could be more developed and give benefit to involved farmers.

*Keywords: Farmers Group; Organic Rice; Business Model Canva;; Business Design;*

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### **Preliminary**

#### *1.1 Introduction*

Rice is one of the most important primary food products in the world. Indonesia is one of the leading countries in rice production in Asia Continent. Indonesia is the world's third rice producer country after China and India, with total production of 70,600,000 tons (FAOSTAT, 2014). Indonesia excels not only in producing common rice but also superior in producing organic rice. The demand for organic products continues to increase due to health awareness as well as consumer appeal to products that have health benefits. The demand for increased organic products is characterized by countries with large organic farming areas.

Indonesia is the number one country which has the widest area of organic land in the world with the total number of organic lands area 3,910,355.00 hectare. Indonesia has potential in developing organic products. One of Indonesia's main commodities is rice. Several organic lands in Indonesia planted with organic rice. Rice development in Indonesia is supported by production data which tends to increase from year to year.

Table 1. Rice Production in Indonesia in 2008 – 2015

	2008	2009	2010	2011	2012	2013	2014	2015
Rice Production (in million tons)	60.2	64.3	66.4	65.4	69.1	71.3	70.9	75.4

Source: Food and Agriculture Organization of the United Nations and the Ministry of Agriculture in Indonesia 2016.

Based on the table above, there was a decrease in 2011 compared to 2010 and 2014 compared to 2013, but within 8 years Indonesia showed a significant increase in rice production. There are 5 largest rice producing provinces in Indonesia. One of these provinces is West Java. West Java occupies the 2nd place as the largest rice producer in Indonesia. West Java became the second highest province in producing rice because West Java has some superior rice varieties. Excellent varieties of paddy in West Java are Inpari for white rice and Inpari 24 for brown rice. These varieties are capable of producing up to 7 tons / hectare of rice.

West Java is also superior in producing organic rice. One of the featured areas of West Java which produces organic rice is Bandung regency. Bandung Regency is predicted has a 100 hectares land area planted by Organic Rice. One of the Organic Rice business in Bandung Regency is Sarinah Organic Farmers Group. Sarinah Organic Farmers Group is the number one businessman for organic rice in Bandung Regency. The Farmer Group has 32.5 hectares of land that has been certified for 13.7 hectares and leads to certification of 18.8 hectares. Sarinah Organic Farmers Group is capable of producing 138 quintals / hectare (dry milled grain) per harvest season. Sarinah Organic Rice has been certified by the Indonesian Organic Farming Certification (INOFICE) a certification body in organic product on November 7, 2011.

Organic certification obtained by the Sarinah Organic Farmers Group and also the excellent varieties planted successfully made Sarinah become a supplier for organic red rice Tropicana Slim Nutrifood Indonesia. The demand of PT. Nutrifood Indonesia for organic red rice Sarinah Organic Farmers Group can reach 25 tons each month. Besides producing organic red rice for nutrifood, sarinah also produces organic rice for other companies. With these achievements, in 2013 the Indonesian Ministry of Agriculture awarded the Sarinah Organic Farmers Group as the 3rd Rank of the National Farmers Group for paddy commodities.

From the background above we could see that business development in organic farming is very important. Therefore, it is necessary to do a research on an organic farming business about the concept of business model that could develop organic rice farming. This research can be a way to know the position of the business as well as aspects that affect the business using the Business Model Canvas.

## Literature Review

### 2.1 The Business Model Canvas

A business model describes the rationale of how an organization creates, delivers, and captures value. A business model best described through nine basis building blocks that show the logic of how company intends to make money. The nine blocks cover the four main areas of the business: customers, offers, infrastructure, and financial viability.

The nine building blocks are:

- Customer Segments: an organization serves one or several customer segments.
- Value Propositions: It seeks to solve customer problems and satisfy customer needs with values.
- Channels: describes how a company communicates with and reaches its Customer Segments to deliver a Value Proposition.
- Customer Relationships: describes the types of relationships a company establishes with specific Customer Segments.
- Revenue Streams: represents the cash a company generates from each Customer Segment.
- Key Resources: describes the most important assets required to make a business model work.



- Key Activities: describes the most important things a company must do to make its business model work.
- Key Partnerships: describes the network of suppliers and partners that make the business model work.
- Cost Structure: describes all costs incurred to operate a business model.

## Methodology

The object of this study is the business model of the Sarinah Organic Farmers Group which includes an analysis of 9 points in the canvas business model. This research uses qualitative research method. The purpose of using qualitative research is to capture expressive information in natural settings. The research technique used by the researcher is a case study research technique. Determination of informants in this study is using snowball sampling. The data collection techniques were used in this research is by direct observation, interview and literature study. To find out the business model that can be applied Sarinah Organic Farmers Group, researchers use the Business Model Canvas through Business Design. There are 6 techniques in business model design that are: (1) Customer Insight; (2) Ideal Formation; (3) Visual Thinking; (4) Prototyping; (5) Storytelling; (6) Scenarios. Each technique in Business Design can be used in accordance with the harmony with each block.

## Result and Discussion

There are nine blocks in the Business Model Canvas traversed by different Business Design approaches. For Customer Segments, Channels, Customer Relationships, Revenue Streams, Key Resources, Key Activities, Key Partnerships, and Cost Structure blocks are obtained through storytelling techniques. For Value Propositions obtained through the Storytelling technique distributed in Empathy Map. When all the blocks are assembled, Prototyping techniques are then made by creating a simple business model from Sarinah Organic Farmers Group which is made simultaneously with representatives of farmer group members.

- Customer Segments

Customer segments of Sarinah Organic Farmers Group categorized as a Niche Market. Sarinah targets a particular market segment. 80% of the final customer of Sarinah Organic Farmer Group is a company, not individual customer. This is caused by the marketing of its products is distributed through a company that has been certified as a provider named PT. Sarinah Agro Mandiri. The other reason why 80% of the final consumers are companies is because the company can guarantee the purchase in large quantities, so that the harvest is not wasted because of the absence of consumers. Companies that buy products will create a new brand use the company brand. 20% of other customers are individual consumers who directly contact PT. Sarinah Agro Mandiri to buy the rice. The average individual consumer is a relative or relative who knows the farmer or the staff of PT. Sarinah Agro Mandiri. The relationship between Sarinah Organic Farmers Group and those companies is also a relationship between supplier-buyer.

- Value Propositions

Value proposition of Sarinah Organic Farmers Group begins with newness by selling different rice which is organic rice that is better for the health of the body and also environmentally friendly. From the design side, farmer groups cooperate with PT. Sarinah Agro Mandiri add sticker with product information and logo of organic Indonesia to facilitate consumer to know the contents of product and guarantee that product is true organic. Sarinah also provides value by way of customization of products offered to suit the needs of consumers. Sarinah produces two kinds of rice, brown rice and white rice.

Red rice varieties used are Aek Sibundong which has a lower glycemic index level than white rice so it suits a consumer to reduce the carbohydrates consumed. The size of the product is adjusted to the consumer consumption pattern. For families, packaging is available with the largest size with a weight of 5 kg while for individual packaging is available in small size with a weight of 1 kg and medium size with a weight of 2 kg.

In terms of Performance, Sarinah offers continuous and assured products by always managing group members who get regular monthly meetings with the aim of sharing sessions about the condition of the group and also counseling from the local counselor agency so that the performance in producing the product can be maintained. In terms of getting the job done, Sarinah provides solutions by way of packing



so that the products received by the company have been neat and ready to be delivered to the final consumer.

Sarinah also offers value affordable price. In terms of pricing, Sarinah offers a price of Rp 7,000 / kg with the purchase in the form of dry grain harvest. According to PT. Sarinah Agro Mandiri, this price is suitable and not expensive. This price is set approximately 10% higher of the price of dry grain harvested in the market with the excess quality of organic products. In final pricing, Sarinah cooperates with PT. Sarinah Agro Mandiri for final consumers pricing. The final price for white rice is Rp 16.000 / kg and Rp 17.000 / kg for brown rice. The price offered is in the form of rice.

- Channels

The channel used by Sarinah Organic Farmer Group to reach customers is indirect selling through PT. Sarinah Agro Mandiri. These channel relationships occur with large sales. PT. Sarinah Agro Mandiri becomes a legal distributor for Sarinah Organic Farmers Group. Furthermore, in reaching consumers, Sarinah Organic Farmers Group cooperates with PT. Sarinah Agro Mandiri conducts direct selling following exhibitions of organic products or special activities from the government both nationally and regionally.

- Customer Relationships

In finding new customers (customer acquisition), Sarinah cooperate with PT. Sarinah Agro Mandiri attended the exhibition of organic products to reach customers. In maintaining good relationship with customers (customer retention), Sarinah has consumer service facilities directly handled by the group management if at any time there is a complaint from the consumer. For upselling, Sarinah Organic Farmer Group partnered with Papak Serang Farmers Group in order to maintain the production stock.

- Revenue Streams

At Sarinah, Revenue Streams are obtained from asset sale. The revenue stream is obtained from the purchase of PT. Sarinah Agro Mandiri who bought the product in the form of dried grain harvest at a price of Rp 7.000 / kg. The income that will be obtained by members of farmers is Rp 5.200 / kg dry grain harvest. Net profit earned by farmer group per year approximately 80 million. Sarinah sells other products in the form of grain and husks. For grain and husk, Sarinah sells the product to chicken farming business. The price of grain and husk is Rp 5.000 / kg.

In addition, Sarinah Organic Farmers Group also provides tractor lending to farmers other groups. The price of tractor lending is Rp 1,500 / tumbak (1 tumbak=14m<sup>2</sup>). Furthermore, Sarinah gets revenue stream from donation from PT. Sarinah Agro Mandiri. In order to establish a good relationship between farmer groups and companies that always work together, PT. Sarinah Agro Mandiri always provides monthly assistance amounting to Rp 28.000.000 / month for the purpose of funding daily operational activities.

- Key Resources

Physical resources owned by Sarinah are an office that is borrowed from PT. Sarinah Agro Mandiri, grain warehouse, rice warehouse, packing place, agricultural production facilities (fertilizer, land rent, etc.), and also thirteen cows. The intellectual resources of the Sarinah are organic certificates obtained after the organic certification process issued by Indonesian Organic Farming Certification (INOFICE) on November 7, 2011. Human resources owned by Sarinah is a member of farmers group consist of 27 members.

Farmer Group members are the main human resources in the business process. Each farmer has their own respective roles in the group management. In managing its resources, the Sarinah Organic Farmer Group implements a contract. This contract refers to the obligation of organic products to have an Internal Control System (ICS) for members. Each member will gain knowledge about organic rice cultivation and get routine counseling from local counselor. In addition, counselor also provides motivation to members of the farmers group through the introduction of organic farming examples that have been successful so as to encourage members. The last is financial resources, Sarinah obtained financial resources from PT. Sarinah Agro Mandiri amounting to Rp 28.000.000 / month.

- Key Activities

The main activity at Sarinah Organic Farmer Group is production activity. Production activities start from the processing of rice fields, selection of superior seeds, planting, field treatment, harvest and post-



harvest management. In post-harvest management, Sarinah Organic Farmer Group keeps the product in the form of grain, after request from PT. Sarinah Agro Mandiri, the farmer group will prepare the product in the form of rice according to the company's request. It is intended that the product condition is maintained because organic products if stored in the form of rice will be vulnerable to ticks. Other post-harvest management activities also consist of packing and distribution processes. For packing activity, Sarinah does the division of working hours. It aims to streamline packing time.

- **Key Partnership**

Key partner of Sarinah is PT. Sarinah Agro Mandiri. Relationship of Sarinah and this company is based on Optimization and Economic Scale and Risk and Uncertainty Reduction so as to gain knowledge and access to customers. This partnership makes the Farmers Group out of fluctuate market price because the price of organic rice can be determined by itself and not depend on market price.

Besides PT. Sarinah Agro Mandiri, the partner of the Sarinah which is always continuous in helping the business to run smoothly is Agriculture Department of Bandung Regency Government. The form of cooperation is to provide assistance in the form of goods such as cow, huller machine, and others. The other partners of Sarinah are agricultural counselor from agriculture counseling agency Pacet. The form of partnership with this counselor is trainings and guidance of organic rice cultivation.

- **Cost Structure**

The cost structure of the Sarinah Organic Farmer Group is categorized as Value-driven class. Sarinah focuses on creating value different from other farmer groups as a fundamental food producer by prioritizing its organic products. Cost structure is divided into two characteristics: fixed cost and variable cost. The main fixed costs of the Sarinah consist of the cost of making fertilizer, cow maintenance, and the purchase of cow feed. The variable costs consisted of farmers meeting costs held once a month, the manufacture of liquid fertilizer, seed procurement, land expansion, and other unexpected costs.

Fig. 1. Business Model Canvas Sarinah Organic Farmers Group.

<p><b>Key Partners</b></p> <ul style="list-style-type: none"> <li>- PT. Sarinah Agro Mandiri</li> <li>- Agriculture Department of Bandung Regency</li> <li>- Agricultural counseling institution of Bandung Regency</li> </ul>	<p><b>Key Activities</b></p> <ul style="list-style-type: none"> <li>- Production process</li> </ul>	<p><b>Value Proposition</b></p> <ul style="list-style-type: none"> <li>- Newness: Produce organic rice</li> <li>- Design: add information of the product and organic logo</li> <li>- Performance: managing group members on a regular basis</li> <li>- Customization: Providing products in various sizes and types</li> <li>- Getting the job done: Helping consumers to the packaging process</li> <li>- Price: Offer prices that suit the consumer's wishes</li> </ul>	<p><b>Customer Relationships</b></p> <ul style="list-style-type: none"> <li>- Cooperates with PT. Sarinah Agro Mandiri in reaching final consumers</li> <li>- Has customer service facilities</li> <li>- Cooperate with Papak Serang farmers group in fulfilling consumer demand</li> </ul>	<p><b>Customer Segments</b></p> <ul style="list-style-type: none"> <li>- Niche Market: supplier-buyer relationship with PT. Sarinah Agro Mandiri</li> </ul>
<p><b>Key Resources</b></p> <ul style="list-style-type: none"> <li>- Physical Asset: PT. Sarinah Agro Mandiri, Agriculture Department of Bandung Regency</li> <li>- Intellectual Asset: Organic Certificate</li> <li>- Human Resources: 27 Farmers</li> <li>- Financial Asset: Monthly allowance from PT. Sarinah Agro Mandiri</li> </ul>			<p><b>Channels</b></p> <ul style="list-style-type: none"> <li>- exhibition</li> <li>- special activities</li> <li>- indirect selling through PT. Sarinah Agro Mandiri</li> </ul>	
<p><b>Cost Structure</b></p> <ul style="list-style-type: none"> <li>- Fixed costs: fertilizer production, cow maintenance, purchase of cow feed</li> <li>- Variable costs: regular member meeting fees, liquid fertilizer production, seed procurement, land expansion, unexpected costs</li> </ul>		<p><b>Revenue Streams</b></p> <ul style="list-style-type: none"> <li>- Asset sale in the form of rice, grain, and husks</li> <li>- Tractor rental</li> <li>- Monthly allowance from PT. Sarinah Agro Mandiri</li> </ul>		

### Conclusion and Recommendations

Based on the result of the research, in the scale of farmers group, Sarinah Organic Farmers Group business model is quite advanced and can be an example for business in organic farming. However, there are several sectors

that must be improved in order to develop the business in accordance with the group's goals.

