INTEGRATED PERFORMANCE MEASUREMENT SYSTEM FOR SME AND MANAGEMENT CONTROL SYSTEM

Teguh Sriwidadi
Bina Nusantara University, Jakarta – Indonesia
teguhfemale@gmail.com

ABSTRACT

Along with the rapid advances in information technology and communications, Small and Medium Enterprises (SMEs), and companies around the world have competition in the global marketplace that aims to maintain its sustainable competitive advantage. This leads to the importance of performance measurement system (PMS). The existing system is designed primarily for use in the context of medium and large companies. SMEs have different characteristics than the big companies, so it is need to develop a performance measurement system which is relevant to SMEs. Therefore, this study discusses a framework that combines the performance measurement system (PMS) for SMEs and management control system (MCS), thereby increasing the efficiency of SMEs which ultimately aim to improve the performance of SMEs.

Keywords: Small and medium enterprises, integrated performance measurement system, and management control systems.

INTRODUCTION

The existence of small businesses in Indonesia representing nearly all business units in various sectors of our economy, because their numbers are very large. By today, in Indonesia there are 41,301,263 small-sized entreprises(SE) and 361,052 medium-sized enterprises (ME). Both of these enterprises, otherwise known as the Small and Medium Enterprises (SMEs) which amounts to 99.9% of the total number of businesses in Indonesia. SMEs are engaged in various economic sectors (agriculture, fisheries, animal husbandry, industry, trade and services). Small entreprises also occupies a strategic position because it accounts for more than 88% of employment. Because of the complexity and diversity of management systems in SMEs, it is important to have PMS framework is better in order to gain an advantage and can continuously react and adapt to external changes. The causes that contributed to the failure of SMEs to operate the PMS derived from internal incompetence, such as the lack of a documented strategy, finance and human resource shortages and owner behaviors that are not effective. However, a good strategy will not work without effective implementation. This is what causes PMS will play a proper role in guiding the usage strategy (Jamil & Mohamed, 2011).

Furthermore Jamil & Mohamed (2011) stated, traditionally, models of PMS is more horizontal, process-oriented, and focus on the needs of the stakeholder. PMS models are designed primarily for use in the context of medium and large companies. But, according to Storey (1994), SMEs have distinct characteristics that set it apart from most larger companies. Hudson et al. (2000) suggests that it is necessary to hold the relevant approaches from the existing PMS to identify appropriate processes for the design and implementation of the PMS framework that simultaneously combines performance measurement and management control that is used by SMEs.

OBJECT OF RESEARCH

Research objects selected are SMEs Tangerang.

- SMEs Tangerang City http://www.tangerangkota.go.id/mobile/detailberita/2472
In the city of Tangerang potential of SMEs is large enough, every year is constantly increasing. Increased number of SMEs that occur each year, also provide greater job opportunities for residents of Tangerang City. Until late 2009, the number of SMEs in the city of Tangerang reaches 128,380 SMEs, includes 102,598 micro enterprises, 25,488 small enterprises, and 294 medium enterprises. While the total assets is Rp 6,071,625,930,000 of all SMEs, and workers are able to be absorbed as much as 229,529 people.

Definition of SMEs
Criteria for small businesses according to Indonesian Law No. 9 in 1995 is to have a net worth of at most Rp. 200,000,000.00 (two hundred million rupiahs) excluding land and building businesses, has annual sales turnover of many Rp 1,000,000,000.00 (one billion rupiah), owned by Indonesian citizens, standing alone in a sense not a subsidiary or branch of a company that is not owned, controlled, or affiliated directly or indirectly with a medium or
large businesses and the latter is shaped the efforts of individuals, business entities are not a legal entity, or a legal entity, including cooperatives business.

While the criteria for a business entity under the Ministry of BPS survey of Cooperatives and SMEs are:

1. If the venture proceeds of up to 1 billion rupiahs, it is classified in the small business.
2. If the venture proceeds from 1 to 50 billion rupiahs, it is classified in the medium.

The next three types of businesses that can be done by the SMEs to generate profit, are:

1. Manufacturing Enterprises (Manufacturing Business), the attempt to change the basic inputs into products that can be sold to consumers. An example is the convection that produces apparel or bamboo craftsmen who produce furniture, home decoration, souvenirs and so forth.
2. Trade Enterprises (Merchandising Business), businesses that sell products to consumers. An example is the traditional hawker centers selling all kinds of traditional snacks or grocery stores that sell all their daily needs.
3. Service Business (Service Business), businesses that produce services rather than products or goods to the consumer. An example is the delivery of goods or services of internet cafes (cafe), which provides tools and services to consumers so that they could be browsing, searching, blogging or otherwise.

**PERFORMANCE MEASUREMENT SYSTEM (PMS)**

According to Neely et al., (2002), PMS is a dynamic and balanced system, which provides a holistic view of the use of different perspectives and measurement. Basically, the model and the PMS framework designed to support management in improving performance through better decision making.

According Garengo et al. (2005), there are eight models of the previous performance measurement system that has been widely used and discussed in the literature. Six of these models are generic models that are well known, while two others made specifically for SMEs.

8. Integrated Performance measurement for small firms (Laitinen, 1996, 2002).

For example, the Performance Measurement Matrix helps companies to define strategic goals and objectives that translate into performance measurement and the integrated hierarchical approach. Combination of the two-times-matrix combines two perspectives and non-fee costs with internal and external perspective.

System Performance Pyramid is a pyramid that is composed of four levels, integrating the corporate strategy, strategic business unit, and surgery.

Performance measurement system for service industries is also called Results and Determinants Framework. Framework consists of two types - the results and determinants. Measurement is related to the competitive and financial performance, while the measurement is related to the determinants of quality, flexibility, resource utilization and innovation.

Balanced Scorecard (BSC) emphasized the linkage between performance measurement to strategy (Kaplan & Norton, 2001). BSC has four perspectives, namely financial, customer, internal business, and innovation and learning. BSC provides a holistic view of the organization by looking at four perspectives simultaneously, thus allowing companies to track financial results, with simultaneous monitoring the progress in establishing the capability and the acquisition of assets for growth in the future.

Integrated Performance Measurement System is defined by Bititci et al. (1997) as an information system that enables the performance management process to function effectively and efficiently. This model highlighted two major aspects of performance measurement system: integrity and deployment. Integrity relates to the performance measurement system's ability to promote the integration of various areas of flying businesses, and the spread associated with the object and policy through four levels at which the higher level becomes a noun (stakeholders) of a lower level.

Performance Prism, reflecting the importance of growth to meet the needs of stakeholders, i.e shareholders, investors, customers, employees, and suppliers. In the form of a prism, there are five performance-related perspectives: stakeholder satisfaction; strategies to meet customer satisfaction; a critical process necessary for the operation and improve the process; what capabilities are required for the operation and improve the process-poses, and contributions of stakeholders to maintain and develop capabilities.
Organizational performance measurement was developed specifically for SMEs and based on three principles: alignment (alignment), the selected performance measures to help the alignment between people's actions and strategy; thought process, the system of measurement which makes reference to the process of monitoring systems, control systems and development, and practically, which is at the company level there is a consistent process to identify measures that are held and to ensure the quality and availability of data. Integrated Performance Measurement for a small company designed specifically for SMEs. This measurement is based on seven key dimensions of measurement, are classified into two external dimensions (performance finance and competitiveness) and five internal dimensions (costs, production factors, activities, production, and income). Internal dimensions are used to monitor the production process, and external dimensions are used to monitor the company's position in the context of competitiveness.

Analysis of measurement models work above shows that performance measurement must be aligned with the strategy (BSC, Results and Determinants, Matrices Performance Measurement, Performance Prism, Pyramid Performance), and has a multi-dimensional pengukukuran (BSC, Results and Determinants). Multi-dimensional measurement is very important and help to resolve the limitations tradisinal performance measurement system that focuses solely on the financial dimension.

MANAGEMENT CONTROL SYSTEMS (MCS)

Various concepts of MCS has been discussed by previous researchers. For example, Chenhall (2003) proposed the concept that the MCS include management accounting and control systems such as personal and group control. Control organizations are sometimes associated with controlling the activities and processes, such as statistical quality control and timely management (just-in-time management). Previously, management control systems have been defined by Simon (1994) as a formal procedure is based on information routinely used by managers to maintain and alter patterns in organizational activities. Consequently, control is a procedure that facilitates the organization's policy to ensure that the organization's goals and objectives achieved. This is achieved by setting standards, receive feedback on the actual performance and take corrective action when actual performance deviates significantly from planned performance. In practice, the real control to create conditions that motivate the organization to achieve the desired results. Finally, Simon (1999) proposed a lever / levers of control framework for the study and control implementasi business strategy. This framework proposes four basic levers for controlling business strategy, namely the belief system (beliefs systems), the system boundary (system boundary), the system control diagnostics (diagnostic control system), and interactive control systems (interactive control system). Belief systems are used to direct the search for inspiration and opportunities, and is associated with the core values. System boundaries associated with the risk to be avoided, and used to determine limits on opportunity-seeking behavior. Diagnostic control systems associated with critical performance variables, and organizations can use to motivate, monitor, and reward the achievement of the goals set. Interactive control systems are more focused on strategic uncertainty, and organizations can use to stimulate organizational learning and encourage new ideas and new strategies. Levers of control framework shown in Figure 1.
In controlling the business strategy, organizations must be able to integrate the four levers of control, namely the belief systems, boundary systems, diagnostic control systems, and interactive control systems (Simon, 2000). According to Flamholtz & Randle (2000) MCS is important for the growth of the organization because it gives freedom to the attention of top level managers of the process can be controlled with the exception and furnish it with information if the informal network exceeds the load.

**FRAMEWORK FOR PERFORMANCE MEASUREMENT SYSTEM AND MANAGEMENT CONTROL SYSTEM**

The proposed model integrates the belief systems and boundary systems in the strategy and translate strategy into action with the use of diagnostic and interactive control system as a dimension to measure performance. Based on previous literature, many researchers propose that the PMS must be aligned with organizational strategies (Fitzgerald et al., 1991; Kaplan & Norton, 1996; Otley, 1999; and Simons, 2000). Belief system is important to communicate the core values of the organization to inspire people to seek new opportunities or new ways to serve the needs of customers in its core values (Simons, 1999). This system inspired the members of the organization to achieve organizational goals. Boundary control system focuses on the behavior of all workers in the organization. The purpose of the boundary control system is to maintain the commitment of employees to pursue organizational goals and seek new ideas. Diagnostic systems are used by management to evaluate the implementation of organizational strategies by focusing on performance variables critically, which is critical to the implementation of the strategy, and at the same time, can direct the attention of management through the use of management by exception (Simons, 1999 and 2000). Interactive control system includes management practices that enable workers to interact with each other so they can assimilate new information and cope with changing market conditions and technology. This could stimulate double-loop learning in the search, examination, and communication processes to enable the emergence of new strategies (Simons, 1999; 2000).

---

The model integrates two elements - the measurement and management. A performance measurement system is a set of measure used to calculate the efficiency and effectiveness of the actions of past (Neely et al., 2002).
Performance management is a strategic and integrated processes that provide a lasting history of success to the organization by improving employee performance and to develop individual and team capability contribution (Armstrong, 2000). This model proposes that the measurement of PMS should be linked to the strategy, mission, vision, and control. Management should regularly monitor and review performance results and evaluate the changes in the market through a system of diagnostic and interactive control. Through feedback and feed-forward control system can help increase the efficiency of the company and also identify new opportunities.

According to Simons (1999) commitment means belief in the values of the organization and will strive to achieve corporate objectives. Therefore, commitment to goals can improve corporate performance improvement. In addition, border control system can motivate employees to seek new ideas within the scope of acceptable and has been determined (Marginson, 2002). So that, if implemented properly, this system can avoid the potential risks, which in turn improve organizational performance.

The proposed model can be empirically demonstrated, as in Figure 3. Strategy is a precursor of variables that influence the design of PMS. Independent variables are integrated PMS for small firms, and MCS elements - trust, boundary, diagnostic, and interactive called mediating variables. Dependent variable is improves organizational performance, and the indicators are profits, sales growth, and non-financial performance such as customer satisfaction, market share, and quality of service.

CONCLUSION

This study discusses a model of integration of PMS with MCS in order to improve the performance of SMEs. PMS used to be made in accordance with the strategy of SMEs, namely PMS Integration for SMEs. This measurement is based on seven key dimensions of measurement, are classified into two external dimensions (financial performance and competitiveness) and five internal dimensions (costs, production factors, activities, production, and income). Internal dimensions are used to monitor the production process, and external dimensions are used to monitor the company’s position in the context of competitiveness. While MCS is used levers control framework, as a way to manage and measure performance based on these factors the most important success (critical success factors). This framework proposes four basic levers for controlling business strategy, namely the belief system, the boundary system, diagnostic control system, and interactive control system. The use of the same approach to performance measurement is not appropriate for all companies because of the complex variations that affect its operation. Therefore, this study proposes a modified framework that can be used in SMEs. The main reason is that SMEs need PMS is specifically designed and tailored to the characteristics and needs. In line with this, the study of literature discussing the eight performance measurement framework. It was found that the same characteristics of these models is the PMS must be aligned with strategy and consisted of measurements of multi-dimensional. Application of this integrated framework will enhance the effectiveness of the company that ultimately improve corporate performance.

BIBLIOGRAPHY

Production, Planning & Control, vol 12, no 8, pp. 804.
Business Review, (Jan-Feb), pp. 75-85.
Kaplan, R & Norton, D 2001, „Transforming the balanced scorecard from performance measurement to strategic 
vol.70, pp. 45-50.
Laitinen, E 1996, „Framework for small business performance measurement: towards integrated PMS”; Paper 
presented to Vasaa, proceedings of the University of Vasaa.
Margison, D.E.W 2002, „Management control systems and their effects on strategy formation at middle-
management levels: evidence from a U.K. organization, Strategic Management Journal, vol 23, pp.1019-
1031.
Neely, A, Mills, J, Platts, K., Richards, H, Gregory, M, Bourne, M & Kennerley, M 2002, 
„PMS design: developing and testing a process-based approach” International Journal of Operations & 
Simons, R 1999, Levers of control: How managers use innovative control systems to drive strategic renewal, 5th 
Simons, R 2000, Performance measurement & control systems for implementing strategy. Prentice Hall, USA. SME 
Annual Report.
http://www.tangerangkota.go.id/mobile/detailberita/2472
QUALITY FUNCTION DEVELOPMENT FOR IMPROVEMENT ANALYSIS OF WEBSITE

Sevenpri Candra
Bina Nusantara University, Jakarta – Indonesia
sevenpri@gmail.com

Maria Immaculata
Bina Nusantara University, Jakarta – Indonesia

Kartika Ligyaningtias
Bina Nusantara University, Jakarta - Indonesia

ABSTRACT

Internet is one of the medium of dissemination of global information, which provides an easy way to do business and enable the user to communicate and obtain the information needed quickly and accurately. D Restaurant is a restaurant managed by C.V. D Indonesia; this restaurant has created a web site that can be accessed by customers who need information about their products, but still having problems in the utilization of the website. To view the competition in the industry the writer used Porter’s five forces analysis, while to compare the restaurant’s website and competitor’s, the writer analyzed with Quality Function Deployment (QFD). The analysis’ result shows that the development of website adjusted with the wishes and needs of customers of D Restaurant is a perfect solution. The development will be focused on the consistency of language used, contents to attract attention of the reader, company and product information on the website, FAQ pages, as well as the delivery order through the website.

Keywords: e-marketing, QFD, Porter Five Forces Analysis

INTRODUCTION

D restaurant is a restaurant under the management of CV. D Indonesia that provides restaurant service. This restaurant has created a website that can be accessed by customers who need information about the products and the restaurant itself and also to support the marketing activities of this restaurant.

But the main reason to analyzed and developed the website was because the website owned by D Restaurant still needs to be developed and improved, also some of the information displayed in the website is not up-to-date, there is only standard features available such as company profile, and the lack of facilities FAQ (Frequently Asked Questions) that can allow customers to know things in common that is usually asked by customers about the product, the sales process or the company itself. Besides the lack of service facilities, booking through a website that can allow a customer to make a delivery order through the web site for current delivery service is only performed with the use of telephone facilities.

Identification of Problems

- How is the condition of the website owned by D Restaurant compared to the websites owned by other similar Restaurant?
- How to design web site development adjusted with customer’s need and desire that can be recommended to the D Restaurant in the future?

Objectives of Research

- To analyze the condition of the website which is now owned by D Restaurant compared to web sites owned by other similar Restaurant.
- To find out and give design suggestions for D Restaurant’s website development to suit the needs and desires of customers in the future.

METHODOLOGY

To support this research the writer takes a few steps to get the results of research ranging from data collection, data processing to the results obtained, including:
In this research method is divided into two phases, namely surveys and literature studies. Literature study conducted to gather information related to the research to be investigated. Literature is used among other books, journals, internet browsing and the theories and applications of Quality Function Deployment (QFD). Data collection techniques used in this study:

The primary data used as the primary data source to meet the research objectives is obtained by collecting directly from the study site with: Questionnaires distributed systematically, used to obtain data that consists of a series of questions that were answered by respondents. Interviews are used as data collection techniques, interviews were conducted with the Restaurant.

Secondary data is a supported data from: The research was conducted by reading, studying and collecting the relevant theories through books, internet, journals related to the context of research and data provided by the company relating to the studied matter.

Method of Analysis

Based on the results of Porter's analysis of its peers over the competition, the company has a strategy to create competitive advantage. In the possible entry of new competitors, the company has a strategy to create a barrier to entry, while in the potential development of substitute product, the strategy is to innovate menu. In the bargaining power of suppliers, the company used backward strategy. In bargaining power, the strategy is to increase the company's services to the customer, provide customers with special discounts to customers who order in large amount, e.g. for events. Therefore, based on the above results, the writer concluded that the company already has strategies to compete, which enabling them to compete in the industry. Further analysis is used Quality Function Deployment (QFD) to analyze the websites owned by D Restaurant.
Analysis of Quality Function Deployment (QFD)

Figure 2. House Of Quality
Figure 3. The Charge of the House of Quality

Source: Results of Data Processing
From the analysis using the method of QFD (Quality Function Deployment), it can be concluded that the comparison between the website owned by D and EsTeler 77 has the same power. But the weakness of D Restaurant’s website is the writing format, consistency of language used, such as images to attract attention, company and product information on the website, the FAQ page that does not exist and the absence of bookings through website page.

In terms of technical parameters of the interaction strength between the needs of customers, the website development can be done on the access speed with the priorities of 9.50%, always updated at 26.14%, easy to use (user friendly) at 34.06%, and reliable at 30.30%. Therefore, in the re-design stage, the order of priorities should be user friendly, reliable, always updated, and the speed of access.

Thus, the conclusions of the analysis of QFD is the features development that need to be done in terms of information of D Restaurant, the consistency of language used, product information, advanced formatting, and adding other features, such as FAQs that can help consumers to obtain information more easily and quickly, and delivery order through the website.

**Web site development using the framework 7°C**

- **Context**: site layout and design.
- **Content**: text, images, sounds, and videos that contain web sites.
- **Community**: the way that these sites allow users to communicate.
- **Customization**: the ability to adapt the site for different users or to allow users to personalize the site.
- **Communication**: the way the site allows the site to users, users to the site, or two-way communication.
- **Connection**: the degree that this site is linked to other sites.
- **Commerce**: the ability of sites to enable commercial transactions.

**CONCLUSION**

- Porter analysis shows that the bargaining power of consumers can be said to be in a strong position. Consumer satisfaction can be achieved by providing good quality of product and service. Therefore companies need to focus on customer satisfaction by improving service by developing marketing via the internet. With the internet service which is a huge global market with access to 24 hours without stopping, so it can be used as a media campaign, and also provides information to customers. Therefore D Restaurant is expected to develop their website to support their goals also provide information and increase more satisfaction to the customers.

  - The comparison result shows that the website of D Restaurant relatively has the same power with their competitor, but the customer felt that the website has a weakness in some aspects and in developing a website, there are several things that must be considered such as:
    - **Context**: the consistency of the language used.
      
      Consistency of language used can be improved by using Indonesian on the web content.
    - **Content**: media such as images to attract attention.
      
      By adding pictures of food products will attract consumers to order food. But in the drawings should include attention to image size so it does not affect a slow down on the speed of website access.
    - **Communication**:
      
      - Company and product information on website are not complete
      
      The full information about the company and its products on the website can support e-marketing applications. Implementation of e-marketing will provide products information for customers to see the decryption of goods.
• The absence of FAQ page

  o Commerce: the absence of order through website.

  The company uses the web to reach out all subscribers to the decision making process. The majority of respondents expect to find new products or services online and to buy goods there.

  o In terms of technical parameters of the interaction strength between the needs of customers, the website development can be done on the access speed with the priorities of 9.50%, always updated at 26.14%, easy to use (user friendly) at 34.06%, and reliable at 30.30%. Therefore, in the re-design stage, the order of priorities should be user friendly, reliable, always updated, and the speed of access.

  o With the development of this website, then D Restaurant is expected to be able to increase the number of customers and the improve the restaurant's image.

REFERENCES


THE INFLUENCE OF BIG FIVE PERSONALITY, JOB SATISFACTION, AND ORGANIZATIONAL COMMITMENT ON ORGANIZATIONAL CITIZENSHIP BEHAVIOR ANALYSIS AND ITS IMPACT TOWARDS ORGANIZATIONAL EFFECTIVENESS ON PT HARAPAN SURYA LESTARI

Annetta Gunawan
Bina Nusantara University, Jakarta – Indonesia

Natalia
Bina Nusantara University, Jakarta - Indonesia

ABSTRACT

In order to achieve organizational effectiveness, every company not only needs qualified human resources, but also employees who perform Organizational Citizenship Behavior (OCB), which is influenced by individual internal factor i.e. Big Five Personality and its external factor i.e. job satisfaction and organizational commitment. As a company that has not been of long standing, PT Harapan Surya Lestari needs employees with high OCB level so that the sustainability of the company can be maintained. The purpose of this research is to analyse the effects of Big Five Personality, Job Satisfaction, and Organizational Commitment of the employees to Organizational Citizenship Behavior and its impact towards Organizational Effectiveness on PT Harapan Surya Lestari (HSL). The method used in the research is Path Analysis. The data is obtained from questionnaire disseminated to all the employees of PT HSL in order to measure the level of Big Five Personality, Job Satisfaction, and Organizational Commitment of the employees and Organizational Effectiveness from the perception of each employee, by using likert scale. Results from the data analysis, obtained structural equations $Y = 0.240 X_1 + 0.166 X_2 + 0.502 X_3 + 0.6671 \varepsilon_1$ where simultaneously Big Five Personality, Job Satisfaction, and Organizational Commitment contribute significantly to Organizational Citizenship Behavior of 55.5% and $Z = 0.461 X_2 + 0.374 Y + 0.6921 \varepsilon_2$ where simultaneously Job Satisfaction and Organizational Commitment contribute significantly to Organizational Effectiveness of 52.1%.

Keywords: Big Five Personality, Job Satisfaction, Organizational Commitment, Organizational Citizenship Behavior, Organizational Effectiveness

INTRODUCTION

Every organization or company tends to try to find and obtain qualified and competitive human resources in order to fill organizational structure that has been set, so that the expected work results will be obtained. But more than that, company also needs people who want to do things beyond their formal duties for organization without receiving more rewards in order to support the company to survive in competition and achieve success. This kind of employee behavior is called Organizational Citizenship Behaviour (OCB). OCB is an extra role behavior that is appreciated when performed by employee, even though it's not described formally, as it increases the effectiveness and the sustainability of the organization. Employee behavior is the key to achieve effectiveness (Ivancevich dkk, 2007, p27).

Organizational effectivity is the extent to which an organization succeeded in utilizing the existing resources optimally as an effort to achieve its purpose or goal while avoiding tension among its members as much as possible. One way to achieve the organizational effectiveness is by employing people who perform OCB. According to Organ in Yen and Niehoff (year unknown, p3), higher OCB level will result in higher effectiveness level for organization and help to bring new resources into the organization.

In investigating the causes of individual behavior, in this case OCB, internal and external factors of the individual should be considered. One of the internal factors is personality variable that is viewed from big five factors (big five personality), while external factors include work attitudes that consists of job satisfaction and organizational commitment. It is also based on OCB theory that was developed from disposition/personality and work attitude (Luthans, 2006, p251). Whereas, according to Robbins (2003, p91), job satisfaction and organizational commitment are work attitudes that are considered in mostly organizational behavior research.
PT Harapan Surya Lestari (HSL) is one of manufacturers who sell instant drinks with different variants of taste. The new company that has started to operate in 2001 and has officially become limited company (PT) in 2007, is now employing 113 permanent employees and 400 freelance labors. As a company that has not been of long standing, PT Harapan Surya Lestari needs qualified employees with high OCB level so that the sustainability of the company can be maintained in order to face its competitors and unforeseen market condition.

In fact, it is difficult to grow OCB within the employees. Indisipliner actions that still often happens are some evidence of the low quality work of the employees, especially about employees’ personality and mentality problems. Generally, employees don’t have self initiatives to work well, they have to be pushed by their superiors to be able to work better. From the observation, it is known that many employees come late and go home earlier. The targets of the duties that have been set to be completed by employees frequently can’t be achieved or can’t be finished on time. Beside that, on working hours, they often do job-non-related activities (playing games, playing Facebook, smoking, chatting about topics not related to the work, etc), do not feel responsible for office facilities, and there are still conflicts happened among the employees. Moreover, fraud acted by employees ever happened for several times, that brought material disadvantages for the company, such as not giving money collected from distributor to the company and falsifying payment bills.

The problem arising lately is less optimally employees’ work attitudes. This is mainly effected by the decreasing sales that causes the company has to do retrenchment and cut unnecessary costs, such as office recreation cost, reduction of electricity utility, fuel cost for office vehicles, and employees bonuses. It affects the employees’ attitudes in working, where their work spirit drop and they don’t give optimal effort anymore for the company. Many employees become lazy, they even complain the management about the rewards and facilities they receive which are not as good as before. In addition, the company condition that is not too good also makes managers and supervisors depressed. It influences their attitudes to become not too nice to the employees, and finally also impacts on the declining job satisfaction of the employees.

Nevertheless, the employees of PT HSL are expected to still have commitment to their organization. Until now, the level of employees loyalty is high enough, proven by the low turnover level. But, there were still about 6% of the employees who resigned, although they were in good position when they resigned. And of course, it made the company lose human resources who actually contributed quite significantly for the company.

From the explanation above, there are two purposes from this research. The first purpose is to know and to analyse how much Big Five Personality, Job Satisfaction, and Organizational Commitment of the employees influence Organizational Citizenship Behavior on PT HSL individually and simultaneously. While, the second purpose is to know and to analyse how much Big Five Personality, Job Satisfaction, Organizational Commitment, and Organizational Citizenship Behavior of the employees influence Organizational Effectiveness on PT HSL individually and simultaneously.

DISCUSSION

Big Five Personality

Personality is how people influence others and how they understand and see themselves, also how their measuring patterns of inner character and outer character measure trait and interaction between human-situation (Luthans, 2006, p228). While, according to Ewen (2003,p4), personality refers to important and relatively stable aspects of behavior. In this research, personality is viewed based on the big five personality that was developed by Costa and McCrae (1992, 1998). Greenberg dan Baron (2003, p85) defined big five as five basic dimensions of personality that are assumed to underlie many specific traits. Those five personality traits are, based on Robbins (2003, p125):

1. Extraversion. This dimension includes someone’s interest level to relationships. Extravert people tend to like to be incorporated in groups, be assertive, and be able to socialize. Introvert people tend to be quiet, shy, and calm.
2. Agreeableness. This dimension refers to an individual tendency to obey others. People who have high level of agreeableness are cooperative, warm, and easy to trust others. People with low rank in agreeableness are cool, not able to agree, and antagonistic.

3. Conscientiousness. This dimension is a measure of reliability. People who are really sensitive to conscience, reliable, organized, credible, and persistent. They who have low rank in this dimension tend to be easily confused, not organized, and not reliable.

4. Neuroticism. This dimension opens ways for the ability of an individual to survive from stress. People with positive emotional stability tend to be relaxed, confident, and safe. They who have highly negative score tend to be nervous, anxious, depressed, and not safe.

5. Openness to experience. This final dimension proposes a range of an individual interest and admiration towards new things. Extremely opened people are creative, curious, and artistically sensitive. Not opened people are conventional and find comfort in familiarity.

Attitude

Personality and attitude are complex cognitive processes. Their difference lies in the fact that personality is thought as a whole human, while trait and attitude are thought as the shapers of personality (Luthans, 2006, p236). Work attitude is feeling, belief, and behavior tendency which are relatively stable to the various aspects of the job itself. Most of organizational behavior researches concern about three work attitudes, i.e.: job satisfaction, job involvement, and organizational commitment (Robbins, 2003, p91). In this research, we will only discuss about job satisfaction and organizational commitment.

Job Satisfaction

Job satisfaction is the individual level of satisfaction that they receive appropriate rewards of various aspects of job situation from the organizations where they work (Tangkilisan, 2005, p164). Some job satisfaction factors are as follows:

1. The job itself. Based on the job diagnostic survey, it is known that five characteristics related to job satisfaction for various jobs are skill diversity, task identity, essential duty, autonomy, and feedback giving.

2. Salary or reward that thought to be fair. By using fair theory of Adams, people who receive salary that perceived to be too small or too big will feel distressed. If salary or reward is perceived to be fair based on job requirements, individual skill level, and salary standard that is applicable for a particular job group, so there will be a job satisfaction.

3. Promotion opportunity. Someone can feel a large possibility to be promoted or not, and promotion process is opened or not. This also can influence his job satisfaction.

4. Supervision. Functional relationship shows how much supervisor helps employee to satisfy their important job values. Aggregate relationship is based on attractiveness interpersonal that has same basic attitudes and values. High job satisfaction level will be created if the two relationships are positive.

5. Coworkers. Job satisfaction will be created if there were appropriate amount of workers in one workspace, so that they can talk to one another (their social needs can be fulfilled). Generally, cooperative coworkers or team members is the most simple source of an employee's satisfaction. A good working team makes job be fun, so that results in job satisfaction.

6. Working condition. Companies need to provide bright and cool workspace, with equipments which are comfort to be used. In that condition, fulfilled physical needs will satisfy the employees.

Organizational Commitment

According to Porter, Steers, Mowday, dan Boulian (Rabin, 2003, p868), organizational commitment is the relative strength of an individual's identification with and involvement in a particular organization. If job satisfaction shows an employee's satisfaction to the job he does, then organizational commitment shows his satisfaction to the organization where he works. There are three dimensions of organizational commitment components according to Mayer and Allen:

1. Affective commitment, which is an employee's emotional attachment, identification, and involvement in an organization. This emotional attachment is formed because he agrees with basic purposes and values of the organization, and understands for what the organization stands. People with high degree
of affective commitment will choose to still stay in their organizations in order to support the organizations in achieving their missions.

2. Continuance commitment, which is commitment based on losses that might be occurred if the employee resign from the organization. The longer an employee stay in an organization, the more unwillingly he lose what he has already ‘invested’ in the organization for years, such as seniority, promotion opportunity, pension planning, and frisenhip with coworkers. People with high degree of continuance commitment will choose to still stay in their organization because they just don’t want to take risks by losing those kinds of things.

3. Normative commitment, which is the feeling about obliged to stay in the organization because it must be so; it is the right thing to do. The obligation to stay in the organization is caused by pressure from others. People with high degree of normative commitment really care about what others think if they resign from their organizations. That kind of employees feel hesitate to dissapoint their employers and afraid of being thought as bad people if they resign.

**Organizational Citizenship Behaviour**

Organizational Citizenship Behaviour has been very famous in organizational behavior since it was firstly introduced 20 years ago, with theoritical basis disposition/ personality and work attitude. The personality basic for OCB reflects an employee’s predisposition trait which is cooperative, helpful, care, and earnest. While the attitude basic indicates that an employee is involved in OCB in order to repay the organization (Luthans, 2006, p251).

According to Organ, Organizational Citizenship Behaviour is discretionary behavior that is not included in an employee’s formal job requirements, even so it promotes effective functioning to the organization (Robbins, 2003, p30). Van Dyne et all proposed a construction of extra role behavior (ERB), which is behavior that attempts to benefit the organization and that goes beyond existing role expectations (Organ, 2005, p33).

OCB consists of five dimensions according to Organ (Purba dan Seniati, 2004, p106):

1. Altruism, which is helping behavior to alleviate other’s work in an organization, for example help an unhealthy coworker to do his work.
2. Courtesy, such as helping coworkers to avoid problems related to their works by giving them consultation and information and appreciate their needs, or understanding and emphasizing even when be criticized.
3. Sportsmanship, which is tolerating a situation that less than ideal in the workplace without complaining, such as participating in bearing the failure of a team project that might be succeed by listening to members’ advice.
4. Civic virtue, by participating in the organizational activities and caring about the existence of the organization, such as willing to represent the company for joint program.
5. Conscientiousness, by doing things which give advantage to the organization, such as obeying rules of the organization and willing to work overtime to finish a project.

It is proven that organizations which have employees with high level of OCB perform better than others which are not. So, organizational behavior is related to OCB as a dependent variable (Robbins, 2003, p30). Therefore, present managers will be very wise to try to increase not only their employees’ job satisfaction and organizational commitment, but also OCB (Luthans, 2006, p251).

**Organizational Effectiveness**

Georgopualos and Tannebaum in Tangkilisan (2005, p139) defines organizational effectiveness as the extent to which an organization as a social system, given certain resources and mean, fulfill it’s objective without incapacitating it’s means and resources and without placing strain upon it’s members. Effective function of an organization depends on an employee’s OCB. It is proven that an employee who performs OCB has better performance and receive higher performance evaluation. OCB is also related to performance and effectiveness of a group and an organization (Luthans, 2006, p251). Moreover, Organ also stated that higher OCB level will result in higher effectiveness for the organization and help to bring new resources into the organization.
Organizational effectiveness can be evaluated by considering about two factors including (1) goal achievement and (2) implementation process of the organization, which are reflected in the organizational behavior (Hutapea and Thoha, 2008, p59). It is in line with Tangkilisan’s opinion (2005, p139) that the concept about organizational effectiveness involves two aspects, which are (1) the goal of the organization and (2) functional implementation or ways to achieve the goal. Moreover, in Hutapea and Thoha (2008, p59), Ivancevich and Matteson also used the similar approach to measure organizational effectiveness, i.e. Goal Approach and System Theory Approach. The two approaches will be described in more detail below:

1. Goal Approach focuses on the extent to which an organization achieve its goal (Griffin, 2004, p88). Those who agree with this approach argued that an organization is established in order to achieve its goal, so that to measure effectiveness level of the organizational implementation, they connect it directly to goal achievement of the organization. According to Gibson in Tangkilisan (2005, p141), the clarity of the goal to be accomplished is indeed one of the measurement indicators of organizational effectiveness.

2. System Theory Approach doesn’t see organizational effectiveness based on the goal to be accomplished, but organizational behavior description at the time of interaction internally at the organization and the behavior of the organization when adapting with its environment (Hutapea dan Thoha, 2008, p61). In other words, there are two roles to be implemented by an organization, which are internal role and external role. In this research, it is only used internally process approach, because the measurement of organizational effectiveness in this case is conducted from the employees point of view. Internally process approach is related to the internal mechanism of the organization and focuses on minimizing tension, integrating individual and organization, and implementing operation smoothly and efficiently (Griffin, 2004, p88). While, Gibson mentioned supervision and control system as organizational effectiveness measure. Smooth vertical and horizontal communication in an organization and the presence of work spirit and member loyalty are also included in the criteria of system theory approach (ITB, 2003, p14).

Research Methodology

The nature of this research is associative research. The unit of analysis used in this research are all employees in PT HSL. There are 113 employees working at PT HSL which make up the population of this research. Researcher used census method by taking the whole population due to the relatively small population size. In order to collect data, questionnaire in likert scale was used to measure five research variables in which respondents giving weight to each question as follows:

- Score 1 = Strongly Agree
- Score 2 = Agree
- Score 3 = Neither Agree nor Disagree
- Score 4 = Disagree
- Score 5 = Strongly Disagree

Variables in this research can be operationalized in Table 1 below.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dimensions</th>
<th>Indicators</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Five Personality (X₁)</td>
<td>Extraversion</td>
<td>Openness</td>
<td>Interval</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sociability</td>
<td>Interval</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ability to work in team</td>
<td>Interval</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>Cooperativeness</td>
<td></td>
<td>Interval</td>
</tr>
<tr>
<td></td>
<td>Politeness</td>
<td></td>
<td>Interval</td>
</tr>
<tr>
<td></td>
<td>Respect other people’s interest</td>
<td></td>
<td>Interval</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>Self-Discipline</td>
<td></td>
<td>Interval</td>
</tr>
<tr>
<td></td>
<td>Reliability</td>
<td></td>
<td>Interval</td>
</tr>
<tr>
<td></td>
<td>Hard working</td>
<td></td>
<td>Interval</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>Calmness</td>
<td></td>
<td>Interval</td>
</tr>
<tr>
<td></td>
<td>Emotional Stability</td>
<td></td>
<td>Interval</td>
</tr>
<tr>
<td></td>
<td>Having Self Confidence</td>
<td></td>
<td>Interval</td>
</tr>
<tr>
<td>Factor</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Openness to experience</strong></td>
<td>Curiosity to new things</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Creative Thinking</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flexibility in handling problems</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td><strong>Job Satisfaction (X2)</strong></td>
<td>Employee likes the job</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task significance</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The balance between employee's ability and the job itself</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Job feedback</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td><strong>Compensation</strong></td>
<td>The salary is appropriate to the job</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The salary is appropriate to the applied standard</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The salary is appropriate to employee's abilities and skills</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td><strong>Promotion opportunities</strong></td>
<td>Promotion based on achievement</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transparency of promotion process</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td><strong>Supervisor</strong></td>
<td>Presence of positive functional relationship</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Presence of similar overall relationship</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td><strong>Colleague</strong></td>
<td>Fulfillment of employees' social needs</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cooperative colleagues</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fellowship among colleagues in the workplace</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td><strong>Working Condition</strong></td>
<td>Workroom condition</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Office layout</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Availability of working facilities</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td><strong>Organizational Commitment (X3)</strong></td>
<td>Consent to organization's basic values or goals</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Involvement in attaining organization's mission</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Having emotional ties with organization</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td><strong>Retention</strong></td>
<td>Anxiety of losing promotion opportunity if resign</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hopes to get more benefits by stay working for the organization</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unwillingness of losing relationship with colleagues if resigns</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unwillingness to look for other job due to convenience in the current job</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td><strong>Normative</strong></td>
<td>Prefer to stay working for the organization to make employer undisappointed</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concern for what other people will say if resigns</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feeling that to stay in the organization is the right thing</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td><strong>Organizational Citizenship Behavior (Y)</strong></td>
<td>Helps colleagues to finish overload work</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Helps customers and guests who need help</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Helps new colleagues to adapt to the workplace</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td>Courtesy</td>
<td>Giving colleagues informations related to work</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Willingness to receive criticism</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Keeping up with the organization’s growth</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td>Sportsmanship</td>
<td>Tolerance to less ideal situation in the work place</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Never blaming others for the failure of employee’s own team</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td>Civic virtue</td>
<td>Involvement in organization’s activities</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Helps to maintain organization’s image</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concern with organization’s sustainability</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>Obedience to organization’s rules</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Willingness to work more than minimum requirement</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Willingness to work overtime</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximize the use of working time</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td>Organizational Effectiveness (Z)</td>
<td>Setting goals as the benchmark for employees in doing their job</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Desire from the organization’s members to achieve the goals</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Involving employees in the process of setting goals</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Goals are attained due to organization’s members contribution</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td>Internal Process</td>
<td>Effective Control System</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employees feel satisfied with the organization</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Good communication process in the organization</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organization’s members are free from pressure and stress</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ability of the organization to minimize internal conflict</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Running the operational activities well and efficiently</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spirit of cooperation and loyalty among organization’s members</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trust and good communication between upper and lower level employees</td>
<td>Interval</td>
<td></td>
</tr>
</tbody>
</table>

Below are the hypotheses for this research

For Research Purpose 1

\[ H_0 = \text{Big Five Personality} (X1), \text{Job Satisfaction} (x2), \text{and Organizational Commitment} (X3) \text{ simultaneously do not have significant contribution to OCB} (Y) \text{ in PT HSL} \]
Ha = Big Five Personality (X1), Job Satisfaction (X2), and Organizational Commitment (X3) simultaneously have significant contribution to OCB (Y) in PT HSL

For Research Purpose 2
Ho = Big Five Personality (X1), Job Satisfaction (X2), Organizational Commitment (X3), and OCB (Y) simultaneously do not have significant contribution to Organizational Effectiveness (Z) in PT HSL
Ha = Big Five Personality (X1), Job Satisfaction (X2), Organizational Commitment (X3), and OCB (Y) simultaneously have significant contribution to Organizational Effectiveness (Z) in PT HSL

RESEARCH RESULTS

To analyze the data, several techniques are used in accordance with the research problems and procedures such as: Transformation of Ordinal into Interval Data, Validity-Reliability Test, and Normality Test. After conducting the tests, researcher used Path Analysis method to answer the research purposes.

Validity-Reliability and Normality Test

The result of validity test with 95% confidence interval shows that there are 2 invalid questions out of 15 questions that measure Big Five Personality variable i.e. question number 5 and 12. There are 5 invalid questions out of 17 questions regarding Job Satisfaction i.e. question number 17, 19, 27, 28, and 32. For Organizational Commitment variable, from 10 questions, question number 37 and 40 are invalid. While 15 questions regarding OCB and 12 questions regarding Organizational Effectiveness are all valid. The result of reliability test by using SPSS shows that the data from each variable are reliable.

Based on computation in SPSS, all five variables in this research are normally distributed. Variable X1 has the value of Sig = 0.054 (≥ 0.05) which indicates normality. Variable X2 has Sig value = 0.200 (≥ 0.05) thus the data is normally distributed. Variable X3 has Sig value = 0.200 (≥ 0.05) that indicates normality of distribution. Variable Y has Sig value = 0.200 (≥ 0.05) so that it is normally distributed. Variable Z has Sig value = 0.200 (≥ 0.05) that indicates normal distribution. Furthermore, variable X1, X2, X3, Y, and Z can be analyzed by using path analysis method.

Path Analysis

The average scores of each dimension of research variables are shown in Table 2 below.

Table 2 The Average of Variable X1, X2, X3, Y, and Z

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dimensions</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Five Personality</td>
<td>Extraversion</td>
<td>3.3429</td>
</tr>
<tr>
<td></td>
<td>Agreeableness</td>
<td>3.5715</td>
</tr>
<tr>
<td></td>
<td>Conscientiousness</td>
<td>3.5066</td>
</tr>
<tr>
<td></td>
<td>Neuroticism</td>
<td>3.4213</td>
</tr>
<tr>
<td></td>
<td>Openness to experience</td>
<td>3.0685</td>
</tr>
<tr>
<td></td>
<td>Total Average</td>
<td>3,3822</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>The job itself</td>
<td>3.8097</td>
</tr>
<tr>
<td></td>
<td>Compensation</td>
<td>3.1374</td>
</tr>
<tr>
<td></td>
<td>Promotion opportunities</td>
<td>3.7867</td>
</tr>
<tr>
<td></td>
<td>Supervisor</td>
<td>3.8486</td>
</tr>
<tr>
<td></td>
<td>Colleagues</td>
<td>3.9016</td>
</tr>
<tr>
<td></td>
<td>Working Condition</td>
<td>3.3983</td>
</tr>
<tr>
<td></td>
<td>Total Average</td>
<td>3,6471</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>Affective</td>
<td>3.6870</td>
</tr>
<tr>
<td></td>
<td>Retention</td>
<td>3.5765</td>
</tr>
<tr>
<td></td>
<td>Normative</td>
<td>3.4454</td>
</tr>
<tr>
<td></td>
<td>Total Average</td>
<td>3,5697</td>
</tr>
<tr>
<td>Organizational Citizenship Behavior</td>
<td>Altruism</td>
<td>3.3879</td>
</tr>
<tr>
<td></td>
<td>Courtesy</td>
<td>3.3556</td>
</tr>
<tr>
<td></td>
<td>Sportsmanship</td>
<td>2.9396</td>
</tr>
</tbody>
</table>
Civic Virtue  3.3791  
Conscientiousness  3.4124  

**Total Average**  3.2950

Organizational Effectiveness  
Organizational goals  3.3167  
Internal Process  3.3763  

**Total Average**  3.3465

The results of bivariate correlation between variable X1, X2, X3, Y, and Z are summarized in Table 3 below.

**Table 3 The Nature of Relationship Between X1, X2, X3, Y, and Z**

<table>
<thead>
<tr>
<th>Relationship between</th>
<th>Correlation</th>
<th>The Nature of Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 and Y</td>
<td>0.560</td>
<td>Moderate, Positive, and Significant</td>
</tr>
<tr>
<td>X2 and Y</td>
<td>0.489</td>
<td>Moderate, Positive, and Significant</td>
</tr>
<tr>
<td>X3 and Y</td>
<td>0.677</td>
<td>Strong, Positive, and Significant</td>
</tr>
<tr>
<td>X1 and Z</td>
<td>0.499</td>
<td>Moderate, Positive, and Significant</td>
</tr>
<tr>
<td>X2 and Z</td>
<td>0.644</td>
<td>Strong, Positive, and Significant</td>
</tr>
<tr>
<td>X3 and Z</td>
<td>0.510</td>
<td>Moderate, Positive, and Significant</td>
</tr>
<tr>
<td>Y and Z</td>
<td>0.599</td>
<td>Moderate, Positive, and Significant</td>
</tr>
</tbody>
</table>

The result of path analysis for sub-structure 1 is summarized in Table 4.