In the Sarinah Organic Farmers Group business model, researchers see the power in the Key Resources and Key Partnerships blocks. The main strength in a group is its members and the strength of this group is also influenced by the major partners who collaborate with the group. The relationship between group members and partners is an interdependent relationship. Therefore it is necessary to increase the bond between group members and partners to facilitate the rights and obligations of each party.

One of the best ways to increase ties with members is to give award through additional commissions from the final profits of the company according to the contribution of farmers in the production. It aims in accordance with the group's goal of improving the welfare of group members

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## Examining Product Attributes, Brand Equity, and Brand Loyalty across Domestic and International Brand

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### Abstract

Although many studies have examined the influence of country-of-origin towards customer buying decision, a few research has evaluated the indirect influence of country-of-origin on customer buying decision in a low-involvement consumer product (ice cream). This research compares the effect of product attributes and brand equity toward brand loyalty across the domestic and international brand. This study predicts that international brand is perceived as superior compared to local brand. The sample of this study, 574 students, was collected from Bandung, Indonesia. The result shows that product attributes, equity, and loyalty of domestic brand are significantly different from that of the international brand product. The finding of this research confirms that international brand is perceived as superior than domestic brand in terms of product attributes and brand equity. Lastly, related to loyalty, this study reveals that both product attribute and brand equity are important determinants of brand loyalty for the international brand, while for domestic brand only brand equity affect significantly brand loyalty.

Keywords: Product attribute, brand equity, country of origin, brand loyalty

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### Introduction

The flow of products from one country to another becomes unstoppable (Kotler, Kartajaya, & Setiawan, 2010). World Trade Organization informs that there are so many emerging market products that dominating the international market (WTO, 2015). Literature also informs that this is the symptom of the competitive era in global market (Grosse, 2016). This phenomenon indicates that there is increasing competition in a country, not only between local brands but also with the international brand. The logic consequence from this situation, based on consumer's perspective is they have many brand choices—local and international- that will make them consider and compare first before making purchase decisions (Kinra, 2006). Thus, in this situation, offering high-quality products is an essential requirement for every company survival to gain consumer satisfaction and consumer loyalty (Heskett, 2002). Although there is a symptom that consumer tends to consider many indicators to buy a product, including the country-of-origin, there is still lack scholars attention on this issue in emerging markets.

Literatures has identified that country-of-origin significantly influences on product quality perceived by consumers (Rajeev Batra, Ramaswamy, Alden, Steenkamp, & Ramachander, 2000). Past studies indicate that country-of-origin influences positively on consumer's purchasing decisions (Rajeev Batra et al., 2000). In contrast, the study conducted by Wang et.al. (2004) shows that country-of-origin has limited influence in determining the perception of consumer quality. This suggests that country-of-origin not always affects consumer perception of the international brand because in some situations its influences also depend on the type of products. To the best of authors understanding, none of the past studies investigate the effects of country-of-origin on low-involvement products. As this product category is distinct and differs from other products, understanding on how country-of-origin affects product choice for low-involvement products is a necessary (Bakewell & Mitchell, 2003; Wang, Siu, & Hui, 2004).

To fulfil the research gap, the objective of this study is to scrutinize the differences that determine consumer loyalty on domestic and international brand using two differentiating factors; product attribute and brand equity in low –involvement product, ice-cream. A better understanding on this issue will be beneficial for the product manager to create the better approach to improve consumer loyalty and formulate the better strategy to compete with others. The Nielsen (2016b) report shows that the percentage of consumption of ice cream product in Indonesia projected will increase up to 10% in 2016. In addition, Marketeers (2016a) also inform that the ice cream product relatively promising in this emerging market. However, this market is dominated by two main brands, Campina (Indonesia) and Wall's (Netherland) with the market share 73,7% for the international brand and 24,6% for the Indonesian brand. This figure shows that ice cream business is flourishing in the Indonesian market. Therefore, conducting this study on ice cream brand in Indonesian market is justified.

## Literature Review

People as consumers have different perception between domestic and international products. It is influenced by product attributes (Fandos & Flavian, 2006), brand equity (Yasin, Noor, & Mohamad, 2007) and country-of-origin (Sun, Zheng, Su, & Keller, 2016). Relating to the model developed by Lancaster (1979), consumer choice is based on the characteristics (attributes) of the product. Fandos and Flavian (2006) explain that quality as one of the parts of products attributes is the way for consumer to get the information and cues of the characteristics of products. Then, consumers must evaluate both cues and information based on their needs when they buy or consuming the products (Becker, 2000). Moreover, the other previous studies suggest that product attributes are influenced by country-of-origin (R Batra, 2000). So that, the consumer will compare between domestic and international brand from some products associated with the origin of the products.

Brand equity indicates the value added of the brand that built from its name in consumer's mind then it has expanded become the including of the set of product attributes that push consumer decision-making. This statement means that consumer willing to pay more for the same quality of products because of the image of the brand. The previous study in China shows that imported products or international brand seem higher social status (Li & Gallup, 1995) so they will choose more on international brand rather than domestic brand, at least, if they have similar quality. In contrast, the other studies found that some consumers prefer domestic brand because of the economic, social and physiological motives (Freurer, Baumbach, & Woodside, 2016; Zeugner-Roth, Zabkar, & Diamantopoulus, 2015). This finding is indicating that there is the differences between domestic and international brand in terms of brand equity.

Country-of-origin is the place where the products were produced (Zafar, Ahmad, & Boon, 2004). Research conducted by Guo (2013) suggest that products from developed countries have the higher quality and value than developing countries. It implies that country-of-origin has significant affects for the consumer decision-making. This statement is proven by the research conducted by Yasin et al. (2007) that country-of-origin plays an important role in purchase decision in case electrical goods. The other study explains that country-of-origin will influence the consumers' belief about the product attributes and brand (Srikatanyoo & Gnoth, 1993). Thus, country-of-origin has important role between international and domestic brand in the market.

## Methodology

To examine the research issue, the researchers developed the questionnaire with 26 attributes adopted from previous studies related to this research (Becker, 2000). Likert scale with five-point is stated by strongly disagree '1', disagree '2', neutral '3', agree '4', and strongly agree '5' is considered as an appropriate method to measure variable constructs. This research uses data collected through online from Bandung City, Indonesia in March 2017. This study focuses on students, thus the data was collected to the target respondents among university and senior high school. The sampling used is random sampling in order to get a sound result (Saunders et al., 2016). Off 600 responses collected, researchers excluded 26 responses from the data because of missing data reason. Respondents consist of female (63.76%) and male (36.23%).



## Data analysis

Concerning the objectives is identify the difference and influence of product attributes, brand equity and country of origin, researchers used t-test and multiple regressions for this research. The t-test is a method used to examine the significant difference between two groups (Ghozali, 2009). In this study, we use one of the methods of the t-test, namely the Independent sample t-test. The result of t-test is depicted in Table 1.

**Table 1 T-test result of brand comparison**

Variable	F-value	t-value	Variable	F-value	t-value
<b>Product attributes</b>			<b>Brand equity</b>		
Product quality	22466	16800*	Intention to buy	45654	14503*
Variant flavor	11489	15450*	Choices domination	35439	18,354*
Product package	10222	17340*	First of mind	842	25,378ns
Price	7828	-3301*	Product uniqueness	13149	9,937*
Product variation	25859	14503*	Buying new variant	16337	15,647*
<b>Loyalty</b>	<b>79805</b>	<b>10,238*</b>			

**Table 2 Regression result of brand comparison**

Path	International brand		Domestic brand	
	Coefficient	t-value	Coefficient	t-value
Product attributes > Loyalty	-0,168	-4,592*	-0,089	-1.296ns
Brand equity > loyalty	0,840	22,998*	0,710	18,345*

ns: not significant, \*significant at  $p < 0,01$

## Discussion

Table 1 shows the result of t-test analysis from two products, domestic and international brand. Based on product attributes variable, including product quality, flavor variant, packaging, price and product variant are offered by international brand significantly different with local brand. It means that international brand concerning product attributes is perceived as better compared to local brand. In brand equity dimension, the international brand is better than the local brand in consumer's mind. It is proven from this study that shows that for some variables such as the intention of buying, product dominant, and product uniqueness, and loyalty, the international brand better than the local brand. In the contrast, for the first mind variable there is the similarity between the international brand and local brand. It shows that for both products have had a strong brand in consumer's mind. Past studies suggest that product attributes (internal cues) are influenced by country-of-origin (external cues), so consumers often associate a product with the origin of the product (Rajeev Batra et al., 2000). This study also confirms that when comparing product attributes of local and international brands, consumers tend to judge that international brands are better. Likewise for brand equity, although there are variables that have similarities with international brands, the international brand still shows its dominance of local brands (Rajeev Batra et al., 2000; Steenkamp, Batra, & Alden, 2003). According to the result, it can be stated that international brand is better than domestic brand, this result similar to the previous study (Sun et al., 2016). So, the variable of the country of origin of international brand and domestic brand is different. This result proves that the respondents are not ethnocentrism consumer because they prefer to choose international brand than domestic brand in this research (Nikoletta & Siamagka, 2017).

Table 2 shows the result of regression analysis from product attributes and brand equity toward loyalty for every product (international and domestic). This result shows that loyalty and the desire to rebuy for international brand is significantly influenced by the product attributes offered and brand equity of the international brand. Furthermore, brand equity has a greater impact than product attributes in shaping consumer loyalty on the international brand. In contrast, for local brand product loyalty and the desire to rebuy is influenced by brand



equity that they have built, not depend on product attributes offered through their various products. Table 2 shows the relationship between construct variable product attributes, brand equity and country-of-origin toward consumer loyalty formation as described in the theoretical model. The results show that product attributes and brand equity of the international brands significantly establish consumer loyalty, whereas for the local brands only brand equity influences significantly. Thus, the product attributes and brand equity of the international brand can affect simultaneously to consumer loyalty. The result of this study explains that in forming consumer loyalty, international brand is formed by two variable, product attributes and brand equity simultaneously and significantly. In contrast, for local brand, consumer loyalty is formed as partial by brand equity indicator, it indicates that relationship of forming loyalty by product attributes variable in context local brand is not significant and very complicated. This study is relevant to the previous study about consumer loyalty in relation with country-of-origin (Rajeev Batra et al., 2000; Loureiro & Umberger, 2007). Furthermore, attribute products owned by local brands do not influence consumer loyalty, but the brand equity indicator towards loyalty influences significantly.

### Conclusion

The competition in low-involvement products, especially ice cream, is intense in the Indonesian market. This intense competition is due to the changing in consumer behavior as well as entering international brand. This study extends our knowledge on the effect of country-of-origin through the differences between domestic and international brand. This study supports past studies and a common belief that the international brand is perceived as a better product compared to the domestic product. Of the attributes product (product quality, variant flavor, and product package, price, and product variations) as well as the brand equity and customer loyalty toward the brand, international brand perceived as a better and their customers are more loyal. This finding provides the venue for managerial practices that, for the domestic brand, the competitive strategy should not rely on stressing the brand. This study suggests that domestic product should improve the quality of their product attribute to be, at least, equal to the international brand in order to compete with the international brand. Although this study has important contributions from theoretical and managerial perspective, this study bears some drawbacks. Many factors affect customer brand loyalty. In this study, only two factors (product attributes and brand equity) are included in this study. To get a better understanding on the effect of country-of-origin, the future study could include other factors such as quality, satisfaction, and image in the model.

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## A Networked Perspective On Business Model For Sap Managed Services

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### Abstract

This study seeks to answer the question how to visualize SAP Managed Services business model using networked business model recently proposed by (Palo & Tähtinen, 2011) and find the modified networked business model framework for SAP Managed Services case. This study applies case study from selected company. By examining the SAP Managed Services business model from a networked perspective, this study creates tools for both researchers and managers to plan, develop, produce and maintain SAP Managed Services.

Keywords: networked business model, SAP, managed services.

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### 1. Introduction

The concept of the business model has evolved since the first appearance in 1957 in the academic literature (Wirtz, Pistoia, Ullrich, and Göttel, 2016). Discussion about the business model is growing ever since the era of the internet and dotcom boom (Wirtz et al., 2016). In the last decade some of the literature has provided a broader definition of the business model. Most of the literature define the concept of the business model and identify all the building blocks, components and elements. The definition of a business model most widely used and accepted business model proposed by Alexander Osterwalder and Yves Pigneur. (Osterwalder & Pigneur, 2010) proposed a business model canvas (BMC), which has nine building blocks that consist of value proposition, key partners, key activities, key resources, customer relationships, channels, customer segments, cost structures and revenue streams.

(Bouwman et.al., 2008) describes STOF business model consists of: Service, Technology, Organization and Finance. This model is the result of the research business models for innovative mobile services. By looking at some of the existing framework, (Lindgren & Rasmussen, 2011) attempts to determine the dimensions of which owned a business model. Seven dimensions of business model have been identified and proposed as Business Model Cube (Lindgren & Rasmussen, 2011). (Masanell & Ricart, 2009) proposed a business model framework to describe how value is created and captured by an organization through which decisions are made and the resulting consequences. Researchers from the University of St. Gallen recently presented St. Gallen Business Model Navigator. (Gassman et.al., 2013) apply the concept of business model consists of four dimensions: Who, What, How and Value.

In 2011, (Palo & Tähtinen 2011) identify the generic elements of a business model in the field of technology-based services and uses those elements to build a networked business model. A networked business model reflects a situation when it is impossible for a single company to govern all the relevant resources and activities needed in developing, producing, and marketing technology-based services.

In order to offer managed services solution a solution provider has to partner with other vendors such as Application Service Provider (ASP), Independent Software Vendor (ISV), data centre or co-locator, a system integrator, a management consultancy, a networking company and possibly a telecommunication company (Seltsikas & Currie, 2002).

In this study, researcher examine the networked business model framework in a case of SAP Managed Services. SAP Managed Services is selected as the focus of this study because of it requires the integration of multiple business processes and suppliers and because it embodies novel instances of networked business model that have not yet received attention in the research literature.

### 1.1 Networked Business Model

(Palo & Tähtinen, 2011) get the facts from his research that there is not common and universal definition of the concept of the business model at the operational level. A unique business model is needed to cover the action and choice in the fundamental level and daily practical operations.