**Table 4 Result Summary of Path Coefficient of Sub-structure 1**

<table>
<thead>
<tr>
<th>Contribution of Variable</th>
<th>Path Coefficient (beta)</th>
<th>Sig Value</th>
<th>Result</th>
<th>Coefficient of Determination</th>
<th>Coefficient of other variables ($\rho_y\varepsilon$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 to Y</td>
<td>0.240</td>
<td>0.003</td>
<td>Ho rejected</td>
<td>0.555 = 55,5%</td>
<td>0.6671</td>
</tr>
<tr>
<td>X2 to Y</td>
<td>0.166</td>
<td>0.033</td>
<td>Ho rejected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X3 to Y</td>
<td>0.502</td>
<td>0.000</td>
<td>Ho rejected</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Structural equation obtained from sub-structure 1:

\[ Y = p_{X1}Y + p_{X2}X2 + p_{X3}X3 + \varepsilon_1 \]

\[ Y = 0.240 X1 + 0.166 X2 + 0.502 X3 + 0.6671 \varepsilon_1 \]

where \( R^2 = 0.555 \)

The first hypothesis states that "Big Five Personality (X1), Job Satisfaction (X2), and Organizational Commitment (X3) simultaneously have significant contribution to OCB (Y) in PT HSL". The overall result shows significant contribution between variables as well as all the sub-variables which are individually accepted. The result of significance test of path coefficient of substructure 1 shows that the coefficients of variable X1, X2, and X3 to Y are statistically significant. Big five personality has a contribution of 0.240\(^2\) \times 100\% = 5.76\% to OCB, Job Satisfaction contributes 0.166\(^2\) \times 100\% = 2.76\% of OCB, while Organizational Commitment contributes 0.502\(^2\) \times 100\% = 25.20\% of OCB. Big five personality, Job Satisfaction, and Organizational Commitment simultaneously contributes 55.5\% of OCB and the remaining 44.5\% are influenced by other variables.

Big Five Personality (X1) has moderate, positive, and significant contribution to Organizational Citizenship Behavior (Y). As shown in Table 3, Big Five Personality correlates moderately strong with Organizational Citizenship Behavior. This means that the higher level of employee's Big Five Personality leads to better Organizational Citizenship Behavior. Therefore, PT HSL has to put effort on increasing the aspects of Big Five Personality of the employees so that their Organizational Citizenship Behavior will also be improved. As mentioned in Table 2, the lowest average score of the five dimensions belongs to openness to experience. This indicates that the employees are less open to new experience as well as having less creativity to create new ideas. The reason is because the employees are too much focused on daily routinity in their work. Hence, PT HSL needs to raise employees' openness to new experience by altering the current work system to be more challenging which can give rise to employees' creative thinking in problem solving. It is recommended to arrange recreation for employees which helps to stimulate their creativity. Otherwise
the company can hold seminars or workshops regarding creative thinking and openness to new experience as well as conducting employee personality test to figure out which dimensions need to be improved for individual employee.

Job Satisfaction ($X_2$) has moderate, positive, and significant contribution to Organizational Citizenship Behavior ($Y$). According to the result in Table 3, Job Satisfaction has moderately strong relationship with OCB. The higher level of Job Satisfaction leads to better Organizational Citizenship Behavior of employees. Thus PT HSL should put effort in order to increase employees' Job Satisfaction to improve OCB. According to Yuli (in Andan, 2007, p12), the model of Job Satisfaction will stimulate employees' behavior of doing more tasks than the required formal duty after passing a critical psychological condition.

Organizational Commitment ($X_3$) has strong, positive, and significant contribution to Organizational Citizenship Behavior ($Y$). The result in Table 3 shows that Organizational Commitment has strong relationship with OCB. Compared to Big Five Personality and Job Satisfaction, Organizational Commitment has the biggest impact to employees' OCB, where Organizational Commitment variable has the largest beta coefficient. It aligns with the opinion stated by Siagian (2005) that an organization in which the employees are viewed and treated as members of a big family tends to stimulate strong employee motivation to increase their Organizational Commitment. In turn, high Organizational Commitment causes various positive attitude and behavior such as avoiding misconducts that potentially harmful to organization's reputation, loyalty to leaders, co-workers, and subordinates, high productivity, willingness to solve conflict though deliberations, etc. As shown in Table 2, the lowest average score belongs to normative dimension. While the other two dimensions i.e. affective and retention show moderately high total score. This reveals that the employees of PT HSL prefer to stay working in the company and have strong willingness to work for the organization due to emotional ties with PT HSL and unwillingness of losing certain benefits if resign from the company. The high level affective dimension is possibly caused by the majority of the employees who have been working since the establishment of PT HSL, meanwhile the high level of retention is affected by the convenience of the working place and fellowship among organization members. The result shows that employees tend to conduct better OCB due to organizational satisfaction instead of job satisfaction.

The result of path analysis of sub-structure 2 discovers that the path coefficients of Big Five Personality ($X_1$) variable and Organizational Commitment ($X_3$) variable are not significant. Consequently, the model should be modified through trimming method by excluding variable $X_1$ and $X_3$ which are not significant. Then the model was reanalyzed and the result is summarized in the following Table 5.

<table>
<thead>
<tr>
<th>Contribution of Variable</th>
<th>Path Coefficient (beta)</th>
<th>Sig Value</th>
<th>Result</th>
<th>Coefficient of Determination</th>
<th>Coefficient of other variables ($\rho_2 \varepsilon_2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$X_2$ to $Z$</td>
<td>0.461</td>
<td>0.000</td>
<td>Ho rejected</td>
<td>0.521 = 52.1%</td>
<td>0.6921</td>
</tr>
<tr>
<td>$Y$ to $Z$</td>
<td>0.374</td>
<td>0.000</td>
<td>Ho rejected</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Structural equation obtained from Model 2 sub-structure 2:

$$Z = \rho_{x_2} X_2 + \rho_{y} Y + \varepsilon_2$$

$$Z = 0.461 X_2 + 0.374 Y + 0.6921 \varepsilon_2$$

where $R^2 = 0.521$

The second hypothesis states that “Big Five Personality ($X_1$), Job Satisfaction ($X_2$), Organizational Commitment ($X_3$), and OCB ($Y$) simultaneously have significant contribution to Organizational Effectiveness ($Z$) in PT HSL”, refers to simultaneous significant contribution. In contrary, not all sub-variables are accepted individually because based on path analysis of sub-structure 2, the path coefficients of $X_1$ to $Z$ and $X_3$ to $Z$ are not significant while the coefficients of $X_2$ to $Z$ and $Y$ to $Z$ are significant. Job Satisfaction contributes $0.461^2 \times 100\% = 21.25\%$ of Organizational effectiveness, while OCB contributes $0.374^2 \times 100\% = 13.99\%$ of Organizational effectiveness. Job Satisfaction and OCB simultaneously contributes $52.1\%$ of Organizational effectiveness and the remaining $47.9\%$ is influenced by other variables not included in this research.
Big Five Personality ($X_1$) has weak but positive and insignificant contribution to Organizational Effectiveness. According to the result in Table 3, Big Five Personality has moderately strong relationship with Organizational effectiveness. The higher level of employees’ Big Five Personality leads to higher Organizational Effectiveness. Although Big Five Personality has no significant contribution to Organizational effectiveness, both variables correlate moderately strong with each other. Therefore, PT HSL needs to hire employees with high level of Big Five Personality by requiring personality test for applicants to reveal their underlying personality in order to attain Organizational effectiveness.

Job Satisfaction ($X_2$) has strong, positive, and significant contribution to Organizational effectiveness ($Z$). In Table 3, it is shown that Job Satisfaction correlates moderately strong with Organizational effectiveness. From the result we know that Job Satisfaction has the biggest influence to Organizational effectiveness compared to the other three independent variables, where Job Satisfaction has the largest beta coefficient. For that reason, Job Satisfaction becomes the main factor that PT HSL should pay attention to in achieving Organizational effectiveness. Table 2 shows that the lowest average scores among six dimensions of Job Satisfaction belong to compensation and working condition. This means that employees feel that the compensation given by the company and the current working condition is less sufficient. Hence PT HSL should consider salary increase based on education level and portion of work to each employee. Furthermore, the company needs to put attention to office layout, repairation of office facilities, etc. Office layout and facilities should be well organized to make employees feel convenient to work which leads to higher job satisfaction. Finally, employee will conduct behavior that support the attainment of organization’s goals and in turn will affect the attainment of the higher level of Organizational effectiveness.

Organizational Commitment ($X_3$) has moderate, positive, and insignificant contribution to Organizational effectiveness ($Z$). Table 3 shows that Organizational Commitment has moderately strong relationship with Organizational effectiveness. Higher level of employees’ Organizational Commitment leads to higher Organizational effectiveness. Although Organizational Commitment contributes unsignificantly to Organizational effectiveness, both variables have moderately strong relationship. This is evidenced with employees’ good organizational commitment which aligns with the highest score of Organizational effectiveness variable in question 68 which states that respondent has the spirit to cooperate in teams and loyalty to the organization. There are 3 main aspects needed to develop Organizational Commitment i.e.: identification, involvement, and loyalty to organization (Kuntjoro, 2002). Identification involves building employees trust to the organization. This can be realized by modifying organization’s objectives in order that it involves employees personal objectives or otherwise includes employees’ needs and desire. Employees’ participation in working activities is essential to be concerned because employees involvement is able to create their willingness to cooperate whether with leaders or co-workers. Employees loyalty to the organization is their willingness to maintain continuous relationship with the organization, even sacrificing their own personal interests for the organization.

Organizational Citizenship Behavior ($Y$) has strong, positive, and significant contribution to Organizational effectiveness ($Z$). As shown in Table 3, OCB has a moderately strong relationship with Organizational effectiveness, nearly categorized to be strong relationship due to the correlation coefficient of 0.599 which is the upper limit within the category. Higher level of employees’ Organizational Citizenship Behavior leads to higher Organizational effectiveness. This aligns with the opinion stated by Organ (Yen and Niehoff, year unknown, p3) that the effective function of an organization depends on the surpassing effort of the employees beyond their required formal duty, which is called Organizational Citizenship Behavior (OCB). Thus PT HSL has to put efforts on improving employees’ OCB for the purpose of improving Organizational effectiveness. According to the result in Table 2, we find that sportmanship dimension has the lowest average score compared with the other four dimensions. Two questions regarding sportmanship, which stated that respondent is tolerant to less ideal situation in the work place, and that respondent never blame others for the failure of his/her own team, have the lowest total scores which indicates internal conflicts including protests from employees to the management concerning unpleasure conditions for them. This aligns with question 65 (respondent is free from pressure and stress in the organization) and 66 (the company is capable of minimizing internal conflicts) regarding Organizational Effectiveness which have the lowest scores compared to other questions. In addition, the highest total average score belongs to Altruism, in which employees are willing to help colleagues finishing their overload works, help customers and guests who need it, as well as helping new colleagues to adjust within the new working environment without instructions from leaders, which is in accordance with Process dimension in Organizational effectiveness.
which has the highest total average score contributed by the highest score in question 67 (The organization runs its operational activities well). Consequently, PT HSL should push and motivate the employees for the purpose of increasing their OCB to attain higher level of Organizational effectiveness.

CONCLUSION

The conclusion of this research can be summarized as follows. Firstly, Big Five Personality, Job Satisfaction, and Organizational Commitment simultaneously have significant contribution to Organizational Citizenship Behavior at 55.5%. Secondly, Job Satisfaction and Organizational Citizenship Behavior simultaneously have significant contribution to Organizational effectiveness at 52.1%, while Big Five Personality and Organizational Commitment contribute unsignificantly to Organizational effectiveness. The result shows that Organizational Commitment is the most significant factor that influence employees’ OCB, so that it can be figured out that the main reason in which employees are willing to perform extra role is their emotional ties to PT HSL, which is developed by employees satisfaction to the organization. In short, Job Satisfaction is also the main factor influencing the attainment of Organizational effectiveness in PT HSL.

There are several suggestions for the company resulting from this research. Firstly, employees’ Big Five Personality should be more concerned and improved by giving personality test through The Big Five Inventory (BFI), then holding seminars or workshops regarding how to improve personality profile, especially in the workplace. Secondly, employees’ Job Satisfaction should be the main concern of PT HSL, by continuously renewing good work system for the interest of the employees and the organization as well. Moreover, PT HSL has to maintain equal promotion opportunity through reward and punishment system, assigning work which is proper to the capacity of individual employees, providing leadership and motivation training to the superiors to ensure that they are able to control and maintain good relationship with their subordinates, fostering good fellowship within the company by periodically arranges employee gathering or recreation, considering salary increase, and improving needed office facilities. Thirdly, PT HSL is suggested to put efforts on increasing employees’ Organizational commitment by giving more understanding to employees about the values and objectives of the organization through orientation program to new employees, modifying organization’s objectives to scope with employees’ personal objectives, involving employees in every attempt to achieve organization’s mission so that they have emotional ties with PT HSL, which can be accomplished through quality circle. Furthermore, PT HSL needs to analyze and develop other factors that influence Organizational Citizenship Behavior and Organizational effectiveness through Human Resource Research.

REFERENCES

Yen, HsiuJu Rebecca dan Brian P. Niehoff. (tahun tidak diketahui), Relationship Between Organizational Citizenship Behaviors, Efficiency, and Customer Service Perceptions in Taiwanese Banks, OCB and Effectiveness, Midwest Academy of MGMT, (ON LINE), [http://www.cobacourses.creighton.edu](http://www.cobacourses.creighton.edu), 20 November 2009
UNDERSTANDING THE RELATIONSHIP COMMITMENT OF THE SUBSCRIBERS OF A LEADING WIMAX INTERNET SERVICE PROVIDER IN BANGLADESH

Mohammad Muzahid Akbar*
Independent University, Bangladesh (IUB)

Hanif Mahtab
Independent University, Bangladesh (IUB)

Samir Mainuddin
Independent University, Bangladesh (IUB)

*Corresponding Author: e-mail: zahid_89@yahoo.com

ABSTRACT

This study intends to investigate the relationships of communication effectiveness, trust, technical quality, functional quality, and relationship commitment in the context of the prepaid and post-post subscribers of a major private telecommunication company of Bangladesh. It presents a critical appraisal of few important antecedents of subscribers’ relationship commitment to the respective mobile service provider. Data were collected from 172 subscribers and 107 post-paid by using self-administered questionnaires. For prepaid subscribers stepwise regression has showed that technical quality, communication effectiveness, and functional quality have statistically significant relationship with relationship commitment. However, stepwise regression for post-paid subscribers has showed that trust and technical quality have statistically significant relationship with relationship commitment. A clear understanding of important precursors of subscribers’ relationship commitment might induce the service provider(s) to germinate and strengthen subscribers’ relationship commitment to create a loyal customer base.

Keywords: Service Quality- Technical quality and Functional quality, Communication Effectiveness, Trust, and Relationship Commitment

INTRODUCTION

Modem based Broadband Internet Service (BIS) is becoming increasingly popular in Bangladesh. In Bangladesh first internet connection got established back in 1996; number of internet users in 2008 was only 6 lakh (Singh, 2011). Bangladesh Telecom Regulatory Commission (BTRC) reported that currently this figure has gone up to 20 million which only reflects extraordinary growth of internet penetration in the country in recent years (Rahman, 2011). After getting government permit, three companies have started operation employing WiMax (Worldwide Interoperability for Microwave Access) for wireless delivery of high-speed internet services to wide geographical areas. Two leading WiMax operators namely Banglalion (primarily focusing on expansion of service network) and Qubee (primarily focusing on innovative and user-friendly services to be the best at wherever they are) managed to start operation at the end of 2009. The newcomer Ollo has started operation in October, 2011. WiMax subscribers only represent less than 1% of Bangladesh’s total internet users; 94% internet users still rely on services offered by the mobile phone operators. But people have started switching to WiMax internet services to enjoy high speed connectivity which is mobile and wireless (Rahman, 2011).

Introduction of WiMax has elevated subscribers’ expectations. For service oriented companies the essence of marketing is developing long-term and value laden relationship with customers (Palmer & Bejou, 1998). In relationship marketing, relationship commitment is considered essential for successful long-term relationship with customers (Anderson & Weitz, 1992; Kumar, Scheer, & Steenkamp, 1995). Two fundamental components of service quality-namely, technical quality and functional quality are considered to be the prerequisites of lasting customer relationship with the service provider (Grönroos, 1983). Sharma and Patterson (1999) reported that effectiveness of communication between customers and service providers can play a vital role to engender customer relationship commitment. Mukherjee and Nath (2003) have identified trust as a major precursor of customer relationship commitment. Unless WiMax internet service providers (WISPs) understand and meet subscribers’ expectations, they can not hope for subscribers’...
commitment to the relationship with the service provider. Hence, this study focuses on issues germane to the WiMax internet subscribers’ commitment towards the service providers.

Literature Review

Service Quality - Technical quality

Service quality is comprised of two components – technical quality (the core service or “what” is delivered) and functional quality (“how” the service is delivered) (Grönroos, 1983; Parasuraman et al., 1985). According to Hauser and Clausing (1988); technical quality refers to the intended the set of technical/engineering attributes, characteristics, and activities which completely define a product/service from a technical/engineering point of view. Lovelock (1996) said that technical quality refers to the actual outcomes or the core service as perceived by the customers.

Service Quality - Functional quality

Grönroos (1978) illustrated that functional quality highlights the nature of the interaction between the service provider and a customer and is evaluated in a subjective manner. Functional quality means how (process) the service provider delivers the services (Grönroos, 1983; Parasuraman et al., 1985). The process includes courteous attention, proper presentation and sufficient explanations regarding the service offerings, insightful suggestions and recommendations with customers’ best interest in heart, and responding to customer queries and complaints promptly. According to Sharma Patterson (1999) core service (technical quality dimensions) sooner or later becomes a commodity as competition increases and the industry becomes mature; then functional quality dimensions become more and more important to create a sustainable competitive advantage.

Communication Effectiveness

According to Sharma and Patterson (1999), communications effectiveness refers to both formal and informal sharing of information in a meaningful and timely fashion between a subscriber/customer and a service provider and such communication can corroborate customer understanding of services being received and thus the customers become more assured in their ability to assess the quality and outcomes of the service. The purpose of the communication effectiveness is to educate the customers, inform them about the service offerings, and help them to understand the worth/quality of the service being received (Headley & Choi 1992). So it appears that offering good quality service is not enough unless that is not coupled with effective communication.

Trust

In business studies, trust has been found to be very important for building and maintaining long-term relationships (Rousseau, Sitkin, Burt, & Camerer, 1998; Singh & Sirdeeshmukh, 2000). Trust is positive expectations towards the behavior of others (Barber, 1983). According to Lau and Lee (1999), if one party trusts another party that eventually engenders positive behavioral intentions towards the second party. Sharma and Patterson (1999) said that trust plays an important role in motivating the customers to continue the relationship with the service provider due to inherent credence properties and complex intangibles of service which make it difficult for many customers to assess whether service objectives were maximized or optimized.

Relationship Commitment

According to Anderson and Weitz (1992) and Kumar et al. (1995) relationship commitment has been considered to be a critical element for successful long-term business relationships. According to Dwyer, Schurr and Oh (1987) relationship commitment is the pledge for relational continuity between exchange partners. In the contexts of buyer and seller commitment, relationship commitment is referred to the desire for continued relationship and an effort to ensure its continuance (Wilson, 1995).

Relationships between Technical Quality and Relationship Commitment

Sharma and Patterson (1999) stated that technical quality has a strong and significant direct impact on relationship commitment. If technical quality is continually improved and more attention is paid to service outcome(s), customers will not only be satisfied, but also become more committed in the relationship with service provider (Wetzels, Ruyter & Birgelen, 1998).

Hypothesis 1: The greater the technical quality of the service, the stronger the relationship commitment.

Relationships between Functional Quality and Relationship Commitment
As mentioned by Grönroos (1978) functional quality has a definite impact on customers’ loyalty or relationship commitment towards the service provider. Sharma and Patterson (1999) claimed that greater perceived functional quality of the service provider will result in higher trust in the relationship, eventually leading to higher relationship commitment.

Hypothesis 2: The greater the functional quality of the service, the stronger the relationship commitment.

Relationships between Communication Effectiveness and Relationship Commitment

For a continuing buyer-seller relationship communication effectiveness is instrumental. Sharma and Patterson (1999) emphasized that if a sense of reliability and trust can be elicited in all possible forms of communication (written or spoken) between the service provider and the customer, the customer will eventually become or remain committed to the service provider.

Hypothesis 3: The higher the communication effectiveness of the service provider, the stronger the relationship commitment.

Relationships between Trust and Relationship Commitment

According to Crosby, Evans and Cowles (1990) trust is defined as the belief that the service provider can be relied on to serve the interests of the customer in the best possible way. Garbarino and Johnson (1999); and Doney and Cannon (1997) stated that business relationship between partners is inextricably influenced by trust and commitment. Mukherjee and Nath (2003) have stated that trust is a significant precursor of customer relationship commitment.

Hypothesis 4: The greater the trust in the service provider, the stronger the relationship commitment.

Conceptual Framework

Based on the aforesaid hypotheses following conceptual framework is developed (Figure 1). In this study technical quality, functional quality, communication effectiveness, and trust are independent variables (IV) and relationship commitment is dependent variable (DV).

![Conceptual Framework](Image)

Figure 1: Conceptual Framework

**METHODOLOGY**

**Sampling and Data Collection**

The researchers used the quota sampling and total 200 structured questionnaires (172 were usable) were distributed among the WIS subscribers (who had been receiving services for a year or so) of a leading WISP in Bangladesh. Data collection was limited to Dhaka metropolitan area. The average age of the respondents was 28 years. 67% respondents were male and 33% were female.

**Measurement instruments**

The questionnaire was comprised of five sections meant for five variables where the researchers used 5 points Likert scale like previous researchers. Technical quality of service scale germane to WIS was measured by using 10 items; which was a combination of items adopted from Sharma and Patterson (1999) and the first author’s prior qualitative research. Five (5) items to measure functional quality was collated from Sharma and Patterson (1999) and the first author’s prior qualitative research. Communication effectiveness was measured by using 6 items which were collected from...
Anderson and Weitz (1992); Sharma and Patterson (1999) and the first author’s prior research. Trust was measured by combining 5 items, which were developed by Moorman et al. (1992), Crosby et al. (1990), and Sharma and Patterson (1999). Relationship commitment had 4 items which were developed by modifying the commitment scales of Anderson and Weitz (1992), and Morgan and Hunt (1994). As found in the literature, he reported reliability coefficients of all the scales were high - Cronbach alphas ranging from 0.68 to 0.90.