The proposed business model is in the form of a framework that defining the elements of the business model.

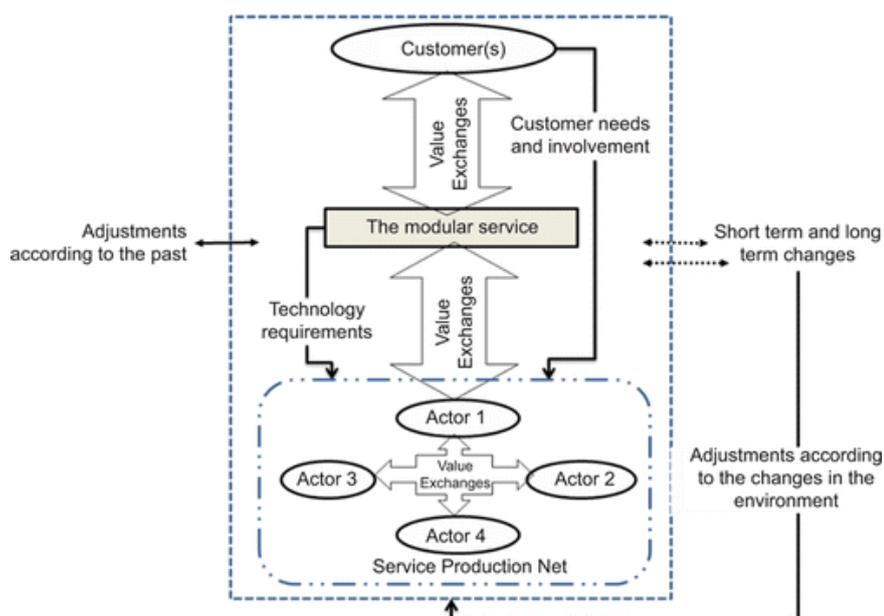


Fig. 1 Framework Networked Business Model (Palo & Tähtinen, 2011)

Network is the element of business model that proposed in Business Model Cube (Lindgren & Rasmussen, 2011) and St Gallen Business Model Navigator (Gassmann et al., 2013).

The component of BMC e.g key partners, key activities, key resources reflected in this framework as actors and their relationship. Customer relationships and channels reflected using customer and channel block. The variance of customer segment is not captured in the framework. If there are customer segment variances then business model for each customer segment must be drawn specifically. The money flow could be captured in the framework but not for the revenue and cost structure.

Technology and its dynamic improvement become important factor that affect the development and production of the technology-based services (Palo & Tähtinen, 2011). Services and technology are important components proposed (Bouwman et al., 2008).

### 1.2 SAP Managed Services

(CompTIA, 2014) defines managed services as management, monitoring, and maintenance of the network, software, hardware, and IT services related to external organizations (CompTIA, 2014). Managed services are often characterized by the Service Level Agreement (SLA) that includes provisions regarding performance, safety, efficiency, accountability, response time, and upgrades are relevant (CompTIA, 2014).

SAP is a software in the area of enterprise applications especially Enterprise Resource Planning (ERP) (Popp, 2011). SAP in managed services means delivery an SAP system “as a managed service”. Traditionally SAP systems had been implemented and managed “on premise” as products bought by customers. The most important disparities between SAP in managed services and installed in-house SAP application are the application are under control of the service provider while installed applications are offered as a product and accessed and controlled from the customer’s location. SAP in managed services could be using Infrastructure as a Service (IaaS) and accessed through Internet.

## 2. Methodology

According to Westerlund (2009) case studies are applicable for the research on networks due to their ability to capture the dynamics of the phenomena and to provide multisided view of the object of study in its specific context. Further, case study research may produce comprehensive, holistic and pragmatic descriptions of complex networks that have unique features and are context-specific. [11]

We use a qualitative research approach incorporating case study methodology comprising structured interviews and observations for the collection of primary data, as suggested by (Yin, 2009). For reasons of commercial confidentiality, the names of the company in this study are withheld.

### 2.1 Data Collection and Analysis

Our field-study process ran over 12 months period between January- December 2016, during which time we conducted semi-structured interviews with senior management in the selected case company. Representatives of the senior management were selected as the key informants.

The key informants were seen as viable sources of information in the critical evaluation of the representativeness and validity of the data. The interviews with the senior management were recorded and transcribed. In addition to conducting our intensive field study, we collected an extensive set of secondary data on the company, comprising agreement, quotation, and website. We also reviewed the relevant literature on technical approaches to SAP implementation.

The data collection was iterative: as data was collected and identified to guide further data analysis, which then coded on prior themes and concepts.

Table 6 . Interview Themes

Elements	Purpose	Interview Themes
<i>Service</i>	Understanding perception, issue, problem, and future expectation of the service	1. Perception of the services from the actor's perspective
		2. Issues, problem in service development
		3. Future expectation of the service
		4. Development strategy
<i>Actors</i>	Understanding the actors and their roles in development, production and marketing the service	5. Necessary actors in production and commercialization
		6. Necessary actors in maintaining the service
		7. Possible cooperation of the actor in the commercialization and production of the service
<i>Customer</i>	Understanding the customer	8. SAP Managed Services customer
<i>Value Exchange</i>	Understanding the money flow, benefit , resources and activity of the actor	9. Benefit of each actor
		10. Quotation scheme for the customer and its term and condition
		11. Quotation scheme t and discount to produce the service
<i>Technology</i>	Necessary technology in producing and developing the service.	12. Hardware and software elements in producing and developing the service

Elements	Purpose	Interview Themes
		13. Ideal use of technology
	The effect of technology development and changes	14. The effect of technology development and changes

Each element was aimed at further understanding the analysis of: a service, the customer, the actors, value exchange and technology.

After the second round, the data were analysed using QSR NVivo 11. The analysis first codified the data into themes, such as the elements and characteristics of business models, and then combined the themes into wider categories. The themes were also written out and illustrated figuratively. Quotes from the answers will be used to illustrate the logic of the analysis. As a result of the data analysis picture of the elements of a networked business model was developed.

### 3 Case Analysis

The study shows that SAP Managed Services defined as a service including SAP licenses, Annual Technical Support (ATS), Support Desk and rental server.

The service will determine the actors in the production, commercialization and maintain the services. The results showed that the SAP Managed Services has a greater role to face the competition. Bundling between implementation and managed services gives competitive advantage because the other SAP business partner-as competitor- did not have the IaaS or link is required in the provision of services. The study also shows technology had an important role. Technology changes will change the necessary actor.

The customer is an essential element of a networked business model, and customer needs have to be taken into account in developing and commercialising the service. Four customer segments has been identified. The study is producing four cases presenting the elements of a networked business model.

#### 3.1 SAP Managed Services for TLK Group

TLK Group are comprised of TLK's subsidiary previously using TLK's SAP system. As the diversity of the business of each subsidiary then TLK's SAP system could not accommodate the needs of difference business processes and their complexities.

Gradually, each TLK's subsidiaries implement SAP. In consideration of ease of implementation and daily operations, SMS requested to implement and manage SAP for TLK's subsidiary.



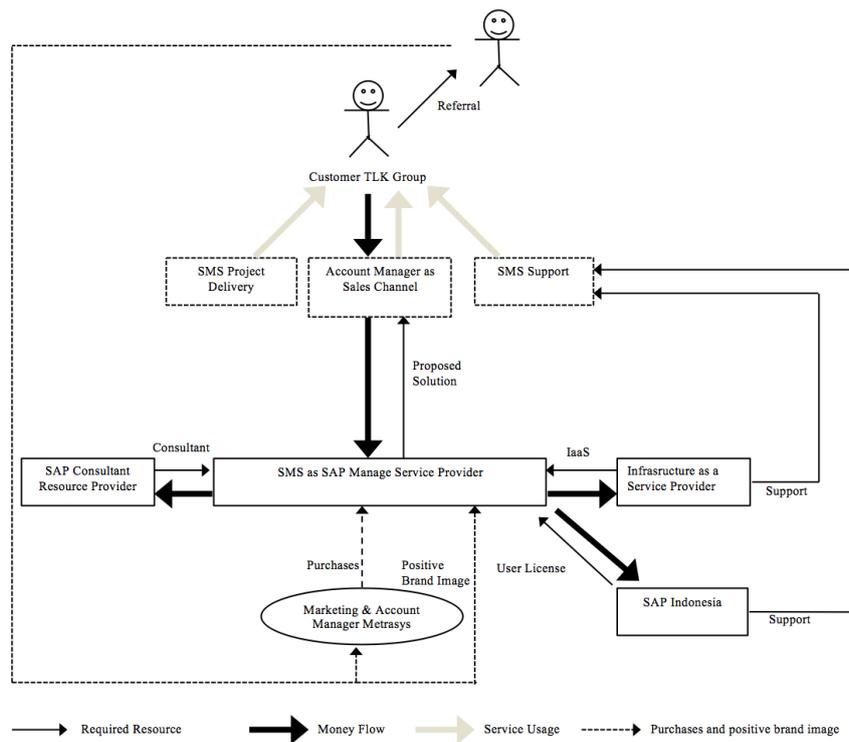


Fig. 2. Business Model for TLK Group Segment

### 3.2 SAP Managed Services for non-TLK Group

SAP Managed Services was originally intended for Telkom Group in 2015 began to be offered to enterprise that have not used SAP and need to implement SAP. SAP's technology in 2015 has changed. SAP released SAP HANA version based on in- memory computing technology. Changes in these technologies also bring changes to the hardware and infrastructure requirement.. This situation makes SMS must purchase the hardware and software needed. In the provision of hardware and software SMS made partnership with hardware distributor. Then, Hardware collocated in SCC's data center and use TLK's link.



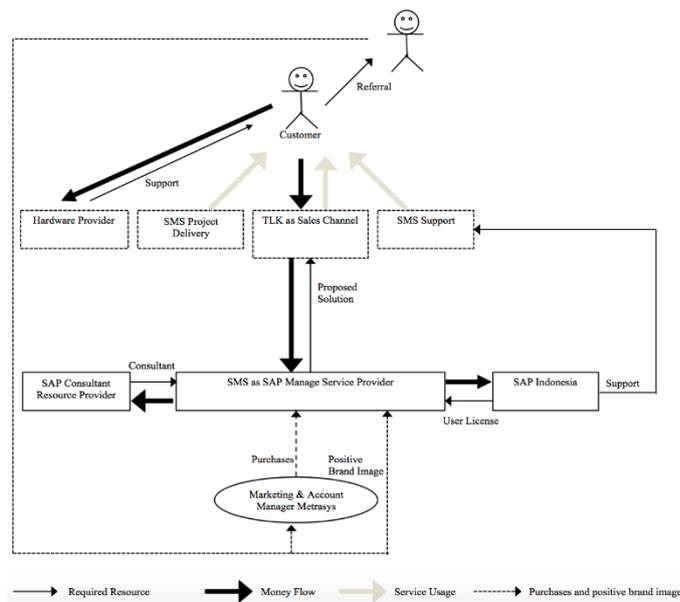


Fig. 5. Business Model for SAP existing user segment

#### 4 Conclusion

Framework networked business model able visualize the elements services, actors, customer and value exchange explicitly. Bundling between implementation and managed services gives competitive advantage because the other SAP business partner- as competitor- did not have the laaS or link is required in the provision of services. Technology changes have a significant impact especially SAP technology changes. The development of in memory computing technology affect the hardware and software provision then will affect the actor and its roles.

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## Business Strategy Based on Opportunity and Unique Competency to Improve Competitive Advantage of Tourism Business in West Java

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### Abstract

The role of regional creative industries is an integral part of nationwide creative economic development. The creative economy plays a strategic central role and a significant contribution to creating the added value for the national and regional economy. However, products of creative industries have not been the prime attractiveness of West Java. Hence, the region requires some uniqueness as an identity of the attractiveness of tourism in order to be competitive to other regions. In this sense, West Java needs a business strategy to leverage its competitive advantage. The purpose of this study is to investigate the influence of the developing and exploiting an opportunity and competency, business strategy, and competitive advantage of the tourism sector in West Java. This research is a literature review for building literature background for the next phase of research, which will be an empirical research. The empirical research will be conducted in 27 regencies and cities in West Java. The expected outputs of this research are some hypotheses about the influence of creative economy, which consist of developing and exploiting opportunity and unique competency on business strategy and competitive advantage of the tourism sector in West Java.

Keywords: Business Strategy, Competitive Advantage, Creative Economy, Opportunity, Tourism, Unique Competency.

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### Introduction

Indonesia is a country that has many potential scattered throughout the archipelago. Creativity and innovation in national development are required to optimize these potentials, including natural resources, cultural diversity, and human resources. In line with the trend of the world today, the Indonesian government has initiated the concept of the creative economy to support local, national, and global economic development.

The terms of 'creative' and 'economy' are relatively not new. Howkins (2014) asserted that the newness is the nature of the relationship between them. In this sense, the creative economy is an evolving concept (Wijngaarde, 2015) from the cultural to creative industries (Garnham, 2005; Cunningham, 2002), based on creative assets potentially generating socio-economic growth (Santos-Duisenberg, 2015). As emphasized by DeNatale & Wassall (2007), creative economy is represented by the 'cultural core' that includes occupations and industries that focus on the production and distribution of cultural goods, services and intellectual property.

Santos-Duisenberg (2015) highlighted that creative economy is a new source of economic growth that needed to promote. At the heart of the creative economy is the creative industry. The creative industries are among the most dynamic sectors in the global economy. They embrace economic, cultural and social aspects interacting with technology, information, and tourism sectors.

Tourism in Indonesia, along with creative economy and creative industries, is a potential renewable sector to be developed. In this regard, the tourism sector, from year to year, has increased significantly. The tourism sector in general can be a trigger for economic growth and social welfare. The tourism sector is able to provide a positive impact on the socioeconomic conditions of society.

In Indonesia, in recent years, the tourism industry ranks 4<sup>th</sup> or 5<sup>th</sup> as foremost income for the country. Meanwhile, other business sectors such as oil and gas, coal, rubber, and textiles, which rank 1<sup>st</sup> to 4<sup>th</sup>, tend to decrease in

accordance with their character as “non-renewable” products. It is believed that those sectors will be exceeded by the tourism sector in 2019, with a target of 275 millions of tourist arrivals (foreign and domestic). Therefore, the government sets tourism as one of the five leading sectors and provides significant budgets to the achievement of the main targets of tourism development (Ministry of Tourism of Indonesia, 2016).

The issuance of Presidential Decree No. 92/2011 formally initiate creative economic activity in Indonesia, because it has strategic value for Indonesia: providing significant economic contributions, creating a positive business climate, raising the image and identity of the nation, using renewable resources, encouraging the creation of innovation, and providing positive social impact. Aside from creating value-added, creative economy also employs many workers. Creative economy is also creating high foreign exchange. In relation to tourism, creative economy is able to improve the quality of tourism as an attraction in the tourism destinations as well as a media campaign for tourism.