Data Analysis

The researchers have employed both descriptive as well as inferential statistics. Correlation analysis and stepwise regression have been carried out by using SPSS version 12.

RESULTS

Descriptive Statistics and Reliability Coefficients

Descriptive statistics and reliability coefficients of the studied variables are presented in Table 1. The range of Cronbach alphas of all the scales was 0.69-0.87; which shows that the reliabilities of all the constructs used in this study found to be above the standard set by Nunnally (1978), which is 0.50-0.60. Mean scores of all the variables measured on a five point-scale found to have a range of 3.49 to 3.73 and the corresponding standard deviations were ranging from 0.46 to 0.62. These mean scores indicate that the subscribers’ appraisal of technical quality, functional quality, communication effectiveness, trust, and relationship commitment is above average.

Table 1: Descriptive Statistics and Reliability Coefficients (n =172)

<table>
<thead>
<tr>
<th>Scales</th>
<th>Number of items</th>
<th>Alpha</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical quality</td>
<td>10</td>
<td>0.73</td>
<td>3.68</td>
<td>0.47</td>
</tr>
<tr>
<td>Functional quality</td>
<td>5</td>
<td>0.76</td>
<td>3.73</td>
<td>0.51</td>
</tr>
<tr>
<td>Communication effectiveness</td>
<td>6</td>
<td>0.87</td>
<td>3.49</td>
<td>0.46</td>
</tr>
<tr>
<td>Trust</td>
<td>5</td>
<td>0.69</td>
<td>3.61</td>
<td>0.54</td>
</tr>
<tr>
<td>Relationship commitment</td>
<td>4</td>
<td>0.80</td>
<td>3.70</td>
<td>0.62</td>
</tr>
</tbody>
</table>

Correlation Analysis

A correlation analysis was done on all variables in this study for two purposes. The first was to check the presence of multicollinearity, which is revealed when the inter-correlation between explanatory variables exceeds 0.8 (Berry & Feldmann, 1985). Secondly, correlation analysis helps to explore the relationships between independent and dependent variables. The bivariate correlation procedure was subject to two tailed tests of statistical significance at two different levels - highly significant (p<.01) and significant (p<.05). Correlations matrix is presented in Table 2 support the notion of hypothesized positive relationships among the independent variables and dependent variable with high statistical significance (p<.01).

Table 2: Correlation Matrix (n = 172)

<table>
<thead>
<tr>
<th>Variables</th>
<th>TEC_QLTY</th>
<th>FNC_QLTY</th>
<th>COM_EFF</th>
<th>TRUST</th>
<th>REL_COM</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEC_QLTY</td>
<td>-</td>
<td>0.23**</td>
<td>0.39**</td>
<td>0.59**</td>
<td>0.54**</td>
</tr>
<tr>
<td>FNC_QLTY</td>
<td>-</td>
<td>-</td>
<td>0.38**</td>
<td>0.20**</td>
<td>0.31**</td>
</tr>
<tr>
<td>COM_EFF</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.18*</td>
<td>0.41**</td>
</tr>
<tr>
<td>TRUST</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.52**</td>
</tr>
<tr>
<td>REL_COM</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: *p < .05, **p < .01.

Stepwise Regression Analysis

Stepwise regression analysis was done to assess the discerning relationship of each independent variable with the dependent variable. The results are presented in Table 3.
Table 3: Stepwise Regression on Relationship Commitment

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable(s)</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>R²</th>
<th>Δ R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Technical quality</td>
<td>.793</td>
<td>.096</td>
<td>.537**</td>
<td>.289</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>Technical quality</td>
<td>.520</td>
<td>.113</td>
<td>.352**</td>
<td>.353</td>
<td>.064</td>
</tr>
<tr>
<td></td>
<td>Trust</td>
<td>.409</td>
<td>.100</td>
<td>.314**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td>Technical quality</td>
<td>.355</td>
<td>.116</td>
<td>.241**</td>
<td>.409</td>
<td>.056</td>
</tr>
<tr>
<td></td>
<td>Trust</td>
<td>.433</td>
<td>.096</td>
<td>.332**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication effectiveness</td>
<td>.308</td>
<td>.077</td>
<td>.258**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *P<.05, **P<.01

The results indicate that technical quality (p < .01), trust (p < .01), and communication effectiveness (p < .01) have statistically significant relationship with relationship commitment. The weighted R² for regression of Model 1 comprised of technical quality (IV) and relationship commitment (DV) was 0.289. The weighted R² for regression of Model 2 comprised of technical quality (IV), trust (IV), and relationship commitment (DV) was 0.353. Trust has only made 0.064 or 6.4% improvement in the model in terms of explaining the variation or change in relationship commitment. The weighted R² for regression of Model 3 comprised of technical quality (IV), trust (IV), communication effectiveness (IV), and relationship commitment (DV) was 0.409. Communication effectiveness has only made 0.056 or 5.6% improvement in the model. The results also indicate that the Model 1, Model 2, and Model 3 are statistically significant (Model 1: F = 69.014, p = 0.000; Model 2: F = 46.116, p = 0.000; Model 3: F = 38.810, p = 0.000). Functional quality was found not to have statistically significant relationship with relationship commitment. These results provide support to hypothesis 1, hypothesis 3, and hypothesis 4.

DISCUSSION

The present study is noteworthy for a special reason. As to the knowledge of the researchers no such study has been carried out previously on the subscribers of WISPs in Bangladesh to scrutinize the relationship between technical quality, functional quality, communication effectiveness, trust, and relational commitment. Sharma and Patterson (1999) used same variables in a study for personal financial planning services.

The results suggest that nothing hurts subscribers’ relationship commitment more than poor technical quality related to intent service. So WISP should ensure better technical support with utmost care and diligence. Hence, WISP should take initiatives to improve the technical aspects of the service, win subscribers’ trust, and communicate clearly and effectively to strengthen subscribers’ relationship commitment. More research is needed to look into these findings.

The findings of this study have to be interpreted considering few limitations of the study. First, data collection was limited to the subscribers who live in Dhaka metropolitan area. Second, a probability sampling would have been better to interpret the results more safely and confidently. Third, a comparison could have been drawn between prepaid and post-paid subscribers regarding their relationship commitment. Since the researchers’ primary intention was to test the conceptual framework, may be in future such a study could be carried out. Finally, inclusion of other variables like- price perception, corporate image, switching cost, etc. could have made the conceptual framework more robust. In future research additional variables could be incorporated.
REFERENCES


Biographical notes
1 Mohammad Muzahid Akbar did his MBA from Lahore University of Management Science (LUMS) and Master of Commerce (Accounting) from University of Dhaka. Currently he is working as a Senior Lecturer (Marketing and Management) in the School of Business in the Independent University, Bangladesh (IUB).

2 Hanif Mahtab did his MBA from University of Birmingham, UK. Currently he is working as a Senior Lecturer (Management) in the School of Business in the Independent University, Bangladesh (IUB).

3 Samir Mainuddin did his BA Honors and MA in Economics from York University, Canada. Currently he is working as a Lecturer (Economics) in the School of Business in the Independent University, Bangladesh (IUB).
THE IMPACT OF PROFILE COMPONENTS TO GROWTH OF FRANCHISE COMPANIES IN INDONESIA

By : Erwin Halim, SPI, MBA, MM  
(SPt Bogor Agriculture Institute, MBA Universite Pierre Mendes France IAE Grenoble, MM University of Indonesia, Binus University Faculty Member)

ABSTRACT

This study provides evidence on the determinants of the franchise growth. There are six variables indicating the factors which affect the franchise company growth: the period of company was begin franchised, initial investment, franchise fee, and royalty fee. The franchise life-cycle theory and agency theory are used in order to support the evidence and understand the behavior on the analyses of franchise companies’ growth. This research uses multiple regressions analyses as statistical tools to test the hypothesis. Surveys in Jakarta in 2007 representing Indonesia franchise companies. As the result, it is found that there are variables which give significant impact: the period of company was established, the period of company was franchised, the initial investment, the duration of contract agreement and the royalty fee. This research also found two pairs of variable that are highly correlated: the period of company was established-the period of company was franchised and the initial investment-the franchise fee. There are 4 variables which give significant impact: the period of company was established, the initial investment, the duration of contract agreement and the royalty fee. There are two pairs highly correlated: the period of company was established-the period of company was franchised and the franchise fee-the royalty fee. Other important thing that is discussed in this researched is the franchise life-cycle. It’s found that the Indonesia franchise companies are in the introduction stage. The stage in life-cycles shows its reputation. The more mature the industry is, the better the reputation is.

Key words: Franchise company profile, franchise growth, franchise life-cycle.

INTRODUCTION

Franchising has a track record as a way to speed up growth through the expansion of business. Recent estimate has anticipated franchise unit growth of becoming turbocharged, in the 12 to 14 percent range. Franchise based business format has been responsible for tremendous growth in franchising since 1950s. It has enjoyed long term growth over the past 25 years. In 1972 there were 189,640 franchise establishments with the gross sales of USD 28.7 Billion. Then in 1987 the number increased by almost 163,000 units (about 86%) while the sales increased to USD 170.8 billion (nearly a 600% increase). In 1997, it was estimated that there were about 380,000 franchise units in the US that accounted for about USD 410 billion in gross sales. It was also estimated that there were more than 100,000 franchise units of United States franchise system (Cherkasky in Justis and Judd, 2006).

Franchising is one of major industry in the United States, and accounts for substantial and growing portion of the US retail industry. It is proven that during 2000-2004, approximately 31% of US GDP came from retail sales. In 2004, retail sales (for personal and household use) exceeded $3.2 trillion (US Department of Commerce). Moreover, US personal consumption expenditure exceeded $6.4 trillion or 63% of US GDP. And in the same year, the US retail industry had more than 1.5 million franchises establishments and employed more than 20 million people (17% of the US workforce). Over 41% of US retail sales came from franchise businesses and about 70% of restaurants were operated by franchisees. (Nwogugu, 2006).

Franchise system has been known in Indonesia since 1970s, followed by the arrival of foreign franchise companies like Kentucky Fried Chicken, Swensen, Shakey Pisa, Burger King and Seven Eleven to Indonesia. The system has started to spring up since International Labor Organization (ILO) funded a franchise study in year 1991 in Indonesia (Sukandar, 2006a). But since the monetary crisis happened, starting from the end of 1997 until 2003, the number of franchise companies has fluctuated in Indonesia. The number of foreign franchise companies has decreased from 230 to 170 – 180 companies and the number of local franchise companies has grown until 85 companies. It was estimated that there were 400 local franchise companies and more than 9,000 franchisees included company-owned in the year 2006 (Sukandar, 2006a).
Akbar (2011) reports that franchise outlet reach to 31,827 units (27,454 units of local companies and 4,373 units of foreign companies). In 2009 this industry has growth of 18% and employed around 610 thousands workforce. Then in 2010, there are a slightly increase to 20% of growth with Rp. 114,640 billion of sales and 719 thousand of workforce and up to 3.5 million workforce that support the franchise industry in Indonesia.

The Asian financial market crash, global economic fluctuation and highly competitive internal–external market environments have either directly or indirectly given great impacts on the success and failure of businesses. In this context, there has been a progressive focus on the strategies that may assist in building a successful business strategy, which are the franchise business (Castrogiovanni and Justis in Inma, 2002).

Nowadays franchise business in the US generates about $1 trillion of sales each year; one of twelve US retail establishments is a franchise business; franchise business sales from franchisees contributes for over than 50% of total annual US retail sales and employs over 10 million people in 2002 (International Franchise Association in Sherman, 2004).

In conclusion, the franchise business has a significant contribution to the national economic growth by increase the number of new business units, open new opportunity of workforce, increase the business that supporting franchise industry and at the end increase the national economy.

Problem Identification
Since franchising is often viewed as an effective business arrangement that generally survives such economic turbulence and also offers a high business success rate, companies have to know how to succeed their franchise business. Franchise growth as the indicator of success performance is chosen in order to understand the behavior of factors that influence the growth of franchise companies in Indonesia.

LITERATURE REVIEW

Franchise Definition
The National Economic Consulting (2004) defines “franchise” is the agreement or license between two parties which gives a person or group of people (the franchisee) the rights to market a product or service using the trademark of another business (the franchisor). The franchisee has the rights to market the product or service using the operating methods of the franchisor. The franchisee has the obligation to pay the franchisor certain fees and royalties in exchange for these rights. The franchisor has the obligation to provide these rights and generally support the franchisee.

Measuring Franchise Success
Organizational success is derived from the overall effort of organizational members. Successful franchises are based on the combined efforts of both the franchisor and the franchisees. It is reasonable because franchisor is the party who has intellectual capital and the franchisees are the parties who have to pay for the franchise fee, initial investment, royalty fee and other obligation to the franchisor after bought the franchise license as written in a franchise contract.

Franchise success can be classified according to various performance factors such as sales, efficiency, growth, market share and reputation (Spriggs, 1994). Success factors can be broadly classified into four main areas: financial measures, growth, market position and satisfaction (Quinn and Rohrbaugh in Inma, 2002). Company growth is a dynamic measurement of change over time which indicates the firm is actively interacting with the environment. There are also success factors that can be divided into short-term and long-term factors. The short-term factors primarily relate to the financial benefits, which have a significant and immediate effect on franchise organizations, while the long-term factors relate to survival and growth which ensure the franchise operating effectively over a period of years (Reimann in Inma, 2002). Thus, growth and survival of an organization are an important indication of organizational success. In the case of franchises, this may relate to the number of franchisees who enter into contractual agreements with franchisors and who remain in the relationship (Castrogiovanni and Justis in Inma, 2002).

Franchise Growth and Franchise Profile Components
Growth in franchise organization is defined as the net change in the number of franchised units (new units opened minus units closed or repurchased) per year. Thus, the franchise growth can be positive or negative.
Positive means that the number of new units open is more than number of unit closed or repurchased and oppositely for the negative growth. By assuming companies that concern of growth as performance of success, this research avoids the negative growth.

Inma (2002) explored the significant effects of franchise stages and franchise management strategies on the development of successful franchise relationship. Inma found a strong relationship between reputation, growth and organizational background characteristics. Price of franchises and their growth orientation were significantly related to franchisor reputation. Initial franchise fees positively related to franchise reputation. There are significant effects between the duration of the franchise relationship and performance outcomes suggest franchisees. The limited duration of the franchisee presence in the franchise relationship may drive the franchisees to focus on short-term gain, rather than long-term success (Inma, 2002).

Sales growth is highly correlated with unit growth and sales are considered to be an excellent indicator of performance. Market position is strongly related to the reputation of the company. Reputation is the public's perception of how a firm's product, operations, strategies and aspects compare with those of competing firms. The longer a company builds and the longer a company franchises its business, the better is the reputation of the company.

Ehrmann and Spranger (2005) found that the organization structure adopted up to about 11 years of business experience is largely stable during the further maturity and growth. The variable growth in this research used a ten-year-period growth. From the Pearson Correlation table was found a positive correlation between ten-year-period growth and business experience, size, average investment, average franchise fee but a negative correlation with average royalty fee. The standard duration of a franchise contract is 11.5 years for their sample.

Ehrmann and Spranger (2005) found the correlation between growth and business experience (related to the period of company was established and period of company was franchised), average investment (related to initial investment), average franchise fee (related to franchise fee) and average royalty fee (related to royalty fee). Brickley (2003) found that the duration of franchise contract would increase as well as the franchisor more establish. Also, the duration of contract agreement was related to the business experience and the size of franchise companies.

Kosová and Lafontaine (2007) found that business experience has no effect to the growth, but royalty rates and advertising fees give a significant positive impact on the growth of the matures stage. They also found the age (in this research the variable same as the period of company was established and the period of company was franchised) effect on growth disappears when the franchise company have been franchising or in business for 30 years or more. The negative impact on the growth remained even for franchise chain with more than 30 years in franchising.

Franchise contracts normally require the payment of fees from the franchisee to the franchisor at differing stages of the agreement. The franchisor often receives payment from the franchisee in the form of an initial fee (franchise fee) for the right to enter the franchise for providing initial start-up services.

Frazer (1998) has revealed that franchises using flat royalty fees do have different characteristics to franchises that use percentage-based fees (variable royalty fee). The franchise which use flat royalty fee offer less ongoing support, conduct less monitoring of franchisee operations, have a faster growth rate of franchised outlets, and are less expensive to enter. Franchisors that have variable royalty fees are motivated to provide more monitoring and ongoing support to their franchisees to help them increase their sales, as this in turn will provide the franchisors with a greater share of those sales. In contrast, franchisors that use flat royalty fees are less motivated to help their franchisees on increasing their sales as this has no effect on the franchisor’s ongoing income stream. Instead, flat fee franchisors are motivated to increase their ongoing income by selling more franchised outlets and hence will provide less complex and less expensive systems to their franchisees to encourage a rapid growth rate.
Justis and Judd (2002) stated that the relationship between the franchisor and the franchisee is the most critical side. This relationship often follows the basic steps of a new business or a product life cycle; that is, it goes through the following stages: (1) Introduction, (2) Growth, (3) Maturity, and (4) Decline/Development.

**RESEARCH METHOD AND RESULT**

**Research Model**

As mentioned before, growth is one of the success factors (sales, efficiency, market share and reputation) of franchise business (Spriggs, Quinn and Rohrbaugh, Castrogiovanni and Justis). Franchise company growth is defined as the net change in the number of franchise units per year.

In order to examine the relation between franchise companies growth and factors that affect franchise growth, the research will use the following model:

\[ \text{OutletNum} = \beta_0 + \beta_1 \text{Begin} + \beta_2 \text{Io} + \beta_3 \text{FFee} + \beta_4 \text{RFee} + \varepsilon \]

Where:
- \( \text{OutletNum} \) = Total number of outlet
- \( \text{Begin} \) = Period of company was franchised (in year)
- \( \text{Io} \) = Initial investment (in Rupiah)
- \( \text{FFee} \) = Franchise fee (in Rupiah)
- \( \text{RFee} \) = Royalty fee (in percentage)

**Hypothesis**

According to Ehrmann & Spranger (2005) the period of company was established, the company size, the investment volume and the franchise fee have positive impact on growth of franchise companies. On the other side, royalty fee has negative impact on the growth of franchise companies. This research follows both the Ehrmann & Spranger research (2005) and Brickley’s et al. research (2003).

**Sample**

The data sample is based on survey in two franchise expo in Jakarta on September and November 2007. From 107 respondents, there were only 37 franchisors that fulfilled the model’s variables. Almost all of the respondents did not have complete data when the questionnaire forms were offered. Some of respondents simply replied by e-mails, facsimile and phone. Most of respondents who agreed to reply the forms did not response after a certain period of time as their promised and most of their e-mails were over quotas. Almost all of respondents do not have official website. Even though they have websites, the websites contain insufficient information and aren’t updated regularly.

**Descriptive Analysis**

The percentage of growth of outlet per year (Growth) has reached maximum at 162 percent and the average is 32 percent. The maximum period of company was established (Esta) in Indonesia is 38 years. The mean of period of company was franchised is 8.8 years. The maximum period of company was established in Indonesia is 14 years and the average is 2.7 years. The average of initial investment (Io) for opening new outlet are in Indonesia is USD 29,202.9 and average of franchise fee (FFee) is USD 8,125.95. The maximum duration of contract agreement (Dur) in Indonesia is 20 years and in average 6.04 years. The range of the royalty fee (RFee) is 0 to 20 percent and for the average is 6.18 percent.

**Multiple Regressions Model**

Since the regression standardized residual (histogram), P-P Plot of regression standardized residual and the scatter plot diagram are found not normal, then the estimate multiple regression is changed into the new model by using the natural logarithm (Ln) of previous data model.

After changing the data and passing through the test of normality for both the US and Indonesia data, the multiple regression models are changed into the model below (Model 2):

\[ \text{LnGrowth} = a + b_1 \text{LnEsta} + b_2 \text{LnBegin} + b_3 \text{LnIo} + b_4 \text{LnFFee} + b_5 \text{LnDur} + b_6 \text{LnRFee} \]

where:
- \( \text{LnGrowth} \) = the change of percentage of growth of outlet per year
- \( \text{LnEsta} \) = the percentage period of company was established
- \( \text{LnBegin} \) = the percentage period of company was franchised
LnIo = the percentage of initial investment
LnFFee = the percentage of franchise fee
LnDur = the percentage of duration of contract agreement
LnRFee = the percentage of royalty fee

After the model had been changed, the regression standardized residual (histogram), P-P Plot of regression standardized residual and the scatter plot diagram are found normal.

ANALYSIS AND DISCUSSION

Table 1. Model 2 of Franchise Companies in Indonesia t-Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>44.490</td>
<td>.494</td>
</tr>
<tr>
<td></td>
<td>LnEsta</td>
<td>-.685</td>
<td>.047</td>
</tr>
<tr>
<td></td>
<td>LnBegin</td>
<td>.169</td>
<td>.049</td>
</tr>
<tr>
<td></td>
<td>LnIo</td>
<td>-2.331</td>
<td>.058</td>
</tr>
<tr>
<td></td>
<td>LnFFee</td>
<td>.311</td>
<td>.066</td>
</tr>
<tr>
<td></td>
<td>LnRFee</td>
<td>-.789</td>
<td>.032</td>
</tr>
</tbody>
</table>

*a Dependent Variable: LnGrowth
*** Significant at 99% level, ** Significant at 95% level, * Significant at 90% level

Table 1 shows that there are 4 independent variables which are significant at 95% level. The variables are for LnEsta (the period of company was established), LnIo (the initial investment), LnDur (the duration of contract agreement) and LnRFee (the royalty fee). There only LnBegin and LnFFee which are not significant. Over all, the model shows that four variables (LnEsta, LnIo, LnRFee and LnDur) are statistically significant, except LnBegin and LnFFee are not significant. There is a high correlation between the period of companies was established (LnEsta) and period of companies was franchised (LnBegin). Also found, high correlation between LnFFee (franchise fee) and LnRFee (royalty fee).

Model 2 Indonesia Franchise companies’ growth is:

\[ \text{LnGrowth} = 44.49 - 0.68\text{LnEsta} + 0.17\text{LnBegin} - 2.33 \text{LnIo} - 0.31\text{LnFFee} - 9.88 \text{LnDur} - 0.79 \text{LnRFee} \]

While the adjusted R-square of the Indonesia model explains that there is 99.99 percent variation of the sample. Every additional 0.17 percent of the period of company was franchised will increase the previous percentage of growth by 1 percent and every additional 0.68 percent of the period of company was established or 2.33 percent of the initial investment or 0.31 percent of the franchise fee or 9.88 percent of the duration of contract agreement or 0.79 percent of royalty fee will definitely decrease 1 percent of the previous percentage of growth in the Indonesia franchise companies.