National creative economic development cannot be separated from the role of the regional creative economy. Development of the creative economy in regional areas is characterized by several conditions. These conditions are the commitment of regional leaders to develop the creative economy in the region, where public areas are utilized by people to develop into a creative, sustainable infrastructure to support the creative process, the presence and activity of the creative community, events as media appreciation of the creative industries, support from local government, the existence of formal education institutions that support creative industries, and the creative industry development planning document. Public areas that can be developed are cultural park, square, youth centers, malls or plazas, sports arenas, museums, galleries, or other places that can be used as gathering places for the perpetrators creative in a city or county, or even at the district level.

West Java is one of the provinces in Indonesia which has a great tourism potential. West Java has a natural condition with a complex geological structure. West Java has beaches, mountains, forests, rivers, waterfalls, agro, lakes, caves, springs, islands, national parks, wildlife sanctuaries and nature reserves. The biggest attractions of West Java are the natural sector, as many as 335 attractions, then the cultural sector with only 121 attractions and special interest sectors with 158 attractions. It shows that the culture, which is part of the creative economy product, is still not the main attraction in West Java. Based on data from the Department of Tourism in West Java in 2012, it is known that the highest number of visits, both foreign tourists and domestic tourists are to the object natural attractions, namely to Ciater (Subang Regency), Tangkuban Perahu (Subang Regency), Pondok Bali (Subang Regency), and Taman Safari Indonesia (Bogor Regency).

West Java has a lot of natural tourism potential, but when compared with other regions, such as Bali, West Java is not a priority tourist destination. In a study of committee drafting team of creative economic development in five areas of West Java in 2011, it is known that the bureaucrats in the area are facing difficulty to implement the Presidential Instruction No. 6/2009, which became the basis of creative economic development policy. The team also found that the economic potential of creative-based arts and culture is the basic capital that needs to be developed systematically. The main issues facing the region are the problem of financial capital, infrastructure, promotion, marketing, and the minimal knowledge capital.

As a consequence, West Java requires a specific characteristic or uniqueness as the identity of the tourism attraction of the object to be competitive in the other provinces. To improve competitiveness, it needs a business strategy in supporting competitive advantage, which is the company's ability to display one or more ways in which competitors are not able to match it. Competitive advantage is built and maintained by adding value for the customer (Dirisu et al., 2013). Competitive advantage is a collection of strategies to determine the benefits of a company from the competition between other companies. Measuring competitive advantage, according to Bharadwaj et al. (2008), is the uniqueness of the product, rare, not easily replaced that does not have a similar replacement.

Almost in all organizations, there is a good association between the company's competitive advantage and its performance. These advantages lead the company towards attaining high profits. According to Rose, et al. (2010), it is inspected that the organizational edge from the resource based view is as vital as it can be. It is used



as conceptual guideline for business organization for enhancing their differential advantage position. The performance via appliance and manipulation of known internal resources of companies are also increased by using competencies. Morgan, et al. (2004) asserted that general work has shown a considerable association between these two variables. Porter (1980) gave us the hypothesis of sustainable competency that was strongly established as the prime account of sustained superior performance (Rose, et al., 2010).

Business strategy in the tourism sector is influenced by external and internal factors. External factors associated with developing and exploiting opportunities, while internal factors associated with developing and exploiting the unique competence. If the competitive advantage is not optimal, then the performance of businesses in the tourism sector will be hampered. It is due to the lack of business strategy implementation based on opportunity and unique competency.

This article explores the implementation of business strategy in tourism sector based on opportunity and unique competency in a creative economy framework to improve the competitive advantage of the tourism sector. It is a preliminary study to further analyze the business performance in tourism in West Java.

## **Literature Review**

### *Strategic Management and Business Strategy*

Strategic management is a set of managerial decisions and actions of long-term decision making in the company. This includes the analysis of environmental (external and internal), strategy formulation, strategy implementation, and evaluation and control (Wheelen and Hunger, 2012). It is something that made the manager to set the company's strategy to achieve the goal of the company (Robbins & Judge, 2012). It is also an art and knowledge in formulating, implementing, and evaluating decisions of a cross-functional organization to achieve its objectives (David, 2013). It can be concluded that strategic management is an art and knowledge in formulating and evaluating decisions in order to achieve the objectives of an organization, as well as strategic management is used to refer to the formulation, implementation, and evaluation of strategies.

The purpose of strategic management is to exploit and create a variety of new and different opportunities for long-term planning. The strategic plan is a tactic for a company and strategic planning is also widely believed as the answer to all problems. Strategic management is a set of decisions and actions that are used to formulate and implement strategies that are highly competitive and appropriate for the company and its environment to achieve organizational goals. Strategic management tried to organize qualitative and quantitative information in a way that permits the adoption of effective decisions under conditions of uncertainty that surrounded him. In essence, strategic management is about how to obtain and sustain a competitive advantage, and a strategic plan is a tactical game of a company.

The company's strategy can be seen as a theory of managers about how to obtain and sustain a competitive advantage. A company can achieve a competitive advantage by improving internal resources, capabilities, and relationships to the opportunities in the external environment. Strategy as a theory about how to compete gives managers a map that is used as guide directions in the area of competition. The more accurate the map, the more strategic is the decision making of managers. In a competitive world, managers test their theory in the market. The relative performance of a company in a competitive market to provide feedback required managers to assess how well the strategy is to achieve a competitive advantage. Thus, the strategic management process is a never-ending cycle of analysis, formulation, implementation, and feedback of business strategy.

This paper utilizes the concept of business strategy from Porter (2008). It is the art, science, and craft of formulating, implementing and evaluating cross-functional decisions that will enable an organization to achieve its long-term objectives. It is the process of specifying the organization's vision, missions, and objectives, developing policies and plans, often in terms of projects and programs, which are designed to achieve these objectives and then allocating resources to implement the policies, and plans, projects and programs. Strategic management seeks to coordinate and integrate the activities of the various functional areas of a business in



order to achieve long-term organizational objectives. A balanced scorecard is often used to evaluate the overall performance of the business and its progress towards objectives. The dimensions of business strategy are the entry of competitors, the bargaining power of buyers, the threat of substitutes, the rivalry among the existing players, and the bargaining power of suppliers.

It is inevitable that tourism is an alternative form of economic development (Wilkinson, 1989). The involvement of government and related industries in tourism may create possible business strategies to develop tourism. It is important to formulate an integrated business strategy in tourism, especially in developing human resources through integrated strategy for education and training in tourism sector (Pollock and Ritchie, 1990). In this information era, the information technology (IT) is a central part of tourism business strategy (Mutch, 1993), including information and communication technology, telemarketing, and media. In many countries, business strategy in tourism has been embraced to reduce poverty and enhance economic development (Croes & Kubickova, 2013). A strategy to enhance the competitiveness of company should be oriented towards creativity and innovation. In this sense, the creative economy is indispensable to the tourism business.

### *Creative Economy and Creative Tourism*

Economic orientation evolved; experienced a shift from the era of agricultural economy, industrial economy, until now the creative economy. Developed countries began to realize that this time they cannot rely on the rule in the industry anymore, but must rely more on human resources creativity, so that in the 1990s it began a new economic era that intensifies information and creativity that has been popularly called creative economy (Ministry of Trade of Republic of Indonesia, 2009).

Development in the tourism sector has a very important meaning in terms of various aspects. Tourism has contributed to foreign exchange earnings, employment creation, expanding business opportunities in the formal and informal sectors, increasing revenues to the central government and the regions through various taxes and levies, increasing people's income, and the distribution of development which is reflected in the Gross Domestic Product (GDP) each year.

Creative tourism is considered to be a new generation of tourism that supports the creative economy. The first generation was "beach tourism," in which people come to a place for relaxation and leisure; the second was "cultural tourism," oriented toward museums and cultural tours. "Creative Tourism" involves more interaction, in which the visitor has an educational, emotional, social, and participative interaction with the place, its living culture, and the people who live there. They feel like a citizen. This third generation requires that managers also evolve, recognizing the creativity within their city as a resource, and providing new opportunities to meet the evolving interests of tourists. While creative tourism must be linked to culture, the particular cultural expressions will be unique to each place.

Creative economy within the scope of business in the tourism sector requires a particular business strategy, bearing in mind the strategic environmental analysis. In connection with that, the environmental analysis at least pays attention to external and internal factors. External factors associated with developing and exploiting opportunities (DEO), while internal factors associated with developing and exploiting the unique competence (DEC). This paper seeks to analyze the relationship of DEO and DEC as internal and external factors of creative economy with business strategy in tourism sector.

### *Conceptual Framework*

The proposed framework integrates the develop & exploit opportunity (DEO) and the develop & exploit unique competency (DEC) as external and internal aspects of creative economy that influence the business strategy and competitive advantage in tourism sector. This framework can be summarized as follows:



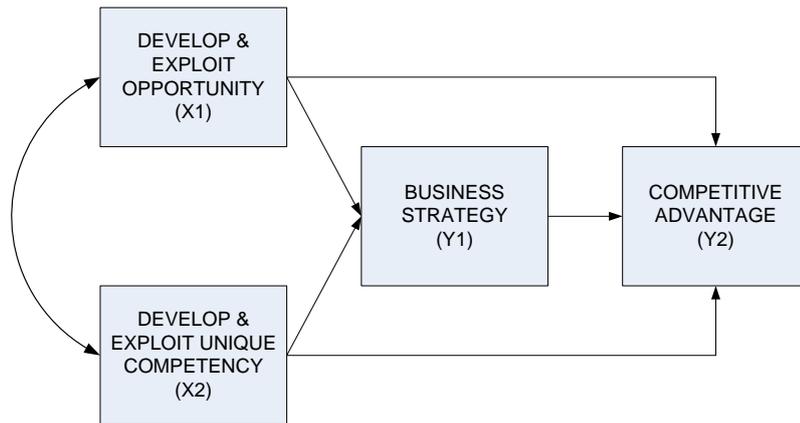


Fig. 1. Conceptual Framework.

The hypotheses of this study are as follows:

- H<sub>1</sub> The development and exploitation opportunity (DEO) has a significant influence on business strategy (BS).
- H<sub>2</sub> The development and exploitation competency (DEC) has a significant influence on business strategy (BS).
- H<sub>3</sub> The development and exploitation opportunity (DEO) has a significant influence on competitive advantage (CA).
- H<sub>4</sub> The development and exploitation competency (DEC) has a significant influence on competitive advantage (CA).
- H<sub>5</sub> The business strategy (BS) has a significant influence on competitive advantage (CA)

### Research Methodology

The research will be conducted in West Java using all staff at Government tourism office in West Java with 27 Departments of Tourism in the District/City. Assuming the employee at any Department of Tourism in the District/City is in average of 50 people, the total population of staff employees is 1.350 people. Associated with hypothesis testing, a technique most appropriate sample size used is the technique of *a priori* sample size for SEM. The minimum sample size that should be taken in this study is 324 respondents. Data will be collected on a Likert type scale, where 1 indicated minimum agreement and 5 indicated maximum agreement. Then we will process the data using partial least square (PLS) method considering the flexibility given by the PLS method and the total respondent that we can collect during this modeling approach to SEM with no assumptions about data distribution (Vinzi et al., 2010). Thus, PLS-SEM becomes a good alternative to CB-SEM when the following situations are encountered (Bacon, 1999; Wong, 2013): 1. Sample size is small. 2. Applications have little available theory. 3. Predictive accuracy is paramount. 4 Correct model specifications cannot be ensured. We will apply Cronbach's Alpha reliability method to check the reliability of all items in the questionnaire using SmartPLS.

### Discussion

This paper is descriptive and verification. Descriptive research is usually designed to present some aspects of the temporary from an environment when a hypothesis is said to be tentative and speculative in a coverage or discussion. Verification research will basically test the truth of a hypothesis which is implemented through data collection in the field. This study is a pilot study, which will test the effect of the development and exploitation opportunities (DEO) and the development and exploitation of competence (DEC) through the business strategy (BS) on the competitive advantage (CA) in tourism sector in West Java.

The study of literature and field study will be developed in this research. The technique of collecting data is questionnaires. Locations of the research are on various tourist destinations in the District/City throughout West Java. The descriptive analysis will be used using SPSS and structural equation modeling (SEM) to test the hypotheses.

The variables refer to the all variables and sub-variables in main hypotheses, supporting hypotheses, and sub-hypotheses. Decision to exploit an opportunity represents a commitment to market entry. To gain a greater understanding of this decision we refer to the entry strategy literature in which the success of a pioneer has been explained primarily in terms of its first mover advantages. Develop & Exploit Opportunity (DEO) is the first independent variable (X1) that explores five dimensions: (1) Government participation (X11), (2) Private sector participation (X12), (3) Social capital, civil society (X13), (4) Education/training in arts and culture (X14), and (5) Media and communications (X15) (Carpenter & Nakamoto, 1989; Lieberman & Montgomery, 1988; UNDP, 2013).

Distinctive to exploit competency is a set of unique capabilities that certain firms possess allowing them to make inroads into desired markets and to gain advantage over the competition; generally, it is an activity that a firm performs better than its competition. To define a firm's distinctive competence, management must complete an assessment of both internal and external corporate environments. When management finds an internal strength that both meets market needs and gives the firm a comparative advantage in the marketplace, that strength is the firm's distinctive competence. Taking advantage of an existing distinctive competence is essential to business strategy development. Develop& Exploit Competency (DEO) is the second independent variable (X2) that explores five dimensions: (1) Creative Workforce (X21), (2) Creative Business (X22), (3) Cultural Institutions (X23), (4) Heritage Building and Sites (X24), and (5) Intangible Cultural Heritage (X25) (Snow et al, 1984; UNDP, 2013).

Business strategy (BS), as intervening and dependent variable, explores five dimensions: (1) The entry of competitors (Y1), (2) The bargaining power of buyers (Y12), (3) The threat of substitutes (Y3), (4) The rivalry among the existing players (Y4), and (5) The bargaining power of suppliers (Y5) (Porter, 2008).

Competitive Advantage (CA) as intervening and dependent variable, explores four dimensions: (1) The tourism performance and impacts (Y21), (2) The ability of a destination to deliver quality and competitive tourism services (Y22), (3) The attractiveness of a destination(Y23), and (4) The policy responses and economic opportunities (Y24) (Dupeyras, & MacCallum 2013).