There are two pairs of variables: LnEsta-LnBegin and LnFFee-LnRFee which highly correlated. The period of company was established is statistically significant but highly correlated (0.880) with the period of company was franchised. Besides that, the franchise fee is not statistically significant (sig. = 0.134) and also highly correlated with the royalty fee (0.576).

The period of company was established gives a significant negative impact to the growth. It means, the longer a company was franchised the lower the growth is. It is because the product life-cycle for some products or services of franchise companies in Indonesia is declining, the market is already saturated and no uniqueness for that products or services. This fact is contrary with Ehrmann and Springer (2005) and Inma (2002) but supported by Sukandar (2006b).
The period of company was franchised also gives a positive impact to the growth, but not significant. It is because the period of company was established and the period of company was franchised is highly correlated. Since the experience of local franchise brand in Indonesia is still low, the pioneer in franchise business will certainly get more benefit compare to other new brands.

In the other hand, the initial investment gives a significant negative impact to the growth. It means the bigger initial investment is the lower the growth is. Price of franchise is not only defined by initial investment, but also from franchise fee and royalty fee in a new market like Indonesia. The franchisee feels that the price of the franchise is too high because there isn’t any promising reputation (the initial investment is a cost from the side of franchisee). The image of the franchise success is also not too strong. So even though franchise has been already known since 1970s, but the local Indonesian brand is not significantly well known and there isn’t great enthusiasm in developing franchise. That also explains why the royalty fee negatively impacts the growth significantly.

Figure 1. The impact of Franchise Profile Components to Growth

In Indonesia the duration of contract agreement negatively impacts the growth significantly. It means that the longer the duration of contract agreement is, the less confident the franchisee of the franchise license sold by the franchisor. It is because the franchisor and the franchisee can make changes in the organization more flexible when the term is short. That’s why, franchisees in Indonesia are more confident for short-term contracts.

From the life-cycle stage, franchisees in Indonesia make a substantial investment in the franchise and run business for at least three years to make profit. If the franchise term is only five years, there isn’t enough time for a decent return. The research of Inma (2002) states that after 3 years almost all of the franchise will begin to be unstable and bankrupt. This kind of problem also happened in other business-format, but in franchise the level of failure is one third of the other business-format failure level. Mostly beginners franchisees choose a rapid growth orientation. So, the relationship between the franchisor and the franchisee should be trustworthy, mutual interdependence, and a shared desire for success and profitability. The franchisee starts out the relationship as an extreme optimism and expectation of great success while the franchisor is interested in making a very positive and friendly approach to the franchisee.

The stage position of franchise life-cycle in Indonesia, a high growth rate of the population (the highest is 164 percent) in the short-term and the late starting franchise express the innovation of diffusion life-cycle in
Indonesia shifting to the left, which supports the theory of innovation diffusion in Western and Eastern markets from Bradley (2002).

Moreover there are 2 variables which give negative impact to the growth but significantly different: LnEsta and LnIo. For the period of company was established, the negative is caused by un-uniqueness of product and the saturated product life-cycle (for some companies) (Sukandar, 2006b). And the initial investment gives a negative impact (-2.331) and costly for franchisees which most of franchise companies are in the introduction stage.

The last, the contract duration and royalty fee give negative impact to the growth. These conditions also indicate that Indonesia franchise companies are in the introduction stage in the franchise life-cycle.

The negative impact of initial investment, franchise fee, royalty fee and contract duration and the positive impact of company was begin franchise are supported by the research of Majalah Infofranchise (Akbar, 2011)

CONCLUSION AND RECOMMENDATION

Conclusion
From all the data that has been analyzed, there are few important conclusions about franchising which can be derived. Factors that give significant impact to the growth of franchise companies in Indonesia are: the period of company was established, the initial investment, the duration of contract agreement and the royalty fee. The period of company was franchised and the franchise fee are not the factors which are significant statistically.

The period of company was established and the period of company was franchised relate to reputation. The impact of the period of company was established contrast to the period of company was franchised as the position of the two factors is different. The period of company was established is more mature and gives more negative impact than the period of company was franchised.

The franchise life-cycle of franchise companies in Indonesia are in the introduction stage. The franchisees in Indonesia are very concerned to the initial investment and royalty fee and prefer short-term contract duration while the long-term duration of contract agreement is more appropriate for the mature stage. Besides that, initial investment gives high negative impact to the growth.

For some franchise companies that in the mature stage are more concern about the sales growth than outlet growth (e.g. McDonald Indonesia introduces 24-hour service but not selling new franchise outlet).

Recommendation
Franchisors have to take benefit from the position of the life-cycle franchise but they should be very careful in setting the franchise package for the initial investment, the duration of contract agreement and the royalty fee. Franchisees in Indonesia also have to be careful since some new brand maybe can not prove their good quality of product and service to the customers and to the franchisee. It is because in Indonesia the franchise business-format can be categorized as young business-format. The period of company was established should as well be considered by franchisee in determining to buy a franchise license. Franchisee should find good franchise consultant incase he/she does not have adequate information whether a certain franchise is qualified or not.

For further research in franchise, it is better to compare the franchise companies in Indonesia to other Asia countries because of the similarly in region. Using other success performance indicators (such as: profit, sales, sales growth, etc.) is also ideal to understand more deeply about franchise business in Indonesia or other countries. Further research with more data will describe the representation of franchise business in Indonesia.
REFERENCES


Inma, Chutarat, (2002), Building Successful Franchises : The Influence of Franchise Heterogeneity and Relationship Management on Franchise Success, Murdoch University.


The National Economic Consulting (2004), The Economic Impact of Franchised Businesses in United States A Study for the International Franchise Association Educational Foundation. IFA Educational Foundation.
SOCIAL MEDIA MARKETING MODEL

Cecep Hidayat
Management Department, School of Business and Management, Bina Nusantara University
Jl K.H. Syahdan No 9, Palmerah, Jakarta Barat 11480
ceceph1267@binus.ac.id

ABSTRACT

Social Media Marketing is a form of marketing by using social media as a channel. The purposes of this paper are: (1) to analyze the definitions, concepts, and the dimensions of social media as a means of marketing (2) to analyze models of research involving social media variables with other variables which are not examined, (3) to examine the thinking of social media experts from various points of view. The issues to be raised are based on the reference journals that are reviewed, they are: (1) How is the development of definitions, concepts, and dimensions of social media as a marketing tool, (2) How is the development of research models that involve variables of social media with other variables which are not examined; (3) What is the thinking of social media experts from various point of view. Paper writing model approach that will be used is a dimensional approach, it reviews the literature by analyzing the variable dimensions of social media from different experts' points of view. By writing this paper, hopefully it can enrich science, especially social media marketing model development (academic implications) and it is also useful for decision makers in selecting and using social media in accordance with the objectives and scope of the organization (practical). The conceptual focus of marketing model that will be developed is the effectiveness analysis of using social media as a promotional medium.

Key Words: Social Media, Social Networking, Marketing Model, Dimensional Approach

INTRODUCTION

Today the use of social media as a means of communication between the organization and its stakeholders is an inevitable thing. One part of very important stakeholders which is related to the concept of marketing is part of the social / community itself, the customer. The use of social media has actually been started since the beginning of the interaction between human beings (Edosomwan et al., 2011). The discovery of electronic media like the telegraph, telephone, radio, and television helped to increase the intensity of the use of social media. As the progress of information technology grows very rapidly in the early 21st century, the use of internet-based electronic social media has intensified and expanded in various organizations in both the business, government or other nonprofit organizations.

The study Wright et al. (2010) showed that ad spending for social media in the United States from April 2009 to October 2010, and 2014 is projected to have the highest order of interactive ad spending compared with other interactive media. The results in detail are the following social media 34%, 27% of mobile marketing, display marketing 17%, 15% search marketing, email marketing and 11%. Wright et al. (2010) also suggested that long-term social media to shift the functions of traditional advertising that began to be ignored by consumers in the United States.

Dong-Hun Research (2010) showed that in the period November 2009 until October 2010 is widely used by social media 79% of the Fortune 100 best companies. Dong-Hun who took the survey data from a public agency Burson-Marsteller from Fortune 100 best companies found that 68% use You Tube, and upload 10 posts per month, 54% use Facebook and upload a 3.8% post per month and use Twitter and have uploaded 25 to 30 posts per week. Burson-Marsteller survey results also found that 65% of the 100 best companies that have an active account on Twitter, Facebook fanpage has an 54%, 50% have a YouTube channel, and 33% have a corporate blog.

There are several advantages of the electronic social media for business organization as revealed by the Dong-Hun as follows: There are four key values from the value of social media for business: first, the speed
Almost all the literature selected to be referenced in writing this paper refers to the definition of social media today is rapidly evolving electronic social media online (connected to the internet network) such as Facebook, YouTube, Twitter, MySpace, LinkedIn, etc. Though social media in a broader sense not only the media but the general public will have all the media in which individuals can freely create and share information with others (Brussee and Hekman: 2010). Basically there are two major social media, namely print media such as newspapers and magazines and electronic media like the telegraph, telephone, radio, television and the internet. If the organization will use both types of media in the marketing of its products, it is certainly going to have a different marketing strategy. Likewise, in one type of media will require different marketing strategies, such as social media marketing strategy for radio will be different with social media marketing strategy of television, the television media marketing strategies will vary with the internet, and so on.

From the literature discussed, there is also overlap between the understanding of social media and social networking. Both concepts are often interchangeable used in the analysis of social media marketing model, although both have a different basic understanding. Basically social media is more led to communications channels, while social networking is more directed at people or a group of people with interests, social interests and the same. Lead to more social media tools to create, spread, or share information, so more of the channel (channel). While social networking is more directed at the act of engagement, so networking is not going to happen if people do not interact on the basis of various interests. Social networking via an online networking website that allows one to interact to form a community based on equality or of particular interest. Social networks (social networking) is a tool (tools) used in social media marketing. Mayfield (2008) mentions that social networks (MySpace, Facebook, Bebo) is one of the basic forms of social media, social media forms the basis of other Blogs, Wikis (Wikipedia), Podcast (Apple, iTunes), Forums, Content Communities (Flikr for photos, YouTube for video), microblogging (Twitter).

One definition of social media marketing (Social Media Marketing) is as stated by Gunelius (2011) as follows: Social media marketing is any form of direct or indirect marketing is used to build That awareness, recognition, recall, and action for a brand, business, product, person, or other entity and is Carried out using the tools of the social Web, Such as blogging, microblogging, social networking, social bookmarking, and content sharing (social media marketing is any form of direct or indirect marketing that is used to build awareness, recognition, memory, and actions for business, brand, product, person or other entity and is done by using the social Web tools, such as sharing of blogging, microblogging, social networking, social bookmarking, and content).

Social media marketing is a form of marketing by leveraging social media as a channel (channel). Position between the user (users) are horizontal, which means there are no leaders and subordinates, in other words, mutual respect between the user without any attachment to bureaucracy. The power of social media marketing led to the voice of the community as the main (core power) and the center of gravity. If a name or brand is able to interact in it and then do the marketing (marketing) of a product and a lot of positive things to talk about forming a community opinion, the ultimate goal of marketing strategy can be realized, which generate sales that will bring profit.

In writing this paper the author will try to review by focusing on the concept and dimensions of social media itself as a means or channel of marketing. From the definitions, concepts, and the dimensions of which were identified in turn will try to be explored definitions, concepts and dimensions which can be grouped into the same thought. The writer will try to develop constructs to develop social media marketing model further.

Of some of the symptoms of problems that have been disclosed, the authors limit the scope of the problem by focusing social media marketing model with emphasis on the discussion of the concept and dimensions of social media as a marketing tool. In detail the issues to be discussed is formulated as follows: (1) How is the development of definitions, concepts and dimensions of social media as a marketing tool, (2) How is the development of research models that involve variables of social media with other variables not examined in this paper; (3) What is the thinking of experts considered grouping of dimensional aspects of the approach. The purpose of writing this paper, among others, are as follows: The first aim is to trace and examine the definitions, concepts, and development of the theory of social media marketing, including the development of
definitions and dimensions of this definition. The next concept will be analyzed so that we can conclude the essence of the definition or concept development.

The second aim of this paper to analyze the research models that involve variables with the variables of social media marketing is not examined. This includes research model and authors, the core variables, and methods of research and industry to implement the model. Furthermore each of the variables will be studied to obtain conclusions from the analysis of the development model of social media marketing.

The third aim of this paper examines the idea of social media experts from various aspects. Aspects studied include the thinking of experts on the field of science expertise, the research model / theory is developed, researchers who adopt a research model, as well as changes or the development of current concepts. Once inventoried will then be compiled into a school of thought that looks obvious difference of scientific development is viewed from both time periods, different dimensions, methodological differences, similarities of thought, and others.

RESEARCH METHODOLOGY
The research method used in the writing of this paper is a study of the literature that attempts to analyze the concept and development of model references which are used as a reference and analytical materials. The main reference which is made as the subject of analysis is of major journals relating to the selected concepts and models of social media marketing.

RESULT AND DISCUSSION
What will be discussed in this section is the results summary of a literature review that analyzes the literature on definitions, concepts and dimensions contained in the definition of social media research. There are two classification definitions that will be analyzed, namely the social networking and the social media in which their uses are often interchangeable in marketing concept. Analysis of literature about definitions, concepts and theory development on the topic being studied can be seen in table 1.

Tabel 1. Analysis of Literature About Definitions, Concepts and Theory Development on the topic being studied
<table>
<thead>
<tr>
<th>Authors</th>
<th>Definition</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kangas, P., Toivonen, S. &amp; Bäck, A. (2007:12)</td>
<td>Social media is built of content, communities and Web 2.0 technologies</td>
<td>Content, Communities, web 2.0</td>
</tr>
<tr>
<td>Dong-Hunn (2010:112)</td>
<td>Social media is an “open media for interactive communication led by normal people”</td>
<td>Open media, interactive communication, normal people</td>
</tr>
<tr>
<td>Mayfield (2008:5)</td>
<td>Social media is best understood as “a group of new kinds of online media”, which share most or all of the following characteristic: participation and engagement, openness, conversation, community, connectedness:</td>
<td>participation and engagement, openness, conversation, community, connectedness:</td>
</tr>
<tr>
<td>Brussee and Hekman (2010:4)</td>
<td>Social media as a supply chain for a type of media with a large participation in the production role of “consumers”, i.e. people that usually have the consumption role in the supply chain.</td>
<td>Supply chain for a type media, production role, consumer role</td>
</tr>
<tr>
<td>Sarniola, A. (2011:17)</td>
<td>Three aspects of social media are relevant for reputation management, as used in marketing communication. These are electronic word-of-mouth, brand trustworthiness, and consumer participation</td>
<td>electronic word-of-mouth, brand trustworthiness, and consumer participation</td>
</tr>
<tr>
<td>Merriam-Webster Dictionary (secara online 2011)</td>
<td>Social Media : “forms of electronic communication (as Web sites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (as videos)”</td>
<td>forms of electronic communication, online communities</td>
</tr>
</tbody>
</table>

**Social Networking**

<table>
<thead>
<tr>
<th>Authors</th>
<th>Definition</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boyd, D.M. and Ellison, N.B. (2007)</td>
<td>We define social network sites as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site.</td>
<td>public or semi-public profile within a bounded system, list of other users, articulate a list of other users with whom they share a connection, their list of connections and those made by others within the system.</td>
</tr>
<tr>
<td>Hieftje, Kimberly (2009:9)</td>
<td>social networking sites are a category of online community sites which incorporate three commonalities: profiles, friends, and comments. Intrinsically, social networking sites are based around profiles, which are a form of individual home page that provide a description of each member.</td>
<td>profiles, friends, and comments.</td>
</tr>
<tr>
<td>Merriam-webster dictionary (secara online 2011)</td>
<td>Networking as &quot;the exchange of information or services among individual, groups, or institutions; specifically: the cultivation of productive relationship for employment or business</td>
<td>the exchange of information or services, cultivation of productive relationship</td>
</tr>
</tbody>
</table>

Kangas, P., et al. (2010:4) they argued that the definition they make a reference is that social media is built on three key elements namely: content, community and web 2.0 technologies. The meaning of the content is the content of the message to be conveyed by someone in social media. The content can be very diverse and influenced by a variety of things and one's social and cultural backgrounds. Community means a group of certain people who have a relationship on the basis of specific interests and goals. In human communities, the individuals in it can have the intent, belief, resources, preferences, needs, risks and a
number of other similar conditions. Communities can be formed on the basis of hobbies, professional background, education, consumption, and many other things are more or less similar. In general, a community built by a variety of functional needs. So the fabric of a community have a closer relationship because of earlier equations.

The third element of social media proposed by Kangas, P., et al. is web 2.0, the new development of the world wide web (www) that is more participatory, technically, web 2.0 is a classification in which the characteristics of data exchange many-to-many case. Web 2.0 is the classification of the web that makes everyone who is connected to the web is able to provide and distribute content (text, graphics, etc.) on the web.

![Figure 1. The Core Concepts of Social Media](image)

Source : Kangas, et.al (2007)

In the era before web 2.0 (before 2000 there was also classified as Web 1.0), only those who have knowledge of the web or the owners of capital who can afford the programmer is able to provide the content (text, images, music) on the web. So that data exchange occurs is one-to-many or few-to-many. Web 2.0 is a website that allows people to share content on the web with ease (no web programming knowledge can share data on the web). So the main difference between web 1.0 to web 2.0 is its function of distributing content. As an example of content in a web 2.0 include Blog, Photo Sharing (flickr), Video Sharing (YouTube), Presentation Sharing (Slideshare.net), social networks (facebook, myspace, friendster, LinkedIn), etc.. definition of the characteristic dimension Kangas, P., et al. which has been described can be concluded that the definition is more emphasis on the element or elements forming the social media (structural dimension).

Meaning contained in the definition put forward by Dong-Hunn (2010) is that the media is open (open media) the point is everyone has access to the media is no exception. Interactive means that communication is a two-way exists, the response can be directly provided by the received message. In addition to the proposed definition of Dong-Hunn suggested that social media can be an open medium where everyone can become a producer of content, and deliver them through interactive communication in the form of a pyramid, based on a relationship.

The purpose contained in the statement is that everyone has the potential to become a producer of certain content in accordance with the desire, knowledge, insight and experience he has is certainly going to affect what will be delivered by someone in the content. Communication that exists not in one direction (as well as other mass media) but two-way (interactive), meaning that the response of the recipient (the audience) can be obtained immediately. Pyramid shape means that the information would have a double impact due to a very fast communication between communities that already have a social relationship that has existed previously (relationship). For the normal aspects of their own people Dong-Hun in his article did not discuss further. According to Dupre, J (2011) normal is what is familiar, and the unfamiliar is feared or Condemned as abnormal (is what is familiar / unusual, strange and feared or condemned as abnormal).

In contrast to the dimensional nature of the definition of P. Kangas et al. (2007), the dimensions of the characteristics contained in the proposed definition of social media, Dong-Hun more emphasis on the nature of social media itself (open media, interactive).
According to Mayfield (2008), that social media is a new type of online media that has the characteristics: participation and engagement, openness conversation, community, connectedness. The following is an explanation of such traits as suggested by Mayfield as follows. Participation and Engagement (participation and involvement) social media encourages contributions and feedback from anyone interested. Boundary between the media and the audience became increasingly vague. Conversation Openness means that the participation set some viewers enjoy the freedom of voting, comment or share information. Unlike traditional media that focuses on one-way communication, social media provides two-way conversation, so that communication is instant. Community means that the most important results of social media is shaping the community. The backbone of this community is to share common interests. Connectedness means that social media creates a sort of chain effect, use the links to different sites and people resources. Most of the elements proposed by Mayfield dimensions are more likely to emphasize the social media aspect of the function itself (functional dimension). Equation definition of Mayfield (2008) by Kangas, P., et al. (2007) is equally have a community dimension element in the definition. The difference is in addition to aspects of the dimension itself, especially the emphasis, Kangas, P., et al more emphasis on the elements that make up the social media itself, while Mayfield put more emphasis on the social media function itself. Equation definition of Mayfield to the definition of the Dong-Hun is the element had the same conversation in an open and interactive dimension of social media. The difference lies in the emphasis of the elements of the definition, Dong-Hun more emphasis on ‘nature’ media social media, while Mayfield more emphasis on ‘function’ of social media for oneself.

Brussee and Hekman (2010:4) discusses that social media is essentially a supply chain or distribution for any type of media with extensive participation of the user whose role as a producer as well as users (figure 2). As a producer point is that the use of social media users can produce something to be consumed by other social media users. As a user point is that one's role as a social media users are limited as the user only (consume what is produced by other social media users). Supply chain (supply chain) the point is that social media has the function of spreading or distributing messages produced by the creator of the message (sender) or in other terms the consumer in his role as producer (Figure 3). Further elements associated with the distribution chain in the definition put forward, they also say that social media is not limited to internet media alone but other media (electronic and non electronic) which serves to distribute something that messages generated by the individual, such as doubling the handwriting, the results molds such as the photocopy, and others.

**Figure 2. The media supply chain with lowered barriers for different forms of media**

![Figure 2](image)

Sumber: Brussee dan Hekman (2010)

**Figure 3. Social media: one person in two roles**

![Figure 3](image)
By Brussee and Hekman (2010) there are two users, namely one's role as producers and as consumers. Electronic media other than the internet, such as radio and television are among examples relating to the definition put forward by them. Radio and television is a distribution channel that can convey a message to any number of simultaneous viewers, although the nature of the communication that occurs in contrast to the Internet is only one direction. So the definition put forward by Brussee and Hekman is the definition of social media in a broader sense, since it includes all the mass media that serves as a distribution chain (supply chain) made by a person's message. Elements in common with previous definitions including the definition put forward by the Dong-Hun and Mayfield both contain elements of the functional dimension.

The definition of social media according to the Merriam Webster Dictionary, which was later quoted by Edowsomwan et al. (2011) as well as the definition put forward by Ahlqvist, et.al (2010) and Sarniola (2011) is a social media internet-based electronics. According to the dictionary definition of electronic media is referring to an example of the web site for social networking and blogging. This definition can be interpreted that the term social media and social networking is a unity because both have the same goal, namely the (social), although it has a different definition.

The definition of social networks Boyd and Ellison (2007) put forward is to reinforce its links with the concept of social media, where both have similarities and differences. Bold and Ellison promoted to that web-based social networking service that allows individuals to (1) construct a public profile public or semi-confined system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse the list connections and those made by others in the system. The nature and nomenclature of these connections may vary from site to site. If the characteristic dimension associated with the grouping of social networking definition presented here is more emphasis on functional aspects.

Similarly, the definition Hieftje, K. (2009) also aims to further reinforce its links with the definition of social media. Hieftje, K. provide a definition that is a category of social networking sites online community site that combines three things in common: profiles, friends, and comments. Intrinsically, a social networking site based around the profile, which is the home page (homepage) each of which gives a description of each member. Just as the definition of social media from Kangas et.al (2007) definition of social network presented here is more emphasis on the aspects that make up a social network (structural).