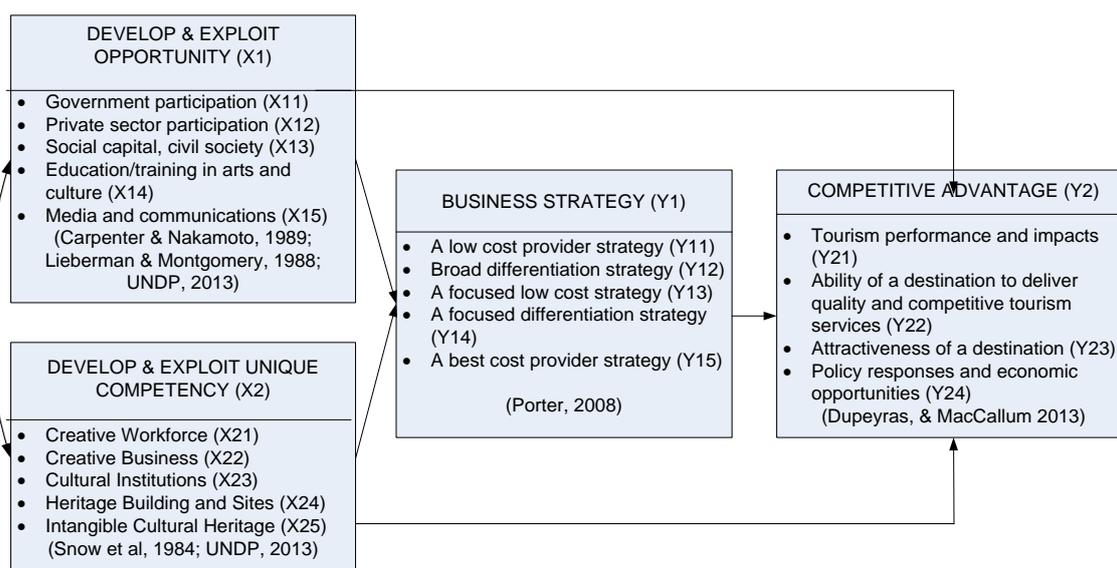


Fig. 2. Relationships of Variables.

Data will be collected through questionnaires. Enclosed questionnaire contains questions about the characteristics of the respondent, the respondent experience, the respondents' assessment, and response to the variables studied. Validity and reliability of the instrument will be used to determine the extent of the measuring instrument. In this study, two types of analysis are used (1) descriptive analysis to measure the

performance of each variable and (2) analysis of verification of testing the hypothesis by using statistical tests. The descriptive and verification will analyze the objective of research: to examine the influence of the development and exploitation opportunity (DEO) and the development and exploitation of competence (DEC) through business strategy (BS) on competitive advantage (CA) of tourism business in West Java. Using SEM, each dimension of a variable will be explained. The simultaneous and partial effect of DEO and DEC through business strategy (BS) on competitive advantage (CA) will be analyzed, including the direct and indirect effects.

In DEO, it can be seen how the dimensions of government and private sector participation can reflect the external factors that must be anticipated, as well as the social capital, civil society, education/training in arts and culture, and media and communication. Tourism sector as a part of creative industry may promote the creative economy as a new source of growth. The government and private sectors will cooperate in some initiative for integrated public policies and institution-building in the area of the creative economy and industries. Liaising with governments, artists, creators, academia and civil society will strengthen the creative economy in developing countries, such as Indonesia.

In DEC, it can be seen how the dimensions of creative workforce, creative business, cultural institution, heritage building and sites, and intangible cultural heritage can reflect the internal factors that must be strengthened. In this sense, tourism sector as a part of creative industry can foster income generation, job creation, and export earnings, as well as social inclusion, cultural diversity and human development. It embraces economic, cultural and social aspects interacting with technology and tourism objectives. The DEC may produce tangible products and intangible services able to generate revenues through trade and intellectual property rights.

In business strategy (BS), it can be seen how the dimensions of the entry of competitors, the bargaining power of buyers, the threat of substitutes, the rivalry among the existing players, and the bargaining power of suppliers can reflect the formulation and implementation of business strategy in tourism sector. The right business strategy of tourism business may facilitate understanding of the key issues underlying the emerging creative economy and its development dimension. It may further identify target investment, business opportunities and competitive advantages to strengthen creative industries.

In competitive advantage (CA), it can be seen how the dimensions tourism performance and impacts, ability of a destination to deliver quality and competitive tourism services, attractiveness of a destination and policy responses and economic opportunities can reflect the formulation and implementation of competitive advantage in tourism sector. The competitive advantage will describe how the tourism competition sector as a subject to determine economic factor.

The relationship between DEO and DEC is expected to be relatively high, as both variables affect each other. It is also expected that DEO and DEC have significant influence on CA through BS, which indicate the DEO and DEC a significant impact on competitive advantage of the tourist business in West Java through business strategy. This is consistent with theories that are used to build hypotheses and framework of thinking, that the DEO and DEC have a positive and significant impact on competitive advantage (CA) through business strategy (BS) partially and simultaneously.

Each dimension may have reflected the dominant effect on the latent variables. To that end, the business entities in tourism sector in West Java should focus on the prevailing aspects of the dimensions studied. Simultaneously, if the tourism business in West Java wants to be successful in achieving competitive advantage, the business strategy must pay attention to the influential independent variables (DEO and DEC). It is interesting to note that the role of media and communication in effective way may strengthen the positioning of a tourism agency to gain a specific competitive advantage. Creative application made by tourist agency of tourism destination can facilitate the tourist to book hotels or restaurants, or to visit attractive tourist destinations. In sum, it creates a new kind of creative rivalry to promote the tourism.



## Conclusion and Recommendation

It is expected that the independent variables of creative economy will have a significant influence on competitive advantage through and business strategy of tourism business in West Java. The main hypothesis substantiates that the development and exploitation opportunity (DEO) and the development and exploitation of competence (DEC) have a significant influence on competitive advantage through business strategy partially and simultaneously. The sub-hypotheses also substantiate that the development and exploitation opportunity (DEO) has a significant influence on competitive advantage through business strategy, the development and exploitation competency (DEC) has a significant influence on business strategy. The development and exploitation opportunity (DEO) and the development and exploitation of competence (DEC) have a significant influence through business strategy (BS) on competitive advantage (CA), and the business strategy (BS) has a significant influence on competitive advantage (CA).

Thus, this paper presumes that by developing and exploiting opportunity, the tourism business can respond to external environmental factors and to strengthen internal environmental factors so that any tourism business in West Java can formulate and implement business strategies to achieve competitive advantage to improve business performance. Future research may also adopt a more dynamic approach to examine the influence of DEO and DEC on business strategy, competitive advantage, and business performance of tourism business in West Java. By involving other dependent variables, it is expected to have an integrated model as a dynamic process to optimize business performance in tourism business in general.

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## Incentive System Impact On Individual Performance Through Motivation In A Corporate University In Indonesia

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### Abstract

During the year of 2009 to 2014, the performance of a Corporate University in Indonesia stays in stagnancy at moderate level. The stagnancy is showed by the result of employee's satisfaction survey which rates at 61.2% and employee's performance at 60.43%. This figure shows the contradiction of the incentive purposes that expected to stimulate the performance of the employees.

The aim of this research is to measure the effect of incentive system towards employee's motivation, the effect of motivation towards employee's performance, and the effect of incentive system directly towards employees' performance in a Corporate University. The data process uses SPSS 20 and analyse it by using multiple regression. The sample of this study is 149 out of 224 population. The data is collected by using questionnaire which consists of 55 items including statements of incentive system, motivation, and individual performance.

The result of this study shows that incentive system has positive and significant impacts towards employees motivation. Employees motivation positively and significantly impacts on employees performance. While incentive system has no significant impact directly towards employees performance in a Corporate University in Indonesia.

Therefore, a corporate university should consider incentive system as a motivator factor in influencing employees performance. The management of corporate university should create attractive incentive system that will motivate employees. It is suggested that a Corporate University evaluating the current incentive system. The incentive system not only focus on financial incentive but also taking into account non financial benefits.

**Keywords:** incentive system, motivation, individual performance

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### 1. Introduction

The rapid development of knowledge, technology, and information as well as business consequently leads to tight competition among business actors motivated by the desire to be the paramount in the business sector. Yet, stepping at the top of business sector is not an easy task to do since the entire business actors share similar desire so that each of business actor perquisites to formulate the accurate business planning and conduct high level of performance, otherwise the company will only fall to failure. Thus, each company should formulate the accurate planning and strategies to compete with its counterparts.

As one of the most important component of the company, human resource is always treated in a number of ways to ensure its performance consistency, such as applying the incentive system (reward) so that the work satisfaction is fulfilled. Thus, incentive is expected to stimulate or motivate the employee to do the work perfectly.

According to 2013's result engagement driver, the aspect of employee's work satisfaction of the corporate university is considered as less satisfying as indicated by a number of aspects such as : compensation and benefit, performance management and training and development. The issue continues in 2014, despite a number of improvement, the concerned aspects had not improved significantly and thus the rate of employee's work

satisfaction is on the rate 61.2% or categorized as Low Satisfaction Index.

The Corporate University has applied incentive system based on the unit and individual performance. Yet, since its application in 2007 and revised twice, the system's effectiveness has not been evaluated.

Thus, this research analyzes the effect of incentive system towards employees performance through motivation in a Corporate University in Indonesia.

### 1.1 Research Purposes

1. Analyzing descriptively the system of incentives in a Corporate University in Indonesia.
2. Analyzing descriptively the employees motivation in a Corporate University in Indonesia.
3. Analyzing descriptively the performance of employees in a Corporate University in Indonesia.
4. Analyzing the impact of incentive system on motivation in a Corporate University in Indonesia
5. Analyzing the impact of motivation on employees performance in a Corporate University in Indonesia
6. Analyzing the impact of incentive directly to employees performance in a Corporate University in Indonesia

## 2. Theoretical Background

Cascio (1995:377), "... an incentive are reward variables, granted to individuals on groups, that recognize difference in achieving result. They are designed to stimulate or motivate greater employee effort on productivity". The passage implies that Cascio views incentive as reward variable granted to certain performance achievement of assigned performance standard and given as a form of motivation to its productivity. Cascio (2013:441), "...Properly designed incentive programs work because they are based on two well-accepted psychological principles;(1) increased motivation improves performance and (2) recognition is a major factor in motivation. Cascio stated requirements of effective incentive systems include (1) Be simple. The rules of the system should be brief, clear, and understandable, (2) Be specific, (3) Be attainable. Every employee should have a reasonable chance to gain something, (4) Be measurable.

Moreover, Robbins and Counter (1999) also state that work motivation is the willingness to put high effort in achieving organizational purposes conditioned by effort capacity to fulfill certain needs of individual. Further, Robbins and Judge (2013) re-explains their definition of motivation as a set of processes which covers individual's intensity, purpose, and tenacity in putting the effort for certain goal. Flippo (2003) also explains similar explanation of motivation as the essence of individual or company's conducts in achieving the purpose and interest. As stated by Werther Jr. (2006: 408) that the incentives is applied to motivate employees to achieve the organizational goals. "...An organization's success requires an effective strategy that is attained by achieving the underlying goals and objectives. Managers and hr departments can use incentives and gainsharing as tools to motivate employees to attain organizational goals and objectives because these are compensation approaches that reward specified outcomes. Incentive systems link compensation and performance by rewarding performance instead of seniority or hours worked. Although incentives may be given to a group, they often reward individual behavior

Bernardin & Russel (2009) define performance as the record of outcomes product on a specified job function or activity during a specified time period. In line with Bernardin and Russel, Mangkunegara (2009) states that human resource's performance is originated from the terms 'job performance' or 'actual performance', while Armstrong and Baron in Wibowo (2009) state that the term 'performance' is not merely defined in term of result or achievement, but also includes the process of which the employee conducts the works.

Gungor in his journal (2011) states that financial reward affects employee's performance in positive way, while his second hypothesis is aimed at measuring the effect of motivation as an intrinsic and extrinsic mediation variable affecting the performance of the employee. The last hypothesis is concerned with relationship of reward management towards motivation and proved by the positive relationship between reward system and extrinsic motivation. Extrinsic motivation is explained by financial reward variable while the intrinsic motivation is explained by non-financial reward variable. The result of this research shows that intrinsic motivation does not



affected by monetary compensation design but promotion chance

In this study, the researcher assign incentive system as independent variable, motivation as intervening variable and individual performance as dependent variable.



Figure 1. Research Framework

### 3. Research Methodology

The data collection methods in this study uses two sources of data, i.e. the primary and secondary data. Primary data obtained directly from respondents by distributing the questionnaires to the sample. The population in this study are the entire employees of the Corporate University. Total number population of the corporate university is 224 employees. By implementing Slovin’s formula at 5% error rate, the total sample of the research is 144 people. Then, the sampling technique used in this study is proportionate random sampling technique, because the population is not homogeneous and proportionally stratified, so that the probability sampling technique was suitable to be implemented in this study.

A survey method was employed to gather data from respondents, the 175 Corporate University’s employees. The 149 valid collected data, out of 152 collected data, was analyzed using a descriptive and quantitative investigation approach.

The secondary data are data which had been compiled by other parties outside the researcher. In this research, the secondary data were taken from employee database, employee’s satisfaction report, related literatures, company profile of the Corporate University, employee’s performance evaluation report, and other necessary documents.

### 4. Operationalization of Variables

The operational variables of the research are classified into three clusters: independent variable, intervening variable, and dependent variable. Those variables refer to several related literatures and scientific journal.

Tabel 1. Operationalization of variables

Variable Type	Variable	Dimension
Independent	System Incentive	Simple
		Spesific
		Attainable
		Measurable
Intervening	Motivation	Achievement motivation
		Affiliation motivation
		Competence Motivation

Variable Type	Variable	Dimension
Dependent	Performance	Power Motivation
		Quality of Work
		Level of Attendance
		Time Management

There are 55 items in the questionnaire, and before it is circulated to the respondents, their validity is put into test using three types of validity testing, namely face validity, content validity, and construct validity, further to test the construct validity of a research instrument, Four experts were involved in the assessment of the measurement model, which included two practitioners and two academics, the researcher conduct a test based on the formulation of Pearson product moment correlation. The result of validity test shows that the value of r count of each indicator, incentive system, motivation, and individual performance is greater than the value of r tables, thus it is declared that all the research questions are valid and can be used as measurement tool.

The reliability test was conducted to determine whether the indicator or questionnaire of the research was appropriate to be an instrument of variable measured. The reliability of an indicator or questionnaire could be determined from the value of cronbach's alfa ( $\alpha$ ), i.e. if the value of cronbach' alfa ( $\alpha$ ) is bigger than ( $>$ ) 0.60, then the indicator is considered as reliable. The overall result of the reliability test shows that all variables have cronbach' alfa value value more than 0.6, which mean all variables are reliable.

### Hypothesis

The hypotheses of the research were:

H1 :Incentive system significantly influence the employee's work motivation of the Corporate University.

H2 :Motivation significantly influence the achievement of individual performance of employee the Corporate University.

H3 : Incentive system significantly influence individual performance of employees the Corporate University.