With these definitions of social networking is if we examine more in depth will be seen more clearly that social networking is more emphasis on contextual aspects rather than the channel, meaning that the network can only occur when individuals interact. While social media is a channel or media in which the interaction (online) in it can be done.

Analysis of research models that involve social media variables with other variables which is not examined can be seen in Table 2. The main research themes Dong-Hun (2010:112) is how the growing popularity of social media and its links to business strategy, marketing strategy, especially in Korea. The concept of social media are raised by Dung-Hun is social media internet-based electronics. In that study suggested that there are four key values of social media for business organizations, namely: (1) Time; speed and durability, (2) Audience; plurality and diversity, (3) Cost; feasibility and effectiveness, (4) Relation; friendliness and credibility. Four key value that causes how internet-based electronic social media can grow rapidly, so business strategy must adapt to these changes.
Table 2. Analysis of Research models that Involve Social Media Variables with Other Variables

<table>
<thead>
<tr>
<th>Authors (year : page)</th>
<th>Research Model</th>
<th>Main Variable</th>
<th>Research Methods and Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dong-Hun (2010:112)</td>
<td>Growing Popularity of Social Media and Business strategy</td>
<td>- Growing Popularity of Social Media, - Business Strategy</td>
<td>Literature studies that attempt to explain the growing popularity of social media and its relationship to business strategy</td>
</tr>
<tr>
<td>Wright et al. (2010:73)</td>
<td>The Lasting effect of social media trends on Advertising</td>
<td>- Social media Trends, - Advertising</td>
<td>Descriptive using secondary data is then made forecasting / projections Literature that discusses how social media to form media consumption patterns</td>
</tr>
<tr>
<td>Webster (2010:593)</td>
<td>User Information Regimes: How Social Media Shape Patterns of Consumption</td>
<td>- Social media, - Patterns of Media Consumption</td>
<td>Literature that discusses how social media to form media consumption patterns</td>
</tr>
<tr>
<td>Sarniola (2011)</td>
<td>Professional Perceptions of the Link between Social Media and Reputation Management</td>
<td>- Social media - Reputation Management</td>
<td>Qualitative study with semi-structural interviews of professionals in the fields of marketing, communications and social media and online survey with 16 young professionals</td>
</tr>
<tr>
<td>Palmer, A., Koenig-Lewis, N. (2010:162)</td>
<td>An experiential, social network-based approach to direct marketing</td>
<td>- Social network - Direct marketing</td>
<td>Qualitative descriptive that addresses the needs of manufacturers, sellers, and community based on the customer experience as an integrative framework</td>
</tr>
<tr>
<td>Workman (2010)</td>
<td>The Social Media marketing Model</td>
<td>- Connecting Ring - Prospecting Ring - Active Clients - Sale Target - Conversations Pie - Referrals Pie</td>
<td>Descriptive analysis to develop a simple model that helps explain the essential components of social media marketing strategy.</td>
</tr>
<tr>
<td>Tariq, M.&amp; Wahid, F. (2011:1049)</td>
<td>Assessing effectiveness of Social Media and Traditional Marketing Approaches in terms of cost and target segment coverage</td>
<td>- effectiveness of Social Media and Traditional Marketing</td>
<td>Qualitative interview study with practitioners in social media as an instrument of data collection</td>
</tr>
</tbody>
</table>

The first value of time (talking about the speed and durability), which discusses how the benefits of social media seen from the aspect of time is the speed of the distribution of posts made by someone in a hurry to reach a worldwide audience in an instant. The second value is the durability discuss how the information or images stored in a social media can last a long time in accordance with the wishes of the creator of the content, very different when stored in other media such as newspapers, magazines. Newspapers and magazines can not survive long, if already discarded the possibility of reading. Messages posted on the
radio and television durability depending on contracts that have been made with no guarantee that the message on to or seen by the audience. The second value of the audience (audience) of social media that have the diversity and plurality that is higher than other media. The use of social media could represent an entire segment, unlike other media where the media can only represent one or several segments of the audience. The third value is the cost to be viewed from the aspect of the feasibility and effectiveness. When advertising in radio and television must be paid in accordance with the duration and frequency (unsecured seen by viewers), advertising on social media are paid based on the number of viewers who click on those ads, so the fee paid is more feasible and more effective. The fourth value is the relationship that is more closely / friendly and no doubt his credibility. Is formed due to the closeness of community that forms the basis of equality of certain equations such as friendship, friendships, hobbies, professions, backgrounds, and other commonalities. Credibility because they are in groups formed on the basis of mutual trust with each other.

The first value of time (talking about the speed and durability), which discusses how the benefits of social media seen from the aspect of time is the speed of the distribution of posts made by someone in a hurry to reach a worldwide audience in an instant. The second value is the durability discuss how the information or images stored in a social media can last a long time in accordance with the wishes of the creator of the content, very different when stored in other media such as newspapers, magazines. Newspapers and magazines can not survive long, if already discarded the possibility of reading. Messages posted on the radio and television durability depending on contracts that have been made with no guarantee that the message on to or seen by the audience. The second value of the audience (audience) of social media that have the diversity and plurality that is higher than other media. The use of social media could represent an entire segment, unlike other media where the media can only represent one or several segments of the audience. The third value is the cost to be viewed from the aspect of the feasibility and effectiveness. When advertising in radio and television must be paid in accordance with the duration and frequency (unsecured seen by viewers), advertising on social media are paid based on the number of viewers who click on those ads, so the fee paid is more feasible and more effective. The fourth value is the relationship that is more closely / friendly and no doubt his credibility. Is formed due to the closeness of community that forms the basis of equality of certain equations such as friendship, friendships, hobbies, professions, backgrounds, and other commonalities. Credibility because they are in groups formed on the basis of mutual trust with each other.

Another aspect discussed in the Dong-Hun study is how social media can be used for marketing. The first social media can be used for direct marketing (direct marketing). As these two interfaces and services to consumers, instead of a call center. The third is an amplifier (amplifier) from word of mouth, where social media can distribute information much faster than traditional WOM (without going through social media). Essence of the study of Dung-Hun discusses how the growth of electronic social media with the rapid advance because it has four key values of excellence and as a result, business organizations have to follow these changes by adjusting its business strategy.

The study Wright et al. (2010: 73) outline discusses how long-term effects (more enduring) than social media for advertising. In that study Wright et. al. suggests that how consumers in the United States becomes increasingly resistant to traditional forms of advertising aimed at them. Advertising spending millions of dollars could ultimately be futile because the consumer to block and ignore the ads that appeared in the traditional advertising media. As a result, marketers must re-evaluate the method recommended using the concept of advertising and marketing as a whole (holistic marketing).

The study begins by discussing the history of marketing concepts, ranging from the production concept, product, sales, marketing and holistic marketing. The discussion aims to see how the weaknesses of a concept born and weaknesses corrected by the next-born concept, which ultimately led to the use of holistic marketing concept is most appropriate for today's business organizations. In addition they also discuss research on how the marketers have to explore other forms of new advertising media. Other forms of advertising media examined to see their advantages and disadvantages, until in the end how social media is seen to have many advantages compared with other media. Besides, Wright et al study discusses how marketers must respond to the trend of consumer rejection of the advertising contained in the traditional advertising media that are one-way, which ultimately led to the alternative social media more interactive. The use of social media as another alternative supported by secondary data comparison of advertising expenditures among mobile marketing, social media, email marketing, display marketing, search marketing.
is derived from the serial data from the month of April 2009 until October 2010, and projected until 2014. The result is that social media has put the top of the interactive ad spending projections. The results in detail are as follows 34% of mobile social media marketing 27%, 17% display marketing, search marketing 15%, and email marketing 11%.

Essence of research conducted by Wright et al. (2010) discuss how social media in the long run may shift from traditional advertising functions are ignored by consumers in the United States. This is evidenced by the budget data for social media advertising which is highest among the other advertising spending. The results Dong-Hun (2010) and Wright et al. (2010) essentially argues to us that the use of social media today is an inevitable thing again by business organizations who want to achieve marketing goal.

Research Webster (2010:593) broadly discuss how the regime of user information (user information regime) and their role in shaping patterns of media consumption. Discussed in more detail Webster is as follows: the first discusses the importance of the space market Characteristics of digital media (digital media market place), the second discusses the theoretical model of the space market. The third discusses the regime of user information, and general methods they use to produce recommendations and an error (bias) are often constructed in both methods. The latter identifies the emergence of patterns of media consumption.

An important characteristic of digital media market space is as follows: first, the total supply of media materials and services are abundant and growing rapidly. Second, digital media is available in the form of cross-technological, and allow consumers to access their media products, the third of the total supply availability of human attention consume media products is a leap.

The theoretical model of the market space is formed above the first three components are the user's media, the agents who consume media products and services, the second is a provider of media (media providers), which is creating a structure and resource users to use, the third is the user's information regime, traditionally created by third party media provider offering market information needed to observe and manage media consumption.

The method is applied relates to the emergence of information regime is the user's search algorithms, which search engines (search engines) who offer advice in response to a question or doubt, for example google is the most popular search engine today. The second method is Agregating Social network, social media is how to integrate a particular community group on the basis of background and interests to form a communication network. The third method is the Collaborative Filtering, a method that will provide the means to cooperate but tailored to the needs of individual users. For example Amazon, iTunes, and Netflix we know as a pioneer in co-operation with the user based on the specificity of consumer needs. The bias is associated with a method that was built in the regime is the behavior of the user's information, personalization, and popularity. The third bias is often a constraint in the analysis methods regime the formation of user information.

Media consumption patterns that form the outline of two-dimensional dynamics of the fragmentation and polarization. Fragmentation dynamics associated with the splitting of the viewer or user's own media related to social values. Polarization dimension describes the tendency of users to concentrate on their consumption patterns around the relatively diverse media products. If associated with research Dong-Hun (2010) Webster's research focus is on aspects of content and community more broadly and more obvious link between the two. With a literature review conducted by Webster provides knowledge that in forming an organization's content, especially if the producer must consider many things, because of the nature of the communities are dynamic, complex and fragmented. If associated with the grouping of elements forming the category of social media, research, Webster was more emphasis on the aspect of nature or characteristics of the building-blocks of social media itself (dimension properties / characteristics)

Research Edosomwam et al. (2011:79) discusses the history of social media and its impact on business. Edosomwam et al. refers to the definition of social media according to Merriam Webster dictionary is a form of electronic communication through which users create online communities to share information, ideas, personal messages, and other content. His research has historically discuss how the development of computer technology in the 1970s to support the development of social media, social networking developments are created in the 1990s, and discusses examples of social media has historically, like Lunar

Besides, it also discussed the benefits of social media are affecting the business to use it more widely. The benefits include the following: promoting open communication between workers and management; allow the worker to share project ideas effectively in groups, promoting better content, such webcast and video, as opposed to simple text; help communicate the cooperation between current customers and potential customers; encourage members or employees of the company became part of a recognized member of the community better; social media be a good place for discussion and a classic goal of marketing and communications. According Edosomwam et. al key factor of success of social media is conversation.

Research Edosomwam et.al (2011:79), as well as research Dong-Hun (2010) and Wright et al. (2010) in addition to providing a historical reason why the media systematically social impact on business, also provide an argument that social media is very plays an important role for the organization in its business strategy.

Figure 4. Corporate Communication

Source : Sarniola (2011)

Research conducted by Sarniola (2011) aimed to investigate the relationship between social media and reputation management of the professional point of view of four Finnish organizations involved in social media and other professionals knowledgeable of social media. This study examines the use of social media in the target organization and the lessons learned by the professionals studied in order to answer the main research questions: What is the relationship between social media and reputation management, as perceived by professionals who were interviewed and surveyed. The methodology was conducted qualitative study consisting of four semi-structured interviews with communications professionals, marketing and social media from four Finnish and international organizations of an online survey of sixteen young professionals. Interviews were conducted in person, by telephone and via email, and online survey administered via Facebook. Theoretical framework of research that included social media activities in four areas of corporate communication: PR, marketing, crisis communication and HRM organization's reputation can be managed as organizations involved in these activities in social media.

The results of these findings, that the relationship between social media and reputation management are three: First, how social media and reputation interact depending on their respective organizations. Second, the reputation of the organization can benefit from social media as these tools allow organizations to unlock. Third, organizations should participate in social media with a genuine interest in building relationships said.
In contrast to previous studies discussed in this paper, a literature review conducted by Sarniola (2011) see social media communications company of four distinct areas, namely in the areas of: (1) Public Relations, as being personal, monitoring, disseminating information; (2) Marketing Communication, includes promotion, brand trustworthiness, and consumer participation (3) Crisis Communication, which includes generating activities news, enabling crisis escalation, involving the public (4) Human Resources Management. include recruiting, using social media at work So the use of social media can be utilized for the purpose of the four regions of interest in that field. It also Sarniola (2011) by quoting Kaplan argued that social media can be classified into two categories based on the properties of these media tools, which is based on Self Presentation / Self Disclosure and Social Presence / Media Richness. The classification with examples of social media can be seen more clearly in the table 3. So the difference Sarniola research with research that has been discussed previously is focusing on aspects of the region and the nature of social media itself. (dimensions of area / space and nature)

Tabel 3. Classification of Social Media Tools (Kaplan & Haenlein, 2010)

<table>
<thead>
<tr>
<th>Social Presence/Media Richness</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Blogs</td>
<td>Social networking Sites (E.g., Facebook)</td>
<td>Virtual Social World (E.g., Second Life)</td>
</tr>
<tr>
<td>Low</td>
<td>Collaborative Project (E.g., Wikipedia)</td>
<td>Content Communities (E.g., You Tube)</td>
<td>Virtual Game World (E.g., World of Warcraft)</td>
</tr>
</tbody>
</table>

Source : Sarniola (2011)

Palmer (2009) proposed a model-based direct marketing experience to guide the assessment of social networking online. In Figure 5 the three elements of social networking environment to be displayed are: manufacturers, customers and communities. Based on these images one can clearly see the difference between direct marketing in the context of modern social networking with traditional direct marketing, which does not use social networking.

Related to the dimensions of social media like previous studies, Palmer (2009) by quoting the opinion of the Fountain (2008) identified the following five main categories of social media: (1) Blog, composed of individuals or companies online journal, often combined with audio or video Podcasts, (2) Social Network is an application that allows users to build personalized web sites accessed by other users to exchange private content and communication, (3) content communities, ie web sites that organize and share certain types of content, (4) Forums / bulletin boards, namely the site to exchange ideas and information usually around special interests, (5) content aggregators, which is an application that allows web users to completely customize the content they want to access.
There are differences between the categories of social media forward by Sarniola (2011) by Palmer (2009). Although Palmer promoted to the category of the term but are more likely to see the dimensions of the elements that make up the social media itself (structural dimension). If explored further, the dimensions proposed by Palmer is an extension of the structural dimensions proposed by Kangas et al. (2007), although the paper did not make it as Referrals.

In contrast to previous studies that emphasize the social aspects of the media as a channel (channel) for the marketing, the paper Workman (2010) tried to develop a simple model that helps explain the essential components of social media marketing strategy. He suggest critical components of a model of social media marketing as follows: Connecting Ring, Ring Prospecting, Active Clients, Sale Target, Conversations Pie, Pie Referrals.

Connecting Ring: that everything in the target area representing our sphere of influence, the outer ring circumscribes represent all the people with whom we have contact, the potential clients and referral sources. Prospecting Ring: the area consists of contacts who have expressed active interest in our services as an intermediary (realtor). The goal is to get them to see us as their real estate expert. Active Clients: representing people who have been chosen specifically to represent. Social media can make us stay connected to clients, but the main task is to do what we do best, namely as a realtor. Sale Target: represents a specific goal for each connection. The main goal is to make the sale and every activity should be directed to help achieve a particular conversion or sales purposes.

Besides the main components of the proposed model of social media marketing Workman also recommends the creation of LIFT (LinkedIn, Blogs Internet, Facebook and Twitter) in his paper. To understand the model Workman (2010) also provide an illustration as well as the two blades of a helicopter to describe the conversation and Referrals. (Figure 6). The more frequently the frequency effectively turning more and more apparent benefits of social media. However, it is important how to control the helicopter rotor blades so they do not spin out of control in order to foster relationships that provide a stream of referrals and new business.

Significant differences with previous studies that discuss more on the social media aspects of themselves as a means of marketing, Workman is located in the study of one of its components, namely the sales target. At its core marketing concept boils down to how to benefit, through the sale. So whatever you call it a marketing model should be directed to the ultimate goal of a business organization.
Significant differences with previous studies that discuss more on the social media aspects of themselves as a means of marketing, Workman is located in the study of one of its components, namely the sales target. At its core marketing concept boils down to how to benefit, through the sale. So whatever you call it a marketing model should be directed to the ultimate goal of a business organization.

Table 4. Grouping the Thinking of Social Media Marketing Researchers

<table>
<thead>
<tr>
<th>Author</th>
<th>Background of expertise</th>
<th>Model Research / Theory developed</th>
<th>Changes or the development of current concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kangas, P., Toivonen, S., Bäck, A. (2007)</td>
<td>Research scientist in Information Technology and Services</td>
<td>Ads by Google and other social media business models</td>
<td>Develop a social media based on the dimensions forming the structural dimension</td>
</tr>
<tr>
<td>Mayfield (2007)</td>
<td>consultant, author and commentator on web media strategy, social media, online content, reputation management and digital literacy</td>
<td>What is Social Media?</td>
<td>Develop a social media element based on the dimensions of the properties / characteristics, namely the participation and involvement, openness, conversation, community, and connectedness</td>
</tr>
<tr>
<td>Brussee, R., and Hekman, E., (2010)</td>
<td>Senior Researcher, Ph.D in Mathematics (Brussee) ; Lecturer at the Faculty of Communication and Journalism at Hogeschool Utrecht (Hekman)</td>
<td>Social media are highly accessible media</td>
<td>Develop a social media element based on the functional dimension</td>
</tr>
<tr>
<td>Sarniola (2011)</td>
<td>Business Communication</td>
<td>Professional Perceptions of the Link between Social Media and Reputation Management</td>
<td>Develop a social media element based on the dimensions of the area/ space (area)</td>
</tr>
</tbody>
</table>
Based on research ideas and models of social media marketing has been discussed, can be broadly grouped according to the scientific background, research model developed and the emphasis on the dimensions of the concept can be grouped into four categories as shown in table 4.

Related to the method of this paper is to use dimensional approaches, the grouping of social media thinking also refers to the dimensional aspects. Based on the ideas of the researchers in the journal that have been studied, it can be grouped into four categories dimensional namely: (1) Structural (2) the nature / characteristics, (3) Functional, and (4) area / space.

CONCLUSION

The use of social media as a means of communication between the organization and its stakeholders is an inevitable thing. The facts suggest that advertising spending of some big companies in America shows that ad spending in the United States ranks the largest interactive advertising spending. Definitions and concepts related to social media, most of the selected literature that refers to the definition of Referrals made electronic social media online. Between the concept of social media and social networking are often interchangeable in their usage although both have a different basic understanding. The research method most widely used in research models of social media is a literature review, then it is followed by a qualitative method using semi structural connection with the grouping based on the dimensional aspects of the researchers in the journal that are to be referenced in this paper the four schools of thoughts namely structural, the nature / characteristics, functional, and the area / space dimensions.

REFERENCES


Brussee, R., and Hekman, E. 2010. Social Media are Highly Accessible Media, Research Group Crossmedia Content at the University of Applied Sciences Utrech.


Hieftje, Kimberly. 2009. The Role of Social Networking Sites as a Medium for Memorialization in Emerging Adults, UMI 3386683 Copyright 2010 by ProQuest LLC.


THE LITERATURE REVIEW OF THE PRACTICE OF COST ACCOUNTING SYSTEMS IN SERVICE SECTOR

Abobaker M Abdurahman Fatah  
Othman Yeop Abdullah Graduate School of Business  
University Utara Malaysia (UUM)  
PhD candidate in accounting  
SAF79009@yahoo.com

Rosliza Mat Zin  
Othman Yeop Abdullah Graduate School of Business  
University Utara Malaysia (UUM)  
rosliza@uum.edu.my.  
Tel(o) : +604-9283905.

ABSTRACT
In this world intense competition, need for customer satisfaction, increase productivity, looking for continuous improvement, increase the profit and use the scare resources in an appropriate way, all this factors and to be able to survive with the competitors (Mostaque, Gunasekaran, & Erkki, 1998; Hill, 2000), cost accounting systems have been emerged to assist decision makers to make suitable decisions. Cost accounting systems provide managers with cost information to facilitate making several managerial decisions. For instance, make or buy decisions, delete useless activities and setting selling prices (Innes, Mitchell, & Sinclair, 2000; Majid and Sulaiman, 2008). Therefore, these systems are important to all organizations. In this paper the researcher reviewed the literature related to practice of cost accounting systems in the service sector such as banking, transportation and hospitals.

Key words: cost accounting systems, service sector, traditional costing, and activity based costing.

INTRODUCTION
Most firms in different sectors face significant changes in their business environment. For instance, the increase in intensity of competition, use of advanced technology, customer’s needs for product diversity, and scarce resources, all those factors make managers seek accurate information for survival (Schoute, 2011; Foong & Teruki, 2009; Drury & Tayles, 2005). The practice of cost accounting systems provide useful information for planning, controlling, and for short and long term decisions (Fleischman & Tyson, 1993; Talha, 2010). Cost information will assist managers to make the right decisions. Service sector is one of those sectors which need to cost information. Service sector includes all organizations which introduce services to the society such as health care, banking, transportation, post office, information sector services, securities, commodities and other financial investment services; rental and leasing services; professional, scientific and technical services; administrative and support services; waste management and social assistance. All the previous services need cost information to produce low cost products, therefore many accounting researchers attempted to study how cost accounting systems being practiced in service sector, next section will summarize some of those studies.

LITERATURE REVIEW
In this field there are many studies focused on practice of cost accounting system in service sector. For instance, Odysseas and Ioannis (2007) studied the Greece hotels to know the present state of the cost accounting practices in Greek hotels. 146 hotels were targeted but only 98 firms responded positively. The criteria used in the selection of the hotels, was their sales revenue and profit for the year 2005. Besides conducting surveys, the researchers also used questionnaires. Odysseas and Ioannis’ study found that three quarters of the hotels costs are fixed costs and also uncontrollable costs such as the room department costs. Although Kaplan and Cooper (1997) said that ABC is more suitable for service firms than manufacturing companies, Odysseas and Ioannis (2007) found that the majority (76.5%) of Greece hotels applied traditional costing. On the other hand, just 23.5% of the study sample applied ABC 58.5% of the hotels which relied on traditional costing applied job order costing system, the rest, 41.5% applied process costing system.
Focusing on cost accounting systems, Odysseas and Ioannis (2007) pointed out that hotels which apply traditional costing depended on two second stage allocation bases, which are sales and direct labor hours and direct labor cost, whilst the hotels that apply ABC use five cost drivers namely room nights, number of stays, sales, the number of covers and the number of customers. Odysseas and Ioannis’ study found that 52.9% of the hotels applied traditional costing or ABC applied normal costing while the remaining 47.1% applied actual costing. In relation to cost allocation, the majority of Greece hotels allocated overhead costs using budget overheads.

Moving on to cost accounting techniques, Odysseas and Ioannis found that 76.5% of hotels applied full absorption costing while 44.7 applied variable costing. Only 20% applied standard costing. They also pointed out that the firms wanting to adopt ABC need to have characteristics such as competition and product diversity. However, Roztocki and Schaltz (2003) found that the firms’ size plays an important role in the adoption of ABC.

In another study by Emmett and Forget (2005) they investigated how hospitals utilize the ABC system using demographic factors namely the size (number of beds and employees), structure of profit, membership in chains and locations. Their study was conducted in hospitals in 46 US states. They used a questionnaire to collect data from a random sample consisting of chief financial officers (CFO) in 149 hospitals. Only seven hospitals (4.7%) implemented the ABC system, while 71.8% were aware of applying the ABC system. The hospitals that had implemented the ABC system stated that this system provided more accurate charging and better cost control; five of them mentioned that the decision making process in their hospitals improved after the implementation of the ABC system. This is approximately what Pines, Fager, and Milzman (2002) found in their study. They mentioned that although there was a considerable progress in costing methodology, the critical care studies have not adequately applied these techniques.

In addition, Emmett and Forget (2005) asked the respondents how they came to know about the ABC system, why they did not implement the system and which cost accounting system were they currently using. The respondents in Emmett and Forget study mentioned that they learned the ABC system from conferences, courses and magazines. 95 (36.8%) of the respondents stated that they did not apply ABC because of the high cost of implementing this system. While some of them answered that they were satisfied with the current cost accounting system, others said that they did not have enough experience with ABC. However, 20 of them were planning to use this system in the future. Finally, the study found that only location had an impact on the hospitals’ familiarity with ABC as compared to other demographic factors. This result contradicts what Roztocki and Schaltz (2003) found in their study.

In another study conducted by Mostaque, Gunasekaran, and Erkki (1998), they stated that the management accounting system can help firms to survive in the competitive markets, and this not only included manufacturing firms but also service firms such as banks. In their study, they used a postal survey method to collect data based on a questionnaire. They collected data from one hundred Finnish service firms on cost accounting practices, proper cost allocation to different products, level of satisfaction in allocating product costs, shortcomings of existing cost accounting system and activity-based costing (ABC). The findings suggest that in Finnish service firms the practice of management accounting systems is not very successful to achieve the goals of decision making, planning, management control and improving the overall performance of the information system. They also stated that there are some service firms in Finnish which have achieved at least some of them.

One of the difficulties in service firms during practice costing systems is in identifying the product, because these firms offer intangible products. Brignall, Fitzgerald, Johnston, and Silvertro (1991) studied product costing in the service sector whereby they focused on five service firms- management consultancy, a hotel chain, a transport company, a news agent chain and a clearing bank. They found that, to achieve goals in the service firms such as determining service price, management control and inventory valuation, service costs need to be identified. However, in some service firms service costs are not use for inventory valuation because the nature of the service cannot be stored.

Pavlatos and Paggios (2009) conducted a study to study the factors that influence the design of cost accounting in hotels. They wanted to know the relationship between cost system functionality and contingent factors. According to Pavlatos and Paggios cost system functionality is defined as “the quality of cost accounting information which is provided by a cost system”. Pizzini (2006) argue that functional cost system has to provide detailed data, provide managers with cost information reports frequently, better classify costs according to behavior, provide accurate cost data and calculate more variances. Their sample consisted of 100 hotels in Greece and investigated the association between cost system design and the six factors, the
extent of use of cost data, the low cost strategy, the level of competition, the hotel size, the number of services and products, and the membership of multinational chain.

Pavlotos and Paggios (2009) used two tools to collect the data, namely the questionnaire and a semi-structured interview. Besides, they used measures from other researchers to measure the strategy, the level of competition and the size. These measures are reliable why, because they have been used before. After analyzing the data they found that only 24 hotels use functional cost accounting system by providing cost according to individual service, customer, room etc. They also classify costs according to behavior and use of information.

The design stage started the third stage which was training the company’s employees to use the system. Finally, they started the third stage which was training the company’s employees to use the system. Finally, the costing manager mentioned that ABC provides useful cost information for several purposes such as cost reduction, determining the product pricing, and cost drivers for the company.

With respect to the relationship between the organizational and environmental factors and the adoption of costing systems, Hill (2000) found that there was a positive relationship between adoption of costing system and hospital size, ownership, occupancy rate, competition, and revenue constraints. Besides, hospitals that are part of a multi-national hospitals system are also more likely to adopt costing system than independent hospitals, while hospitals which are located in rural areas are more likely to use relatively unsophisticated methods than urban hospitals. Inner city hospitals are more likely to have no costing system because they lack the resources and are neglected by the government.

Another study concerned with activity-based costing (ABC) in service costing was conducted by Majid and Sulaiman (2008). They used a case study to explore the difficulties and benefits from practicing activity-based costing in Malaysia. Face to face semi-structured interview and documentation analysis were used to collect data from two companies, to investigate the problems they faced during implementation of ABC and the benefits they gained. The literature suggests that ABC has many benefits such as increasing profits, influencing strategic managerial decisions, process improvement, and eliminating non-value added activities (Innes, Mitchell, & Sinclair, 2000; Majid and Sulaiman, 2008). However, it has also some difficulties such as the cost of implementing this method due to the time spent on determining cost drivers, and also the need for additional accounting staff (Innes et al., 2000). The second problem is gathering the data from the employees. After analyzing the data gathered, the first company expressed that it implemented the ABC because it function in the competition market, so ABC has enabled it to improve the company’s strategic product pricing and facilitate the improvement.

Arnaboldi and Lapsley (2005) suggested four stages to implement ABC namely initiation and adoption, design, implementation, and use of information. Majid and Sulaiman (2008) applied these steps in their study. They found that the first company initiated ABC and adopted by headquarters in USA. The president of the sector chaired a committee to set a steering committee and project team. The design stage started when both committees travelled to Malaysia. The two teams worked with the production personnel and in-house accountant and external consultants in identifying the activities and the cost drivers for the company. Then they started the third stage which was training the company’s employees to use the system. Finally, the costing manager mentioned that ABC provides useful cost information for several purposes such as cost reduction, determining the product pricing, and customer profitability analysis.

The first company was a multi national company; therefore, it could overcome the difficulties faced easily. While Majid and Sulaiman (2008) mentioned that they faced the same problem the researcher have found in the literature that the high cost was a result of buying new and also up-to-date software. They also spent much time in identifying cost drivers. In addition, ABC made the company’s manufacturing process more
efficient. It identified the profitable activities and non-value-added activities, while the accurate cost information provided by ABC made them competitive within their industry.

In the second company, the finance division suggested initiating implementation of ABC. Then, a cross-functional team formed a committee chaired by an expert in strategic cost management. They started designing ABC by identifying the relevant cost pools, activities, and cost drivers. They brought external consultants to train the employees on how to use ABC. However, they did not introduce ABC in all divisions of the company, because they have two costing systems one for capital expenditure decisions, and they implemented ABC for daily operating expenditures. They implemented ABC for two reasons: the competition and they noticed that traditional costing systems provide them with unreliable information. In term of difficulties they stated that the high cost accompanied with applying ABC, and the technology change was one of the difficulties they faced. When the committee study the exist activities and products, they introduced new ones. After implementing ABC the company gained many benefits such as assist managers to make informed decisions, reducing wastage, identifying profitable customers and high cost activities, and identifying non-value-added activities.

CONCLUSION

Although some accounting researchers stated that Activity Based Costing (ABC) is the appropriate cost accounting system to service firms (Kaplan & Cooper, 1997). Others contradict this view and they found out that service firms implement traditional costing more than Activity Based Costing (ABC) (Odysseas and Ioannis, 2007; Emmett and Forget, 2005). Furthermore, identifying the final product in service firms is one of the difficulties which faced service firms to implement cost accounting systems because service firms product intangible products (Mostaque, Gunasekaran, and Erkki, 1998; Brignall, Fitzgerald, Johnston, and Silvertro, 1991). Moreover, the cost of practicing this method as a result of the time spent on determining cost drivers, and also the need for additional accounting staff (Innes et al., 2000).

REFERENCES


PRODUCT DIFFERENTIATION IN INTRA-INDUSTRY TRADE INDONESIA-ASEAN3 FOR WOOD AND RUBBER-BASED PRODUCTS

Pauline H. Pattyranie
BINUS University Lecturer, Management Department

ABSTRACT

Intra-Industry Trade (IIT) is the most important solution for Indonesian trade with ASEAN members. Trade liberalization in ASEAN region through ASEAN Free Trade Area that was fully implemented in 2010, causes IIT to become an important phenomena for the measurement of trade integration intensity of ASEAN. This is a form of trade cooperation aiming to develop ASEAN Economic Community in 2015. Eleven industry priority sectors are developed to speed up integration. Among them are the Wood Based Product coordinated by Indonesia and the Rubber Based Product coordinated by Malaysia. World Trade in monopolistic competition markets shows IIT was developed by specialization through product differentiation and economics of scale. This research uses a panel data regression (fixed effect model) to estimate the cross-sectional unit product in 4 digits ISIC for seven years period. The result indicates that IIT Indonesia-ASEAN3 for the above products is predominantly determined by product differentiation variable. Hence, Indonesian output can still be increased through product differentiation and this in-turns increases the IIT. Field observations support the research findings, producers are in strong need for knowledge and ideas to design new product.

Keywords: Intra-industri trade, product differentiation, trade integration.

INTRODUCTION

Intra-industry trade (IIT) is an important solution to Indonesia's trade with member countries of ASEAN, in addition to the existing inter-industry trade. The establishment of trade liberalization in ASEAN region through the ASEAN Free Trade Area (AFTA) that was fully implemented in 2010, making IIT to become an important phenomenon as a measure for the trade integration level of ASEAN. This is a form of trade cooperation towards the economic integration of ASEAN Economic Community (AEC) by 2015. Measuring the level of IIT can be an indicator of the presence of 'similarity' and convergence of the countries trading with each other in the integration block (Aturupane et al, 1997:3). IIT becomes the solution for increasing trade due to the fact that ASEAN member countries have similar geographical and technological factor endowment.

The Intra-industry trade described above, is the trading that occurs in industries that belong to the same commodity classification, or products that are inter-connected, or products that use similar factor intensity of production production (Krugman, 2009:128; Lloyd, 2004:3). For example Indonesia exports furniture products to other ASEAN members, namely Singapore, Thailand, and Malaysia, but Indonesia also imports furniture products from these countries. The same was done in the three countries, the similar furniture manufacturing, and trade with each other for the same furniture product, but with different shades of wood and furniture design so that it will meet the diverse tastes of the consumers in each country. Specifically in the ASEAN region, previous studies showed a high intra-industry trade for some countries such as Singapore and Malaysia, although in general the index shows that the level of IIT is still small. Calculation on the index through IIT-Grubel-Loyd showed small numbers in the ASEAN region, which means that there is more inter-industry trade rather than intra-industry trade. However, it can be concluded that from year to year, the index of IIT in ASEAN is in general increasing (Murshed, 2001:116-122; Austria, 2004:3-134; Khalifak, 1996:351-368; Wiklander,2008:1-38).

The existence of the increase of IIT index, indicates an increasing trade integration of ASEAN in this region. Then to go on the ASEAN Economic Community, a program to integrate the 11 priority sectors by state coordinators, has been established. This include the Wood Based Products coordinated by Indonesia, and the Rubber Based Products coordinated by Malaysia. Within this priority sectors ASEAN6 reduces tariffs to 85% on the priority sectors in 2007 and 2012 for other members (Adningsih etal, 2007:16; ASEAN Secretariat, 2007; the ASEAN Secretariat, 2009; Dirjen Kerjasama ASEAN-Deplu RI, 2009). This priority sectors integration is identified for accelerated economic integration. On this basis research considers important to look at Indonesia's IIT...
The model used in this study uses also several determinants of IIT that was done by previous researchers, namely: Christodolou(1992:825-884), Clark (1998:345-362), Kishor (2000:245-255), Byun and Sang (2005:128-28), Thorp and Zang (2005:231-247), who were selected based on the theory of IIT from Krugman. The difference is the inclusion of the variable output estimates of the medium scale and the large scale industry as a determinant of IIT were put separately in the IIT equation, which is based on Rybezynski trade theory (Salvatore,2011:206-209). IIT models in this study will be estimated with panel data regression equation. Panel data used for estimation includes the heterogeneity of units 4 digit ISIC disaggregation, or describe the nature of their wood-based products and rubber based products on each large and medium scale industry. 

Krugman (2009:128) defines IIT as a two way exchange of goods which are the standard industrial classification. IIT occurs when each industry of each country produces a wide range of goods that uses, factors of production with the same intensity, but its products are distinguished by different attributes or different characteristics. In explaining the phenomenon of IIT, Krugman (1979:469-479,1980:950-959, 2009:122-133), in line with the Lancaster (1980:151-175) and Helpman (1981:305-340) build a theory of IIT based on horizontal product differentiation, increasing returns to scale, and monopolistic competition as an approach for market imperfection. Horizontal IIT understanding was derived from the term 'the love of variety' of Krugman, Dixit and Norman as well as 'the most preferred' or 'the ideal variety' of Krugman and Lancaster (Loyd,2004:6; Lancaster, 1980:154) with the determinant the so-called industry-specific. Understanding of these different horizontal IIT are different than vertical IIT initiated by Varley in 1981 that looked at IIT from different angles (Grubel & Lloyd, 2003: xiii).

The theory states that specialization and trade is the key to economic growth (Parkin, 2005: 538-586). The relationship between Economic Growth and international trade is explained as follows. Rybezynski theory (Salvatore, 2011:206-208) states that if one of a country's endowment increases (capital or labor), there will be specialization (Grubel and Lloyd, 1971:496-497) provides a definition of IIT to an industry that is for industry i at each level of aggregation is: the value of exported 'industry' which is very similar to those imported in the same industry namely:  

\[ R_i = (X_i + M_i) - (X_i - M_i) \]

where \( X_i \) and \( M_i \) each is the value of exports and imports of the same industry, which is calculated based on the currency of the country or countries analyzed or of the country of origin. (home country). GL Index = \[ \left( \frac{|X_i + M_i| - |X_i - M_i|}{X_i + M_i} \right) \times 100 \], varies between 0 to 100. When exports of an industry precisely equal to its imports, then the measurement of IIT that is Bi is 100. If there are exports but no imports in the same industry, then the IIT index is zero.

**METHOD**

In doing the regression, the study data are divided into two groups, namely medium scale industry and large scale industry. Estimation of the model is in the form of panel regression. Cross-sectional unit is disaggregation products in 4-digit ISIC, namely: 2010 (sawmills and wood preservation, processing of rattan, bamboo and the like), 2021 (plywood, laminated plywood, wood panels, veneer), 2022 (molding materials and building components), 2029 (woven from rattan and bamboo handicrafts and carvings of wooden kitchen utensils), 2511 (outer and inner tube tires, retread tires), 2519 (out of rubber goods for households and industry), and 3610 (furniture). Indonesian-ASEAN IIT equation can be written as follows:

\[ PI_{it} = \alpha_0 + \alpha_{n,t} + \alpha_{IP_{it}} + \alpha_{DP_{it}} - \alpha_{S_{it}} \]

where intra-industry trade \( I_{it} \) for each product \( i \) in year \( t \); \( i \) = disaggregation industrial products in the 4 digits ISIC, \( \alpha \) years of research 2000-2006 \( \Omega \) output of each large and medium scale industry \( DP_{it} \) = Product differentiation in industry \( i,t \), \( M_{it} \) = minimum efficiency scale at industry \( i,t \). Independent variables were measured from the equation:
\[ IIT_i = (X_i + M_i) - (X_i - M_i) \]

IIT = value of intra-industry trade in product i (in the real amount); \( X_i \) = exports of each product i in f.o.b (in real Rupiah) to partner countries; \( M_i \) = imports of each product i in c.i.f (in real amount) of the partner countries. Product differentiation is calculated using the Hufbauer index (HI) from the equation:

\[ \frac{\delta_{ijk}}{\mu_{ij}} \]

where \( j = \) Indonesia; \( k = \) Singapore, Malaysia, Thailand; \( \delta_{ijk} = \) Standard deviation of export unit value of product i j k (Indonesia) to state k (partner); \( \mu_{ij} = \) average unit value of exports of product i from j to k. The more the value of HI is close to 0 then the more is the differentiated product that are traded both horizontally (Funke, et.al. 2001; Christodolou, 1992). Export unit value of product i is based on the f.o.b value in real Rupiah. Variable minimum efficiency scale (MES), is the ratio of value added output per worker in the largest company to the value added of output per worker in the remaining companies, expressed in real Rupiah. SEM = \( \frac{VA_{AI}^N/N}{VA_{AI}^N/N+1} \)

In doing regression of panel data, the model must first be determined to use the fixed effects model (FEM) or the random effect model (REM). It depends on the assumptions to be used on unobserved variable correlation with the regressor. According to Gujarati (2003:650,651) and Wooldridge (2006:498) if the number of cross-sectoral N is small even with a lot of time T, then the results of FEM and REM estimates are not too different. It depends very much on the individual components \( \epsilon_i \) error, which is correlated with one or several variables regresor it will make a biased estimator of REM, but FEM is not biased. Formal test is also performed to determine the best model, ie Hausman Test and compare it with the distribution of \( \chi^2 \) with the null hypothesis is that the FEM and REM estimator does not differ substantially. When the null hypothesis is rejected, then the match is a FEM model (Gujarati, 2003:651; Wooldridge,2006:498), To see whether the heterogeneity of cross-sectional units located on the intercept or slope, test one – way analysis of covariance, the estimated FEM model with different intercepts but the slope is identical for all units of the product through test \( F = \frac{S_2 - S_3/(N-1)}{S_1/(N-N(K+1))} \) with \( (N-1) K \) and \( (NT-N(K+1) \) degrees of freedom. \( S_1 \) the unrestricted residual sums of squares, and \( S_2 \) the restricted residual sum of squares. The hypothesis test: \( H_0: \beta_1 = \beta_2 = \ldots = \beta_k \) and \( H_1: \text{at least } \beta_i \neq \beta. \) Because the F test is not significant, then \( H_0 \) is not rejected, so that the FEM models with assuming different intercepts but the slope is identical for all wood-based products and rubber valid to be applied in the model (Hsiao, 1986:11-18).

RESULT

1. IIT equation which influenced by medium industrial output of wood and rubber-based products, differentiated product, and minimum efficient scale.

\begin{align*}
\text{IIT}_{2010} &= \text{24196179} + 0.00980(-1) \cdot \text{2010} + 11359595495 \cdot \text{DP}_{2010} - 1251876 \cdot \text{MES}_{2010} \\
t \text{value} &= (1.484) \quad (2.127)^* \quad (-2.145)^* \\
p \text{value} &= (0.147) \quad (0.401) \quad (0.039) \\
\text{R}^2 = 0.830 \quad \text{Adjusted } \text{R}^2 = 0.786 \quad \text{DW} = 1.17 \\
\text{IIT}_{2021} &= \text{3215698} + 0.00980(-1) \cdot \text{2021} + 11359595495 \cdot \text{DP}_{2021} - 1251876 \cdot \text{MES}_{2021} \\
\text{IIT}_{2022} &= \text{30546926} + 0.00980(-1) \cdot \text{2022} + 11359595495 \cdot \text{DP}_{2022} - 1251876 \cdot \text{MES}_{2022} \\
\text{IIT}_{2029} &= \text{10125675} + 0.00980(-1) \cdot \text{2029} + 11359595495 \cdot \text{DP}_{2029} - 1251876 \cdot \text{MES}_{2029} \\
\text{IIT}_{2031} &= \text{176828361} + 0.00980(-1) \cdot \text{2031} + 11359595495 \cdot \text{DP}_{2031} - 1251876 \cdot \text{MES}_{2031} \\
\text{IIT}_{2051} &= \text{457553098} + 0.00980(-1) \cdot \text{2051} + 11359595495 \cdot \text{DP}_{2051} - 1251876 \cdot \text{MES}_{2051} \\
\text{IIT}_{3610} &= \text{84019656} + 0.00980(-1) \cdot \text{3610} + 11359595495 \cdot \text{DP}_{3610} - 1251876 \cdot \text{MES}_{3610}
\end{align*}

2. IIT equation which influenced by large industrial output of wood and rubber-based products, differentiated product, and minimum efficient scale.

\begin{align*}
\text{IIT}_{2010} &= \text{33286979} + 0.06990(-1) \cdot \text{2010} + 1280319225 \cdot \text{DP}_{2010} - 1035625 \cdot \text{MES}_{2010} \\
t \text{value} &= (2.762)^* \quad (3.974)^* \quad (-2.287)^* \\
p \text{value} &= (0.009) \quad (0.000) \quad (0.028) \\
\text{R}^2 = 0.816 \quad \text{Adjusted } \text{R}^2 = 0.764 \\
\text{IIT}_{2021} &= \text{153000000} + 0.06990(-1) \cdot \text{2021} + 1280319225 \cdot \text{DP}_{2021} - 1035625 \cdot \text{MES}_{2021}
\end{align*}
3. Results of measurements of trade integration level can be seen in the following table.

The Average Level of Trade Integration Indonesia-ASEAN3
(Index GL), Wood and Rubber-Based Products, 2000-2006

<table>
<thead>
<tr>
<th>Type of Product 4 Digit ISIC</th>
<th>IIT Index</th>
<th>Integration Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>27.13%</td>
<td>Moderate</td>
</tr>
<tr>
<td>2021</td>
<td>43.13%</td>
<td>Moderate</td>
</tr>
<tr>
<td>2022</td>
<td>26.13%</td>
<td>Moderate</td>
</tr>
<tr>
<td>2029</td>
<td>16.32%</td>
<td>Weak</td>
</tr>
<tr>
<td>2511</td>
<td>75.78%</td>
<td>Strong</td>
</tr>
<tr>
<td>2519</td>
<td>91.64%</td>
<td>Strong</td>
</tr>
<tr>
<td>3610</td>
<td>24.55%</td>
<td>Weak</td>
</tr>
</tbody>
</table>

Source: Export and Import Data, BPS, Analyzed.

DISCUSSION

The result shows that product differentiation factor has the strongest influence IIT-ASEAN3 Indonesia for wood-based products and rubber. Differentiation that is expressed in the Hufbauer index is horizontally (near zero), so still in the same quality but with different attributes (Besanko, 2004:214-216). Minimum efficiency scale is also in accordance with the theory, which help support the PII. Although there is no standard amount is, but the data in the study showed a decrease in the minimum efficiency scale, both for large and medium industries.