## 5. Findings and Discussion

Based on the result of the descriptive analysis of the research, the incentive system (X) which is consisted of four dimensions namely simple, specific, attainable, and measureable reaches the percentage of 79.29% or categorized as fair. It means that the employees of the Corporate University perceive that the implementation of incentive system has not yet fully appropriate. The variable of motivation (Z) consists of four dimensions namely achievement motivation, affiliation motivation, competence motivation, and power motivation. The percentage of motivation variable is 85.98% or categorized as very high. It means that the corporate university employees are highly motivated. The variable of individual performance which consists of three dimensions namely quality of work, level of attendance, and time management and reaches the percentage of 82.53% or categorized as high. It shows that the employees of the Corporate University have high performance level.

### 5.1. Test model of incentive system towards motivation

The following table shows the result test of causal relationship between incentive system and motivation. Based on table 2, it shows that significant value of incentive system toward motivation is less than 0.05. It indicates that incentive system has significant influence toward motivation. In conclusion, H1 is supported

Table 2. The influence of Incentive System towards motivation

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	38,458	4,986		7,712	,000
Incentive_system	,715	,108	,479	6,612	,000

a. Dependent Variable: Motivation

The standardized coefficients value of incentive system is 0.479. This means that incentive system can improve



motivation level of employees at 0.479 times.

This proven of hypothesis is in line with the research result conducted by Gungor (2011) At Global Bank which states that, "Reward management system applications are positively related to motivation". Moreover, Cascio (1995) also says that incentive is a reward variable granted to certain individual of a group, in which the individual is distinguished by the differences in work achievement. Based on these results, incentive systems can used to improve the level of employees motivation.

## 5.2. Test model of Incentive and Motivation toward employees performance

Multiple regression analysis is used to examine the influence of more than one independent variable toward the dependent variable. In this research, the researcher analyzes the effect of incentive system on motivation and the effect both incentive system and motivation towards the performance of employees in the Corporate University.

Table 3. The incentive system and motivation impact on employees performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	20.881	3.872		5.392	.000
1 Incentive system	.039	.081	.030	.479	.633
Motivation	.624	.054	.728	11.549	.000

a. Dependent Variable: Employees Performance

The result of multiple regression in table 3 shows that the value of the constants (a) = 20.881. Based on the coefficient regression values, it concluded that:

- 1) The standardized coefficient between incentive system and individual performance is amounted to 0.030 (positive). The amount of  $T_{\text{calculate}}$  is 0.479 while  $t_{\text{table}}$  is 1.655. This means that  $t_{\text{calculate}}$  less than  $t_{\text{table}}$ . It indicates that  $H_0$  is supported and  $H_a$  is rejected. It concludes that there is a positive influence from incentive system to employees performance but there is no significant effect.

This result in line with the research result conducted by Indrawati, et al (2015) which states that the incentive system shows little and insignificant effect towards employees' performance of retail banking. For most employees at XYZ Bank, the system of incentives provided by the company has no direct influence on the work achievement as expected by the company, but it has indirect effect towards employees' performance mediated by motivation.

- 2) The standardized coefficient between motivation and individual performance is amounted to 0.728 (positive), and reveals liner relationship.  $t_{\text{calculate}} = 11.549$  while  $t_{\text{table}} = 1.655$ , so  $H_0$  is rejected and  $H_a$  is supported which means that significant effect occurred. Thus, motivation affects individual performance positively and significantly.

Based on the calculation analysis as shown in table 3, motivation affects positively and significantly towards the performance of individual employees at the Corporate University, amounted to 72.8%. Then, it can be interpreted that the achievement of individual performance of employees at the Corporate University is 72.8% affected by motivation, so that any increase / improvement of employees motivation will increase the achievement of individual performance of employees, amounted to 72.8%.

Thus, it indicates the the hypothesis that there is a positive and significant influence of motivation towards performance of employees is proven. This hypothesis is in line with the research conducted Gungor (2011) at Global Banks which states that, "Motivation is Significantly and positively related to employee performance". In addition, Robbins and Coulter (2012) also state that motivation is high willingness to make efforts to achieve organizational objectives which are conditioned by the effort's ability to meet the needs of a particular individual. This means that motivation affects positively and significantly towards the performance of individual employees at the Corporate University.



### 5.3. Regression Model

Based on the the calculation as explained before by using regression analysis, the following figure shows interrelation among variable consist of incentive system, motivation and employees performance. This study proved that incentive system has no significant influence to employees performance. Incentive system can influence employee performance through motivation. Therefore, motivation can be considered as intervening variable.

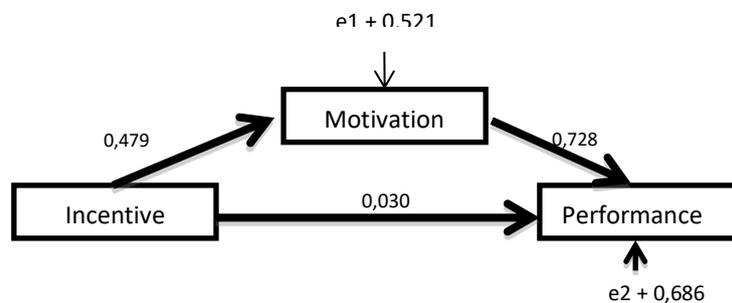


Figure 2. The Interrelation of Incentive System toward Motivation and Performance

The size of error value of each variable's influence towards dependent variable is obtained using the following formulation:

$$Pe_1 = \sqrt{1 - 0,479^2} = 0,521$$

$$Pe_2 = \sqrt{1 - 0,728^2} = 0,686$$

In trimming theory, the research validity model testing is observed using the calculation of total coefficient of determination, with the following formula:

$$R^2_m = 1 - P^2_{e_1} P^2_{e_2} \dots P^2_{e_p}$$

$$= 1 - (0,521)^2 (0,686)^2$$

$$= 1 - (0,271) (0,471)$$

$$= 0,872 = 87,2\%$$

The value of coefficient of determination is amounted to 87.2%, which means that 87.2% of the information of the data is able to be explained by the model while the rest 12.8% is explained by other variables outside the model and a subject of error.

Figure 2 shows that the direct influence of incentive system towards performance is amounted to 0.030 while the influence through motivation is  $(0.479 \times 0.728) = 0.348$ . The result shows that indirect influence trough motivation is bigger than direct influence towards performance. Thus, it shows that variable of motivation is a intervening variable between incentive system and performance.

Based on the calculation of the analysis and discussion as presented in the preceding section, the regression coefficient is positive but not significant which indicates the direction of direct relationship, so that any incentive improvement system will not improve individual employee performance significantly. This means that the incentive system has no significant effect on the performance of individual employees at Corporate University.

In line with the results of the last two years employee satisfaction survey (2014 and 2015), employees feel that the monthly take home pay is good enough to meet the basic needs of the family, the aspect of the work environment is perceived to provide a sense of security & comfort, as well as the interpersonal relationship aspect which is in line with Maslow's theory, that the employee is at level 3, so giving the kind of financial incentive will have an insignificant effect on the performance of individual employees.

In addition, based on observations in the field, the direct incentives impact on Corporate University performance

is relatively small because, in general, employees feel that they will automatically receive an incentive for their performance, although that will be received differently according to their respective performance, this is because of the threshold / minimum threshold of incentives each employee will receive based on the performance. According to field observations and interviews with SM General Support CorpU, this is also made possible by a positive sign of the implementation of culture in Corporate University that has become a positive habit that the presence / absence of incentives or recognition of the company is not an important matter, so that employee work motivation remains high and result on the relatively high employee performance.

The results of this intervening test indicate that motivation becomes a variable that mediates between incentive system to performance or an intervening variable between incentive system to performance.

The Influence of Variables The incentive system directly to the achievement of individual employee performance of Corporate University is very small and insignificant, the influence is much lower than the effect that arises through motivation. Thus, positive or negative changes from the quality of this incentive system affect the positive or negative changes in employee motivation and employee motivation changes have a strong influence on the high low achievement of employee performance at Corporate University.

### **Conclusion**

It is concluded that: (1) incentive system affect the motivation of the Corporate University employees significantly, (2) employees' motivation affects the individual performance achievement of employees of the Corporate University significantly, and (3) incentive system affect the individual performance of employees of the Corporate University insignificantly. Moreover, the result of intervening test shows that the indirect influence of incentive system towards individual performance through motivation is bigger than direct influence of incentive system towards performance. Thus, motivation is the mediating variable between incentive system and performance, or, in other words, is the intervening variable between incentive system and performance.

### **Recommendations**

The incentive system does not significantly affects the individual performance of the Corporate University, The incentives system at Corporate University has a direct influence on the performance of individual employees which is relatively low, so that it is highly recommended that management should review this incentive system or replace with non-financial incentive system, in the form of other benefits such as assistance for vehicle facilities, holiday subsidies and others. It is suggested that Head Office grants SGM Corporate University Center the authority to provide non-financial incentive forms according to local conditions. And that future researchers are advised to conduct deeper research / analysis of the factors affecting the individual's performance at the Corporate University.

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## Property Business Classification Model Based on Indonesia E-Commerce Data

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### Abstract

Online property business or known as e-commerce is currently experiencing an increase of home sales. Indonesia e-commerce property business has positive trending shown by the increasing sales for more than 500% from 2011 to 2015. A prediction of property price is important to help investor or public to have accurate information before buying property. One of methods for prediction is classification based on several distinctive of property industry attributes, such as building size, land size, number of rooms, and location.

Today, data is easily obtained, there are many open data from E-commerce sites. The E-commerce contains information about home and other property advertised to sell. People also regularly visit the site to find the right property or to sell the property using price information which collectively available as open data.

To predict the property sales, this research employed two different classification methods in Data Mining which are Decision Tree and k-NN classification. We compare which model classification is better to predict property price and their attributes. We use Indonesia biggest property based ecommerce sites Rumah123.com as our open data source, and choose location Bandung in our experiment. The accuracy result of decision tree is 75% and KNN is 71%, other than that k-NN can explore more data pattern than Decision Tree.

Keywords: Property business, Data Mining, Classification, K-NN, Decision Tree

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### 1. Introductions

Property business currently is in positive trends in Indonesia, shown by the increasing number of transactions over the year. This opportunity force many property business company to develop their next year strategy. E-commerce is a way to generate new transactions by providing catalog for properties selling advertisement. The effective and efficient nature way doing property business transaction, makes e-commerce preferable for many Indonesian. The value of ecommerce in Indonesia is also predicted to become one of the best industry in the future [1].

Today, large collection of data can be easily obtained through internet. Those large-scale data contain many valuable information, if we can mine pattern or uncover hidden value using data analytics methodology. Data Analytics is the process of examining data sets to draw conclusions about the information. Data analytics techniques are widely used in commercial industries to enable organizations to make more-informed business decisions. One of data analytics methods is data mining. Some data have open nature which sometimes comes with no cost at all, for example data from online forum, social media, and e-commerce.

In this research, we explore open data from an e-commerce site to uncover hidden value of property business. Our result is a model to predict property price and their attributes. We collect data from e-commerce site *rumah123.com*, where it provides advertisement regarding property business. This site is the biggest e-commerce property business. We select one location which has growing property sales as case study, the location is *Bandung City*. This research describes patterns of the home sales market and potential place in Bandung by using *Decision Tree* and *k-Nearest Neighbor* classification model. The reason we use both model is because the suitability of ecommerce data with both model rather than other classification model.

## 2. Theoretical Background

Data mining is a process to discover insightful, interesting patterns, as well as descriptive, understandable, and predictive from data [3]. One of data mining process is classification. It is a supervised learning technique to classifies the data items into a given class label [4]. There are many classification methods, such as; *Decision Tree*, *k-NN*, *Naive Bayes*, *SVM* and *Neural Network*. Each of methods is suitable for classify specific application. *Naive Bayes* and *SVM* normally used for *text classification*. *Decision Tree* is used to detect simple visualization pattern within complex variable data, *k-NN* could see the similarity of the data based on their respective distance, and *Neural Network* is able capture knowledge or predict event from complex data [5].

*k-NN* is one of the simple classification methods, the main idea of *k-NN* is measure the data similarity by using nearest neighbor distance of data [6]. *Decision Tree* is a model represented as two-way split binary tree to display the value of a target variable can be predicted by using the values of an independent variables [7]. Both are suitable for our e-commerce data characteristics.

Training data is an activity to find general pattern of the data to a target label. This activity is based on the data characteristics. Testing data is an activity to match data to the model resulted from training activity. This activity to determine model accuracy. As the result, the model is used to predict the any data value related to the model. We use 70:30 rules, where 70% of the data use for training activity and 30% of the data use for testing activity [8]. *Data training* and *data testing* should have a fair composition amount of data in each labeled target. Then, the data is evaluated by using confusion matrix, to see the object-based classification performance score [9].

## 3. Research Methods

We classify home sales data and create home sales model based on e-commerce historical sales data. The first step is to identify the problem, which is to define how to use the data to predict or to model home sales characteristics. The second step is set the research goal, which in this case the objective is the resulted model able to predict home sales based on their properties features. The third step is data collection process, where we collect only the useful data features to the model construction. The fourth step, after data has been collected, we do preprocessing activities to remove duplicate, incomplete, and other useless data. The fifth step is to divide data into 2 types; which are *Data Training* and *Data Testing*. The sixth step is model construction based on those 2 types of data. The last step is to evaluate the model accuracy. The complete workflow of our research methodology can be seen in Fig.1.

We collect the data by from e-commerce site *rumah123.com*. We get in total 801 home sales data in *Bandung*, from the 2015-2016 transaction period. The home sales data consists of price, building size, land size, bedroom, bathroom and location. We name the variable *building\_size* to represent the building size, *land\_size* represent land size, while *bedroom* and *bathroom* represent their respective variable. Example of home sales data can be seen in Fig.2

To simplify model classification construction, we define three numerical class as a transformation of continuous data value. This transformation is to simplify model, for example if we let the price range in continuous value, it will create large class to each different price value as the label target. This makes classification model become hard to understand. The three-numerical class in form of interval variables can be seen in Table 1. After we done preprocessing then, we split the data into training and testing data. 70% for data training and 30% data testing. After that, we construct the predictions model. Then, we evaluate the prediction model using confusion matrix tools.



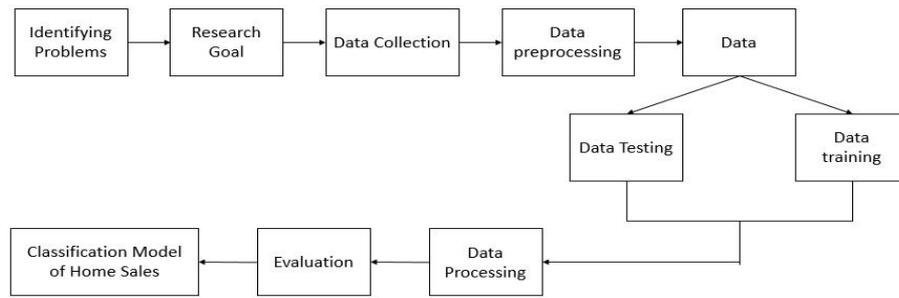


Figure 3 Research methodology

	location	building_size	land_size	bedroom	bathroom	price
1	Bojongsong, Bandung	90	60	2	1	Rp. 250.000.000
2	Katapang, Bandung	45	131	2	1	Rp. 95.000.000
3	Geger Kalong, Bandung	258	280	4	4	Rp. 3.000.000.000
4	Cimahi, Bandung	45	60	2	1	Rp. 285.000.000
5	Antapani, Bandung	65	72	2	1	Rp. 389.000.000
6	Cirwastra, Bandung	66	70	2	1	Rp. 250.000.000
7	Antapani, Bandung	60	115	2	1	Rp. 750.000.000
8	Cibiru, Bandung	36	72	2	1	Rp. 300.000.000
9	Arcamanik, Bandung	70	125	2	1	Rp. 520.000.000
10	Kopo, Bandung	58	112	2	1	Rp. 475.000.000
11	Setiabudi, Bandung	160	360	3	3	Rp. 3.100.000.000
12	Cikutra, Bandung	100	136	3	1	Rp. 540.000.000
13	Antapani, Bandung	90	120	3	2	Rp. 620.000.000
14	Ujungberung, Bandung	115	160	3	2	Rp. 1.275.000.000

Figure 2 Example of home sales data in Bandung

Table 1. Three numerical class of interval variables

Price_Range (in Rp)	Land_Size (in m2)	Building_Size (in m2)	Price_Class
< 603500000	< 107	< 89	Price_A
603500000 - 1487500000	107 - 175.5	89 - 171	Price_B
≥ 1487500000	≥ 175.5	≥ 171	Price_C

## 4. Result and Analysis

### 4.1 Classification Model

#### 4.1.1 Decision Tree

The decision tree home sales model is shown in Fig 3. The root node is *building\_size* represent building size, while *land\_size* represent land size as the leaf node. Both variable is significantly important variables to define property price. The variable bathrooms, bedroom and location are not significantly important in decision tree model. The reason for this is given by data characteristics of those three variables, which their value does not considerably varies across the data.

To understand the model, we give the following example; If we want to know what is the price for a property that have building size is 80m2 and land size is 100 m2. We trace the corresponding value in Node 1 and Node 5, then we conclude that the 91,5% probability that the price is fall into *Price\_A* class, which is less than Rp. 603500000.

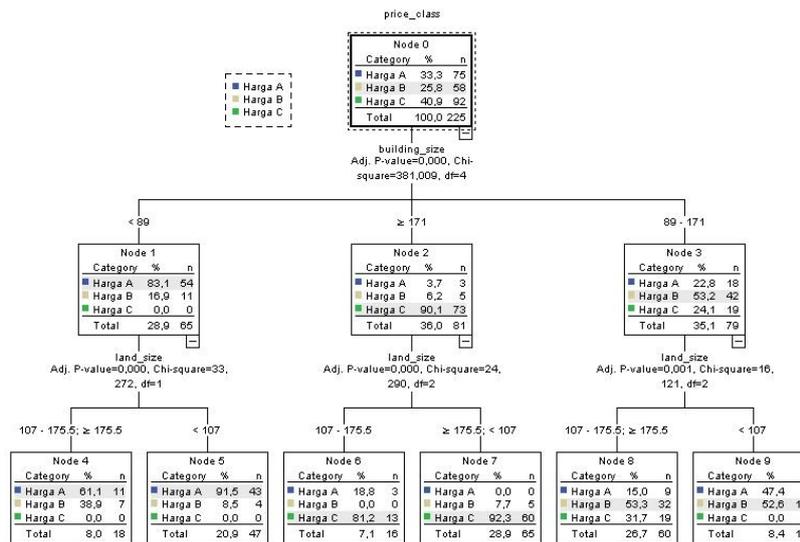


Figure 4 Decision tree model

#### 4.1.2 k-Nearest Neighbor

The *k*-NN property classification model is shown in Fig 4. *k*-NN represent all the variables where it classifies the property data based on the data similarity or their closest distance across any available variables.

To understand the practicality of this model, we use following example; if we want to buy a home where the land size is 80 m2 land size and its building size is 80 m2. Our budget is not more than Rp 150000000, -. We find data similarities on all the variables. There are 4 similar variables which are *land\_size*, *building\_size*, and *bathroom*. We have also 2 variables that mismatched which are *location* and *price\_class*. We conclude that the decision fall into data in *Hegarmanah* with *Price\_B* which is the price around between Rp. 603500000 to Rp 1487500000.

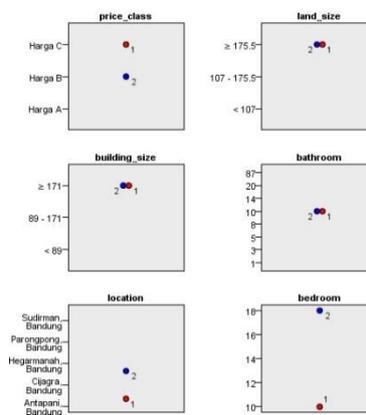


Figure 5 k-NN classifications models

#### 4.1.3 Evaluation Accuracy Test

The evaluation or accuracy test is done by using *confusion matrix*. Table 2 show the evaluation of *Decision Tree* and Table 3, show the evaluation of *k*-NN of home sales in Bandung. We have the *Decision Tree* accuracy is 75%, while *k*-NN is 71%.

Table 2. Accuracy table of decision tree model

Partition	Observed	Predicted			
		Harga A	Harga B	Harga C	Correct Percentage
Data	Harga A	54	18	3	72,00%
	Harga B	11	42	5	72,40%
	Harga C	0	19	73	79,30%
	Overall				75,10%

Table 3. Accuracy table of k-NN model

Partition	Observed	Predicted			
		Harga A	Harga B	Harga C	Correct Percentage
Data	Harga A	53	11	3	79,10%
	Harga B	14	48	10	66,70%
	Harga C	2	17	45	70,30%
	Overall				71,90%

#### 4.2 Comparison Methodology

We sum up the difference of both methodology *Decision Tree* and *k-NN* model in this research, by the following comparison table in table 4.

Table 4. Comparison of decision tree and k-NN model

Model	Decision Tree	k-NN
Data Source	Data from e-commerce <i>rumah123.com</i>	Data from e-commerce <i>rumah123.com</i>
Measurement Indicator	To predict the price, model is presented by <i>price_class</i> as target label. The most influential variables for the model are <i>building_size</i> and <i>land_size</i> . Other variables are not significantly important to predict the label target	To create exploration model, all variables are used to construct the model. Each data is measured their similarity by respective variables.
Analysis	<i>Decision Tree</i> produce prediction model	<i>k-NN</i> produce exploration model
Result of Accuracy	75,10%	71,90 %

#### 5. Conclusions

We compare two classification methods for home sales data in *Bandung*. Classification methods are used to construct the model for predict property prices. *Decision Tree* and *k-NN* has their own uniqueness. We found *Decision Tree* is more accurate than *K-NN* for given data characteristic. *Decision Tree* is suitable for prediction model while *k-NN* suitable for exploration model. For the future research, we suggest performing home sales data processing by using more specific attributes and others techniques like *unsupervised learning Clustering* to see a group in the data without label target.

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## Identify Potential Opportunity for Research Collaboration Using Bibliometrics

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### Abstract

Research has become more complex and interlinked. Collaboration is now the key for managing innovation and R&D activities. This study aims to discover the potential opportunity for research collaboration using bibliometrics. The analysis reveals both existing and potential (hidden) research networks which can lead to future development among potential groups of experts in the field.

Keywords: Research Collaboration, Bibliometric Analysis, Social Networks, Decision Support

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## **The Effect of Partnership and Innovation Management on Business Performance of Limestone Mining Company in East Java**

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### **Abstract**

Limestone is an industrial mineral with an enormous potential. By early 2013, limestone reserves in Indonesia is estimated at more than 600 billion tons spread almost throughout the territory of Indonesia. Although the volume of limestone mining in 2012 is lower than in 2011, the volume continued to increase in the next year. However, there are indications of less than optimal business performance for the limestone mining industry in East Java. We hypothesize that this condition is potentially caused by an improper execution of innovation management and partnerships. Therefore, this study is aimed to investigate the effect of partnership and innovation management to business performance of limestone mining company in East Java. The study was conducted on a sample of 25 respondents. Data were processed using statistical analysis tools PLS. The results showed that partnership and innovation management have significant impact on business performance

Keywords : Partnership, Innovation Management, Business Performance

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## **Influence of The Dimensions of Eco-preneurship towards Student New Business; Emerging Eco-Campus Spirit of Youth Entrepreneur Associations at Telkom University (HIPMI-PT)**

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### **Abstract**

The background of this study is related to the phenomenon of environmental damage resulting from a variety of activities, including household (e.g., institutions, hospitals, schools, colleges, and public areas), industry and transportation. This environmental damage is having relevance with entrepreneurship activities because of its activity is very potential with negative impact. Eco-preneurship is a new concept of knowledge to emerge the relationships between entrepreneurial and environmental system.

In the neighborhood of higher education, the activity of eco-campus is begun to appear, as the concept to build environmental awareness by declining the activity that would increase the environmental damage. Specifically, in this dynamic condition and variety of eco-campus activities, can be indicated by green metric index. This index will explain regarding with information as the size of the university, both spatially and in terms of population, the campus location and the amount of green space; and also information on energy use, transport, water use and recycling and waste treatment. Findings of this research believe that the green metric parameter can be a good influenced to realize the new start up business of student is environmental friendly.

Starting with this condition, the authors realize that the research related with the eco-campus campaign which conducted by the association of youth entrepreneur in Telkom Universities campus (HIPMI-PT) as one of student activity unit. This association is having opportunities to developing entrepreneurial concept and also eco-preneur as the basic knowledge of entrepreneurships.

The involving of higher education for developing economic of the countries is very important, the purpose of this research is to find the concept to establish the new business start up of student in Telkom University to empowering student awareness about the value of eco-preneurship in addition to implement the eco-campus concept by using quantitative approach of a causal research design. This intention is to support HIPMI-PT Telkom University to equip the youth entrepreneur future by the value of eco-preneurships.

**Keywords:** Eco-preneurship, Eco-campus, student activity units

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## Exploring Internet Access of Indonesian SME Entrepreneurs

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### Abstract

The Internet opens many new business prospects for small and medium-sized enterprises (SME's). However, many SME entrepreneurs remain reluctant to go online despite this opportunity. This might pose as an obstacle for them when dealing with the ASEAN Economic Community (AEC) in 2015 since they have to compete with lots of other SMEs who have integrated the internet into their businesses.

The main purpose of this study is to exploring internet access of Indonesian SME entrepreneurs. Unfortunately, there is little empirical evidence about internet access for SME entrepreneur, Through focus groups helped us in obtaining a better view of internet motivation access, internet physical access, internet skills access, and internet usage access for SME entrepreneur by using the internet as it is experienced in Indonesia.

The result found that still many entrepreneurs do not use internet and do not yet understand the support of Internet can improve their business performances. In other word SME Entrepreneurs lack of motivation skills and lack of skills required to internet business such as information internet skills, communication internet skills, content creation internet skills and marketing internet skills. SME entrepreneurs should learn how to skills up their business activities by using Internet for business.

With this study we contribute to the development of an instrument for measuring internet access for business context than in a private context.

Keywords: Internet access, sme entrepreneurs

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## A Core of E-Commerce Customer Experience based on Conversational Data using Network Text Methodology

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### Abstract

Abstract - E-commerce provide efficient and effective way to exchange goods between sellers and customer. E-commerce has been a popular method for doing business, because its simplicity of having commerce activity transparently available, including customer voice and opinion about their own experience. Those experiences can be a great benefit to understand customer experience comprehensively, both for sellers and the future customers. This paper applies for e-commerce's and customers in Indonesia.

Many Indonesian customer expressed their voice to open social network service such as Twitter and Facebook, where a large proportion of data is in the form of conversational data. By understanding customer behavior through open social network service, we can have the descriptions about the e-commerce services level in Indonesia. Thus, it is related to the government effort to improve Indonesian digital economy ecosystem.

A method for finding core topics in large-scale internet unstructured text data is needed, where the method should be fast but sufficiently accurate. Processing a large-scale data is not a straightforward job, it is often need special skills of people and complex software and hardware computer system. We propose a fast methodology of text mining methods based on frequently appeared words and their words association to form network text methodology. This method is adapted from Social Network Analysis by model relationship between words instead of actors.

In this paper, we investigate network text performance to analyze customer experience regarding two e-commerce business models, B2C and C2C, where each is represented by two biggest e-commerce sites in Indonesia respectively. Those are Lazada and Mataharimall for B2C, and Bukalapak and Tokopedia for C2C. We identify topics group in network text using Modularity metric. The result is description about each study case customer experience dominant topics that need to be addressed by the company

Keywords: Consumer Behavior; Customer Experience; E-Commerce; Network Text Association; Social Network Analysis

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## **Management Commitment And Customer Service Recovery Performance : A Study Of Customer Service In A Broadband Operation And Maintenance Service Company In Indonesia**

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### **Abstract**

A broadband operation and maintenance service company in Indonesia faces failures in its smooth services. Scholars believe that service failures in the company are related to management commitment. The objective of this research was to determine the influence of management commitment, consisting of reward, customer service training, empowerment and customer service orientation, on service recovery performance in the operation and maintenance of a broadband service company in Indonesia. The respondents of this study are 77 team members of Corporate Customer Care (CCC). Path analysis was used to analyze the data. The result of this study showed that empowerment had no significant influence on service recovery performance, while the other variables of management commitment had significant influence. Based on this result, to minimize the risk of service failure to customers, the company should consider employee reward, customer service training, and customer service orientation.

Keywords : Management Commitment, Service Recovery Performance, Reward, Customer Service Training, Empowerment, Customer Service Orientation

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## **The Influence of Industry Environment and Company Asset on Strategic Innovation and The Implication on Business Valuation of Information and Communication Technology (ICT) Industry In Indonesia**

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### **Abstract**

In the period of 2013 – 2020, it was predicted a decline will happen in voice and data services. In the other hand, there will be an increase in data services especially for automated (Non-Human) and Digital (content, video, e-commerce, etc) service. In addition, Digital product presence in Telco will be able to restore revenue growth from negative to positive (predicted to Turn around 2016).

However, the valuation of the Information and Communication Technology (ICT) company were fluctuating within the last nine years due to the volatility that caused by several factors. The unoptimized value of ICT product industry allegedly caused by implementation of Strategic Innovation that has not been very smooth. It is also associated with problems in the leveraging of the Company's Assets and strategy to adapt Industry Environments as well. Considering this phenomenon, this study aims to assess the influence of the Industry Environment and the Company Assets on Strategic Innovation and its implications on the Business

Valuation of ICT industry in Indonesia. The study uses a quantitative approach with ICT products companies in Indonesia as analysis unit, especially those who run Digital Service Providers and Digital Creative Business that produce applications and content. 200 samples are taken by simple random sampling technique and were analyzed using Structural Equation Modelling (SEM). The results of the study have pointed out that Company Assets gives a stronger influence than Industry Environment in influencing Strategic Innovation. Strategic Innovation significantly influence Business Valuation. Industry Environment and Company Assets simultaneously influence Business Valuation through Strategic Innovation, where Company Assets gives a greater influence than Industry Environment.

**Keywords :** Industry environment; Company Asset; Strategic Innovation; Business Valuation.

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## **The Impact of Motivation Factors to Intention To Use of Mobile Platform Application Case Study: Go-Jek Drivers In Bandung**

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### **Abstract**

The study is aimed to test the impact of motivation factors to intention to use of mobile platform application for Go-Jek. The method used in this research is quantitative descriptive. The data was collected by questionnaires to 124 Go-Jek drivers in Bandung and assigned with Likert's scale from 1 (strongly disagree) to 5 (strongly agree). Furthermore, the data used factor analysis and multiple linear regression analysis techniques. Based on the result of factor analysis, it is known that six new factors were formed sequently, such as positive affect, positive reputation, usefulness, social motivation, economic benefit, and sustainability. Those six factors can explain the seven original factors with total percentage of 71.837%. From the result of multiple linier regression analysis, it is known that social motivation factor and economic benefit factor have partially significant influence to intention to use of mobile platform application with value 3.421 and 3.345.

Keywords: Motivation factors; Intention to Use; Mobile Application; Go-Jek Drivers

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## **Synergizing Digital-based Technology and Management in Water Balance Calculation as Decision Support System for River Basin Management – Study at Upper Citarum Watershed in Bandung Greater Area**

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### **Abstract**

Most of the water needs for households and industries in Bandung Greater Area (including agriculture, plantation, fishery) is supplied by Upper Citarum Watershed. Water balance analysis is absolutely necessary to respond to water needs that continues to increase simultaneously and to avoid water scarcity as well. Water balance analysis is very important to help the government to organize and plan for water allocation for the fulfillment of households and industry needs.

The study was conducted in the Upper Citarum Watershed that crossed the City of Bandung, Regency of Bandung, Regency of West Bandung, Regency of Sumedang, and City of Cimahi, during 2016. The calculation by manual and by DSS-Ribasim method is used to get the water balance value.

The results exhibited that the DSS-Ribasim calculation shows the  $Q_{80\%}$  mainstay discharge which means that the water requirement for household, city, and industry is fulfilled well. Nevertheless, the water requirement for PDAM in Regency of West Bandung, is only fulfilled by 55.7%. Meanwhile, the result of manual calculation showed that there is no shortage of water supply in general, but there is a deficit for PDAM in Upper Citarum Watershed which influences water supply for the City of Bandung, Regency of Bandung, Regency of West Bandung, and City of Cimahi.

Keywords: Water value, Water balance, Upper Citarum Watershed, Bandung Greater Area.

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## Corporate Governance, Risk And Indonesian Islamic Banks Sustainability

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### Abstract

Islamic Banks (IB) must achieve the highest goal, which is sustainability. There are many factors influencing sustainability, including corporate governance and risks owned by banks. This study aims to see how these factors affecting the sustainability of Indonesian Islamic Banks. Purposive sampling used generates 10 samples. Logistic regression is used for research data during 2013-2016. The study result shows that on average, Indonesian Islamic Banks have a strong sustainability. They are also proven to implement good corporate governance in accordance with the prevailing rules. The sustainability condition is determined using Altman Z-score for service companies. This study found that there is no significant effect between corporate governance and risk variables with the sustainability of Indonesian Islamic Banks.

Keywords: Corporate Governance; Islamic Bank; Risk, Sustainability

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## **Factors Determining Bank Competitive Strategy: An Empirical Study On Local Development Banks (Ldbs) In Indonesia**

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### **Abstract:**

Many studies have been investigating determinants of the company's competitive strategy. Nevertheless, there have insufficient studies conducted to investigate the determinants of competitive strategy on banking industry, particularly on Local development banks (LDbs). This study is aimed at filling in the literature. This study surveyed top executives of twenty-six local development banks in Indonesia and employed PLS approach to answer the research questions. The result shows that three groups of variables, i.e., innovation management, company resource management, and adoption of technology influence the development of competitive strategy in local development banks.

**Keywords:** Local Development Banks, Innovation Management, Resources, Adoption Technology

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## Buyer-Supplier Relationship Construct at the Traditional Market Trader: Instrument Development and Validation

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### Abstract

The buyer-supplier relationship ensures the availability of products; it plays the major role in retail business activities, so that if there is no product available means no purchase transaction. However, the development of the size scale of buyer-supplier relationship has not been developed primarily in the traditional market. The aims to evaluate the buyer-supplier relationship constructs from a traditional market in Bandung Indonesia. The purpose of this research is to evaluate the applicability of the buyer-supplier relationship scale in the context of the traditional market in Bandung, Indonesia. A survey conducted toward 400 traders on the traditional market in 14 traditional markets around Bandung, Indonesia. Analysis factor exploratory used for the first analysis, the result showed that the constructs of buyer-supplier relationship scale consist of six dimensions, namely; contractual agreement, information sharing, the routine of supply, supply procedure, and adaptation. The findings are cross-validated hierarchically using both first order confirmatory factor analysis (CFA) and second-order confirmatory factor analysis (CFA). The research finds that the buyer-supplier relationship structure is applicable in the Indonesia Traditional Market setting. Besides, the result of the first order confirmatory factor analysis (First Order-CFA) shown that the dimensions of buyer-supplier relationship correlation between the construct and square variance extracted the six dimensions same as the previous study using exploratory factor analysis. Furthermore, the second-order confirmatory analysis (Second Order-CFA) shown that the dimensions of buyer-supplier relationship scale in all dimensions have good of fit indexes

Keywords: Type your keywords here, separated by semicolons ;

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## **Volatility Spillover Analysis In Stock Market of China, Singapore, Malaysia and Indonesia (2011-2015 period)**

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### **Abstract**

China-ASEAN Free Trade Area (CAFTA) encourages interdependency across the country in the bilateral and multilateral relationship. Consequently, there is probability in spillover relationship of stock market volatility in these four countries, China, Singapore, Malaysia, and Indonesia. In addition, along with China's crisis in failing of China' stock market and Yuan currency devaluation caused China against fluctuation in stock market index. China's fluctuation probably has caused spillover to Singapore, Malaysia, and Indonesia.

The Aim of this study is to know stock market volatility spillover of China, Singapore, Malaysia, and Indonesia by Shanghai Composite Index Stock (SHCOMP), Singapore Stock Market (STI), Kuala Lumpur Stock Market (KLSE), and Indonesia Composite Index (IHSG or *Indeks Harga Saham Gabungan*) in 2011-2015.

This study performed time series data and analyzed with Unit Root Augmented Dickey-Fuller test, Cointegration test, Granger Causality test, and EGARCH. This study applied EViews 8 software. Result of data processing explained that there is two-way volatility spillover between China, Singapore, Malaysia, and Indonesia stock markets.

Keywords: CAFTA, Stock Markets, Volatility Spillover, Causality and EGARCH;

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## **The Assessment in Determining The Audit Location Sampling in The Integrated Management System by Using The Analytical Hierarchy Process Method**

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### **Abstract**

Internal Quality Audit (AMI) is an annual agenda conducted by a company to maintain its standard. One of the standard that needs to be maintained is the Integrated Management System which consists of several standardizations such as QMS (ISO 9001:2008), ISMS (ISO 27001:2015), and BCMS (ISO 22301:2012). However, AMI sampling location needs to be determined first, in which the problem will occur if the sampling method is unavailable and only based on the agreement of personal judgement. Therefore, the Analytical Hierarchy Process (AHP) method is used to describe the multi-factor issue or the complex multi-criteria that becomes a hierarchy. The sampling location is also selected by considering the customer segmentation, revenue, and environment. Based on the implementation of AHP method, an area will be proposed as AMI sampling location for several next years. So, it is expected that the AHP method can be the best practice in determining the AMI sampling location.

Keywords : Internal Audit, Integrated Management System, Analytical Hierarchy Process

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## The Supply Chain Analysis of Curly Leaf Lettuce Produce using Supply Chain Operation Reference Method

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### Abstract

The focus of this paper is to analyze supply chain process of PT. Indonesia Agro Industri for organic curly leaf lettuce produce using SCOR method which then provides alternative recommendations for strategic improvement. This study uses qualitative method with case study technique in PT. Indonesia Agro Industri. There are three levels of analysis in SCOR. SCOR level one analyzes supply chain's reliability, responsiveness, flexibility, cost and assets management. Level two defines supply chain activity by exploring supply chain primary processes (plan, source, make, deliver, return, enable) and figuring out which process performing the worst. Level three defines supply chain primary processes configuration which has the worst performance activity which is identified in level two to find the root problem. Result shows that supply chain performance of the company could be classified as excellent, although there are existing problems still need to be addressed in fulfilling orders. Problems are founded in make-to-order process which is unsuccessfully grown crops caused by lack of company's equipment and facilities, and high amount of returned produce caused by less than standard implementation by company's worker. One of the strategic improvement recommendation from this study is to maximize production lane by upgrading facilities and improving activities in PT. Indonesia Agro Industri supply chain process. The recommended improvement will increase competitive advantage of PT. Indonesia Agro Industri.

Keywords: Supply Chain Management; Lettuce; Organic; SCOR

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## **Knowledge Transfer Model Through Continuous Improvement Implementation at Small Enterprises Cikoneng District Ciamis Regency**

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### **Abstract**

This Paper is addressed to developing a knowledge transfer model in the implementation of continuous improvement (CI) on SMEs in Cikoneng District, Ciamis Regency. The main problem of the research is how to developing the knowledge transfer model in the implementation of continuous improvement (CI) at SMEs In Cikoneng District, Ciamis Regency. The research model is based on the statement that knowledge transfer is an input-process-output system where CI is also a knowledge-based management. The process is defined as a number of activities aimed at changing the object in accordance with the objectives to be achieved. Thus the process of knowledge transfer in the implementation of CI is activities and events that aim to or contribute to the organization is now an organization that performs CI. Data collection is done by exploration of documents, interviews, and observation. The data collected is analyzed through the following stages: [1] Identification of knowledge transfer data including process. [2] Identification of knowledge transfer from process data, [3] Map of knowledge data transfer process of CI with LP; and analog modeling knowledge transfer in Implementation of CI and LP.

Keywords : Model; Knowledge Transfer; Implementasi; Continuous Improvement (CI)

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## **Differences Of Capital Structure And Performance Due To Gender Differences Of Ceos In Small And Medium-Sized Businesses In Indonesia**

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### **Abstract**

Previous researches and results show that women-owned small firms have less debt than man-owned firms, and they have different performance. The objective of this study is to know whether the difference of capital structure is a factor correlated with gender differences resulting in different financial performance. This study utilizes sample data of all small and medium-sized businesses listed in Indonesia Stock Exchange to determine the differences of capital structure and performance between companies with male and female CEOs. The statistical test result using independent t-test shows that there is no difference in both of them. Regression result shows variables influencing capital structure of small and medium-sized businesses in Indonesia are age of company, company size and company liquidity. Meanwhile, for company performance, the statistical test result shows that it is only variables of age of company and leverage that have significant effect. Therefore, small and medium-sized businesses should maintain their capital structure at low rates to have a good financial performance. Companies that are able to survive in a long term will also increase the company performance.

Keywords: capital structure; performance; gender differences; small and medium sized business

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## **Arbitrage Pricing Theory By Considering The Political Risk In Indonesia Stock Exchange**

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### **ABSTRACT**

APT is one of the pricing asset theory which talks that besides market factor there are other factors that can influence stock return. This study aims to see the impact of macro factors of economic growth, inflation, interest rates, exchange rate and political risk on stock returns in Indonesia Stock Exchange. This research was conducted on 194 companies listed on the stock exchange of Indonesia (BEI) from 2007 to 2015. The research method used in this research is explanatory method. The data used in this study is secondary data from the Indonesia Capital Market Directory (ICMD) and International Country Risk Guide (ICRG). It is expected from the results of this study found the relationship between macro factors and stock returns of companies listed on the Indonesia Stock Exchange.

Keyword : BEI, Macroeconomics, Political Risk, Stock Return

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## **Multifactor Model For Market Overreaction Condition In Indonesia Stock Exchange**

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### **ABSTRACT**

This study aims to find out how the factors in multifactor model affect the portfolio return formed in condition of market overreaction. The multifactor model used is essentially a model proposed by Fama and French and then developed by Carhart that adds momentum factor into the model. While market overreaction is a market condition caused by excessive reactions from investors when receiving information.

The portfolio used is the portfolio of winner and portfolio of losers that has been established in our previous research based on the performance of non-financial sector stocks in Indonesia Stock Exchange during the period of July 2005 - December 2015. The other data used are the Composite Stock Price Index (CSPI), market capitalization, book to market ratio, and the difference of portfolio returns to implement the multifactor model consisting of market factors, firm size, value, and price momentum.

The results showed that the multifactor model can explain the portfolio returns well. Implementation of the GARCH (1,1) model to improve the accuracy of the estimation results also shows similar findings.

**Keywords:** Asset pricing, Carhart model, Fama and French model, market overreaction

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## **The Influence Of Company Reputation And Competitive Strategy On The Rural Bank Performance In West Java**

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### **Abstract**

Although Rural Bank has a major role to boost the regional economy, but it's contribution is still relatively small. Rural Bank has not been widely known by the public and has not been used by the government to support economic development in order to improve the welfare of the people, especially in rural areas. Although the development of the assets, the amount of savings, deposits and loans from the Rural Bank belonging to the Provincial Government of West Java and Banten is likely to increase, but not matched by a stable growth in operating income, which tend to fluctuate, thus shows the unoptimal performance. Similarly, the performance of private Rural Banks are generally not optimal. The condition is presumably caused by the problems in implementing competitive strategy and in developing the reputation. Thus, this study aims to examine the influence of company reputation and competitive strategy on the rural bank performance in West Java. Data were collected through questionnaires to 100 respondents and analyzed using PLS. The results showed that competitive strategy has a greater influence than company reputation in improving the rural bank performance.

**Keywords :** company reputation, competitive strategy, Rural Bank Performance.

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