Industrial output variable is the determinant of IIT in this study supporting the IIT. The influence of domestic industrial output towards the IIT is estimated separately for the medium scale industry and for large scale industry. Each these estimates shows that industrial output support the IIT Indonesia ASEAN3. This means that if our industrial output increases, it will come to increase the IIT Indonesia to Singapore, Malaysia, and Thailand. The highest level of IIT (based on the Grubel-Lloydindex) among the seven kinds of wood and rubber-based products in large and medium scale industries are rubber products (2511 and 2519), followed by plywood (2021) and furniture (3610).

In the effort of increasing the output of wood and rubber based products, it is necessary to increase the amount of capital used per hour per worker and to increase the labor productivity. These two factors have the greatest effect to the value of output in the two sector industry of the medium and large scale industries. Field observations indicate the fact that for the wood and rubber based products there are no problems in the market demand. The market is still large, especially for products that provide a given special taste. The selling price for these products are usually much higher, but it does not create problem in selling as long as product design can be accepted by the customers. In fact more than 90% medium size industry output are exported (Raharjo, 2009). For this reason, the business expansion is still available.

The presence of product differentiation create even more additional market. The differentiation of products create additional tastes in respects to its design and attributes. The structure of market which is monopolistic competition make it also possible for new ventures to enter the industry with least cost. There are many producers as well as many buyers. Important for the producers, since price is higher than its marginal cost, to pay attention to the need for advertising their products in order to avoid the occurrence of asymmetric information. If asymmetric information occurs it may reduce the market size.

REFERENCES


ANALYSIS OF INVESTMENT DEVELOPMENT IN THE LAND AND WATER FOR CATTLE IN SUMBA ISLAND

Budiman Notoatmodjo
Senior Researcher at the Department of Agriculture, Jakarta

Haryadi Sarjono
Management Department, Binus University, Jl. KH. Syahdan No. 9, Kemanggisan, Palmerah, West Jakarta 11480 - Indonesia
Email: haryadisarjono@yahoo.com

ABSTRACT

This research was conducted aiming to land and water investment development in the area of beef cattle on the island of Sumba, which is one of the islands in the East Nusa Tenggara province. While the scope of the study, among others, will include an in-depth study of particular aspects related to the area and conditions land and water, technical aspects, social, economic, institutional structuring of the activities of land and water infrastructure to support the improvement and development of the regions, especially in the area of beef cattle farms. Research methodologies used were 1) the synergy approach and spatial policy, 2) technical approach to land and Water Resources, 3) approach to production and productivity of livestock and 4) socio-economic approach. The results of this study is the multiplier effect of the development of irrigated farm area also includes the promotion of employment opportunities can be approached from the employment opportunities generated through business development and construction of the irrigation farm itself.

Keywords: Infrastructure, land, water, investment and beef cattle

INTRODUCTION

Background

Indonesia will be competing farms with livestock of other countries, not only in seizing the international market, but also in seizing the Indonesian domestic market. With a population of more than 210 million people and growing per capita income, Indonesia will be one of the largest cattle market products that will be contested by the world's livestock producers. The increasing demand for beef cattle in particular, the impact of depletion of cattle livestock, mainly from eastern Indonesia. East Nusa Tenggara and West Nusa Tenggara who was a regional livestock seed sources in the 1980 era - an.

Livestock sub-sector is very crucial role in meeting the needs and nutrition, especially protein of animal origin. This will be increasingly important as the NTT were shocked by the case of "starvation" that swept almost the entire district, and this can be seen also as a direct result of low consumption of the public, especially children under five will need protein and nutrition. Average consumption of meat and eggs on the island of Sumba is respectively of 2.1 gr / cap / year and 0.27 gr / cap / year. And is lower than the average consumption for the East Nusa Tenggara at 4.49 gr / cap / year, and eggs 0.88 gr / cap / year (Master Plan Development of Livestock in West Sumba, 2006).

Arrangement of the seeds as the source region in East Nusa Tenggara (NTT) through the development program is intended for these areas: (1) according to the agro-ecosystem and its location follows the spatial allocation (2) based leading livestock commodities (3) have the infrastructure either (markets, roads, water sources, etc.) (4) is supported by the availability of technology and network-access institutional upstream and downstream as well as a chance to develop. Program development is very important breeding areas for immediate implementation because the farms are supposed to be the central point of all livestock farming development activities conducted by the breeder.

Area of the farm that has evolved over this infrastructure is not maintained, the capacity tends to decrease, the activity is less efficient, due to such lack of policy and budget support are not sustainable. While the area has adequate infrastructure is increasingly pressed (land conversion) for other purposes, outside the breeding business. Grazing as a marriage together and the source of livestock feed, which first developed in the countryside, nearly 78 percent have switched functions. Meanwhile pasture felt by small farmers, so it is important to be developed in order to reduce production costs, especially the source of livestock feed.
Livestock Forage Food is a major component in the development of farm businesses. However, availability is very limited areas, especially in times of drought. On the other hand the potential of land for fodder development is still very open and spacious. Therefore, it is necessary to develop and optimize land use land with supporting infrastructure development. With the development of good infrastructure is expected to be able to invite new investors / private, which will reduce dependency on government.

Sumba is one of the islands of East Nusa Tenggara province, which consists of 4 districts namely West Sumba, East Sumba, West Sumba, Central Sumba and Power. District Fiscal corresponding index is very low (<1.00) means that the area is still considered necessary to receive assistance from the center. Income per capita is still below the average of other districts in the province of NTT, and the poverty rate reached about 65% and sometimes there are cases of outbreaks of Malnutrition, Nutrition, and others less.

Through the activities of chaps (Cattle Health and Productivity Survey) in 1990-1993 has been carried out measurements of the level of productivity of natural grass on the island of Sumba (East Sumba and West Sumba), and the obtained results: the reduction in carrying capacity of grazing land began in June and the peak occurs in September. Production of natural grass becomes very low during the dry season (September - November), so that the carrying capacity of grazing lands is very low, often well above 2 ha / adult cows. This occurs due to lack of grass growth as long as no rain, or during the dry season.

By considering the challenges and opportunities that exist, it needs immediate preventive measures to keep the production of beef cattle in areas of potentiel this, both the quantity and quality. From the aspect of land and water management, to support the development of a farm on the island of Sumba, among others, by striving for continuous availability of fodder throughout the year. This effort can be achieved by reducing the impact of the drought through the arrangement and search of water sources that can be used to irrigate lands in particular food-producing livestock forage.

Objectives
Work of this study are intended to identify new areas for the development of animal husbandry in the region of Sumba Island East Nusa Tenggara Province, through the identification of potential, problems and opportunities as well as data collection and data analysis required to consider the potential sources of land and water. Infrastructure development of land and water area of beef cattle farm on the island of Sumba, East Nusa Tengga aims to:

1. Obtain data on potential and conditions of farm land that has been developed for livestock
2. Obtain data on potential fields such as data on potential HMT gardens, paddocks and stables are suitable to be developed into farm land
3. Obtain the data for farm irrigation conditions such as water resource conditions, the flow of water and irrigation conditions
4. Obtain data on potential sources of water that can be used for farm irrigation as rain water, ground water and surface water
5. Obtain the data for the condition of facilities like drinking water of livestock husbandry, sanitation, gardens and pasture forage
6. Identify the constraints and problems quantitatively in the development of livestock
7. Obtain advice on the development of livestock on the island of Sumba in particular relating to land and water.
8. Utilizing technology to develop water and land resources are effectively and efficiently in order to support the achievement of better living environment in order to improve the socioeconomic welfare of the community

Scope of the Study.
Study of Land and Water Infrastructure Development in the Area Beef Cattle Ranch on the island of Sumba, NTT, especially in the West Sumba District and East Sumba., Among others, will include an in-depth study of particular aspects related to the area and land and water conditions, technical aspects, social, economic, institutional structuring of the activities of land and water infrastructure to support the improvement and development of the regions, especially in the area of beef cattle farms. Thus in more detail the scope of the study will include among others:

1. Study on the physical condition of land and water, social, economic, and direction of government policy in relation to the development of the region.
(2) Study on the potential, business patterns, and location systems for livestock grazing livestock facilities, livestock marketing, livestock feed location and condition.

(3) Study and identification of potential land uncultivated land / non-productive, which has the potential to be harnessed and developed into the area or cattle grazing.

(4) The study and identification of land and water facilities for livestock which includes, among others, the availability of water sources, amounts, and physical condition MANAGEMENT patterns and settings.

(5) Conduct an inventory of farmers and ranchers institutions, as agents of development efforts in the region, as well as who will manage networking systems to formulate recommendations farm development.

(6) Develop land and water needs for the improvement and development in the region infrastructure farms, especially in meeting the demand for green fodder.

(7) Selection and utilization technology development of land and water resources, to provide advice and recommendations to the development of livestock farming systems and the patterns of beef cattle, which might be expected to be the center of seed production of beef cattle.

(8) Prepare an outline design for the needs of land and water infrastructure development in areas that have been established for 5-year medium-term and long term of 10 years.

(9) Develop Technical Plan infrastructure development of land and water in breeding areas, in the short term of 1 year, which focused on the preparation of the technical details of the draft determination and location (block design), the preparation of infrastructure and supporting policies.

RESEARCH METHODOLOGY

Synergy approach and Spatial Policy.
This approach was undertaken to gain understanding of the Spatial Plan of East Nusa Tenggara province, particularly the island of Sumba in the four districts. With this approach will be known to the policy, wishes and plans of local governments in connection with the arrangement of land and water in relation to the development of the livestock, as well as the effort and follow-ups so that the program will be done later be synchronized and continuous.

Technical Approach of Land and Water Resources.
This approach was conducted to determine the needs, conditions, location of land to sleep / non-productive which has potential as a form of area / production center for beef cattle. Land primarily for grazing, forage planting, perkandangan, and so forth. This approach is expected to get the data and information on current conditions (existing condition) mengenahi data on potential water sources, existing infrastructure, land of the non-productive land, for the benefit of utilization for the improvement and development of the livestock, particularly cattle.

Livestock Production and Productivity Approach.
This approach is employed to obtain information about the potential that includes population, and productivity, as well as farmers and institutional conditions. Population is a function of births, deaths and cutting. Of beef cattle birth rate were low, and relatively high mortality rate, and rate cuts plus cows in particular are less restrained. By increasing the reproduction ability and opportunity to grow is one alternative for increasing the production of beef cattle. Decline in the quality of livestock, can be done through increased productivity through an effective system of marriage, and one of them is a natural marriage, to improve the quality of males, system maintenance, business patterns, and other supporting factors, as well as land available to feed the supporting conditions.

In addition to knowing and beef cattle farms get the data, also intended to determine the overall agribusiness system, including disease control, control of expenses and income from other areas of the region, and the resulting products (cattle breeding, beef cattle, calves etc. ). Besides that, it also will be known issues regarding transportation and other infrastructure that may be needed to improve its business. For use in feed and forage needs of livestock feed, it will be approached through the form of shapes and how to get the feed, including the potential use of locally available resources. Including the development of the type of grass and legume species, as well as agricultural waste byproducts.

Social Economics Approach.
To provide insight and understanding as well as the empowerment of the actors in this business is peternaknya, the approach to be done is through (a) the identification and inventory of peasant farmers, the
number and ownership of livestock, the potential of available resources as well as business prospects to be developed (b) construction and dissemination of the goals and direction of regional development plans, as well as land and water infrastructure development and (c) the wishes and aspirations of farmers as agents of development in the future (d) consideration of the various stakeholders involved.

Meanwhile, in an effort to identify and obtain data on production and productivity of animal husbandry, and welfare, will do an inventory to determine the amount of population, birth rate, death rate, disease control, control of expenses and income from one region to another kewilayah, as well as products produced (beef seeds, beef cattle, calves, etc.) from its economic aspect. Besides, it also will be known problems concerning the transport and other infrastructure that may be needed to improve its business.

With socio-economic approach will be known about the current state income levels and welfare of farmers, trade conditions, market and others. It is very necessary to calculate the economic impact of the development of land and water infrastructure for regional development, particularly in improving income and welfare of the community in general and farmers in particular.

METHOD OF IMPLEMENTATION

Stages or steps to be carried out in the implementation of infrastructure development studies of land and water area of beef cattle farm on the island of Sumba, NTT is as follows:

Data Collection and Information.
To carry out this study will use some of the method of collecting data in both primary and secondary data, the review of the reports of East Nusa Tenggara Province, especially the island of Sumba, which is related to the development of land and water, in relation to the development of beef cattle.

Socialization activities development program is intended to make the process of interaction of the various agencies and institutions, both in the province, especially in the District in the context of infrastructure development program of land and water area of the region, especially beef cattle farms, which will be developed. Interaction process will be done for example by methods group group discussions with members of related agencies.

In the area of infrastructure development is very relevant and should be synchronized with existing programs at central, provincial and available in the district, according to the needs of the region and its people. Necessary understanding of local government policies, synergy with policies, such as spatial planning policies in the field of provincial / district level to 5 - 10 years. It is necessary to know the plan of development of commodity production centers, especially centers of beef cattle farms.

Socializing at provincial and district levels, carried out by consultants to the existing technical team environment of Regional Planning Board, and Office related agencies. When it has been determined that the candidate sites will be facilitated, then the area of socialization that has been selected, with the involvement of relevant stakeholders, etc. into a form of group discussions. Socializing can be done in various ways such as: advocacy, consultation, workshops, symposiums, discussions and other fields. Socialization is an important activity in phase and introduce the activities of land and water infrastructure development in the area of beef cattle farms, and early participation in the planning process.

It is important for consultants to be able to obtain an indication of the program - an annual program, or five years ahead of provincial and district levels.

Identification Location Area / Region Livestock.
In the stage to define a region / area, to be made in a study of the development of infrastructure for land and water area of beef cattle farms

Identification of Potential Problem Areas and Selected Livestock.
After getting the locations have been chosen, based on mutual agreement, we then conducted a survey concerning the identification of potential, indications, problems that exist in that location.

Preparation of the Indicative Programme Area Beef Cattle.
Indications of this program is the preparation stage of the planning that involves the community since the introduction of the issue to the determination of need. These results indicate not only be used purely for the sake of land and water infrastructure development, but includes cross-cutting programs oriented to
development of the area selected beef cattle, particularly in improving the quality of economic and human resources.

It is given that infrastructure development of land and water in the area of beef cattle, with regard to sectoral and regional programs, so that later the preparation of Indicative financing program can be sourced from various parties, particularly local governments. With these indications of the areas concerned to make good investment proposal to the sector and to any other parties who have an interest in the art. Payload draft Indicative Programme are as follows: (a) matrix of cross-sectoral program (b) the general layout plan of the area of beef cattle. The results of this planning and dikonformasikan to other relevant sectors to get the allocation of the supporting program.

**Picture 1. Frame work of Investmet system for beef catle in land and water resources**

**METHOD OF ANALYSIS.**

**Analysis of Beef Cattle Ranch Area Determination.**

With some of the parameters used in the identification, will be accessible alternative location / land area of Livestock, beef cattle and commodities used as a commodity on the island of Sumba and seeded the existing district. At the district level where the commodity is widely cultivated and is dominant compared to other districts.

Besides it will also consider various other aspects greatly affect the activities of the internal activity or external-oriented activities, such as the opinions and suggestions from local community leaders and others. To this location will be selected based on criteria that are classified into four domains, namely the requirements:

1. Physical Location realm.
3. Coverage of the realm
4. The realm of regulation.

Planning area will be guided by the spatial planning in the preparation of land and water development program in a district-related, so it can be expected occurrence of synergy and complementation and spatial utilization in an area that will be developed.

**Analysis of Land Use Zone.**

Analysis of land use area, it is important to do in order to identify the location or site where various types of livestock production activities will be conducted. Land use will be analyzed by the method of analysis
mappyn, which is expected to be able to give an overview on the scope of land use areas that have been established.

The results of this analysis will be the basis for the concept of the use and arrangement of the region based on the integration of systems and patterns of land in the production of beef cattle farms. Land use is also expected to be used to create a design plan the development of beef cattle farms, and direction of development for at least five years. It can also function in a set location perkandangan location, settlement, gardens and other fodder crops other.

Infrastructure Needs Analysis in the Regions
This analysis will seek the condition of existing facilities (existing), and utilization plans for its development needs. Infrastructure needs of beef cattle livestock sector in the region, is required primarily to support agribusiness farms, environmentally sound. Infrastructure will include: irrigation, water resources, carrying capacity Alahan and so on. To be considered a means of economic means, health facilities and other animals.

Infrastructure Analysis of Land and Water.
1. Air Network
2. Irrigation networks.
3. Drainage and Sanitation Network.

Analysis of Livestock Facilities and Infrastructure
1. Population and Production
2. Land and Grazing Area Development

Analysis of Human Resources and Institutional Breeders
To strengthen the economic institutions in the area of farm livestock farmers will do the analysis of institutional breeders, so that farmers / ranchers can take advantage of the development program in an effective, efficient and sustainable, as well as to foster a sense of belonging, participation and development krativitas, along with other community support, especially the private and investors in the field of animal husbandry. These efforts are made to form groups of groups of farmers, cooperation between groups, to form productive groups are integrated into a cooperative or a company / private, to build market access, capital, technology, information and human resource development.

Through these institutions are expected farmers will need each other, enhance each other, reinforce each other and remind each other, so as to enhance the knowledge and skills in managing business systems and farm independently and professionally. To achieve this purpose will also be analyzed the possibility of developing a variety of institutional support, such as microfinance institutions, institutional services, institutional cooperation partnerships and others.

Socio Economic Analysis
Socio-economic analysis aimed to determine the economic impact or multiplier effect of land and water development in the area of beef cattle. Besides it will also be social benefits and opportunities of business / employment for the region is. Therefore to know the multiplier effect, the approach will be implemented through a combination of macroeconomic analysis and micro analysis, the relationship between the marginal propensity to invest and GDP, with the cost benefits analysis; which form the program are:

\[ K = \frac{1}{MPS} \]
\[ \Delta Y = k^{*} I \]
\[ \bar{Y} = \bar{Y} + \Delta Y \]

While the economic impact analysis, social and labor, will use the formula:

Benefit - Cost Ratio = (Σ Bn / (1 + i) n) / (Σ Cn / (1 + i) n)

NPV (Net Present Value) = Σ (Bn - Cn) / (1 + i) n

IRR = Σ (Bn - Cn) / (1 + i) n = 0

From the above analysis will be calculated levels of both income and value-added employment opportunities to be gained from the development potential for the development of animal husbandry and irrigation network which consists in the development of surface irrigation, ground water, and ponds.
Multiplie

r Effect Analysis Results From Livestock Investment in Irrigated Area Development

In calculating the multiplier effect will be used GDP data analysis, analysis of farm livestock and analysis of farm irrigation network investment business. In calculating the marginal propensity to Invest (MPI) is used for livestock breeding farm value share in the increase in GDP. Where in the last 4 years of the MPC are:

\[
MPC = \frac{(22188247/167223557) + (85342740/463814350) + (86958480/482739860) + (89012280/503708280) + (91115000/529145000)}{4} = 0.17
\]

Because the MPC + MPS = 1 so that MPI = MPS = 0.83

Given the investment business for river irrigation networks Mburukulu 10 l / s East Sumba for Rp.308 million, for East Sumba S.Kabar with pump 50 l / dt of Rp 728 million, drill wells in 10 l / dt spread Rp560 million, Mamboro in West Sumba for Rp2.500 million, Umbu Ngay Queen with pump 100 l / dt required an investment of Rp2.100 million; It needs an investment of USD 6196 million. Which detailed for USD 1596 million in East Sumba and West Sumba Rp 4600 million. So that the total added value of the irrigation network of business investment will achieve:

\[
\Delta Y = I \times \frac{1}{MPI} = 6196 \times \frac{1}{0.83} = USD 7465 million
\]

for East Sumba = 1596 * (1/0, 83) = USD 1923 million and the West Sumba So the amount of USD 5542 million Gross Domestic Product for East Sumba in 2005 will increase to = USD 531 066 million. To West Sumba become = Rp.578.720.780.000 So for irrigation investment business in each region can be described as follows:

Table 1. The Deployment of Irrigation Investment

<table>
<thead>
<tr>
<th>District/Sub District</th>
<th>Name of Area</th>
<th>Type of livestock Irrgt</th>
<th>Total Investment (mill rp)</th>
<th>Total Multiplier Effect (mill rp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Umbu Ratu Ngay</td>
<td>Ur Ngay</td>
<td>Surface Irrigation</td>
<td>Rp 2.100.000.000</td>
<td>( \Delta Y = I \times \frac{1}{MPI} = 2.100 \times (1/0, 83) ) = Rp 2.530 million</td>
</tr>
<tr>
<td>Mambora</td>
<td>Watu Asah</td>
<td>Surface Irrigation</td>
<td>Rp 2,500,000,000</td>
<td>( \Delta Y = I \times \frac{1}{MPI} = 2.500 \times (1/0, 83) ) = Rp 3.012 million</td>
</tr>
<tr>
<td>Laura</td>
<td>Karoni</td>
<td>Ground water Irrgt</td>
<td>Rp 560 mill</td>
<td>( \Delta Y = I \times \frac{1}{MPI} = 560 \times (1/0, 83) ) = Rp 675 million</td>
</tr>
<tr>
<td>Rindi</td>
<td>Kabaru</td>
<td>Surface Irrgt</td>
<td>Rp 728 mill</td>
<td>( \Delta Y = I \times \frac{1}{MPI} = 728 \times (1/0, 83) ) = Rp 877 million</td>
</tr>
<tr>
<td>Pohunga Lodu</td>
<td>Mbrukulu</td>
<td>Ground Water Irrgt</td>
<td>Rp 308 million</td>
<td>( \Delta Y = I \times \frac{1}{MPI} = 308 \times (1/0, 83) ) = Rp 371 million</td>
</tr>
</tbody>
</table>

Meanwhile, if viewed in terms of cultivated farm investment, the value added due to the multiplier effect is as follows:

Table 2. The Deployment of Livestock Business Investment

<table>
<thead>
<tr>
<th>District/Sub District</th>
<th>Name of Area</th>
<th>Land capacities (ekor)</th>
<th>Livestock invest. Rp 5 jt / ekor</th>
<th>Multiplier Effect (Rp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Umbu Ratu Ngay</td>
<td>Ur Ngay</td>
<td>17.055</td>
<td>Rp 85.275 mill</td>
<td>( \Delta Y = I \times \frac{1}{MPI} = 85.275 \times (1/0, 83) ) = Rp 102.741 mil</td>
</tr>
<tr>
<td>Mambora</td>
<td>Watu Asah</td>
<td>10.728</td>
<td>Rp 503.640 mill</td>
<td>( \Delta Y = I \times \frac{1}{MPI} = 503.640 \times (1/0, 83) ) = Rp 606.795 million</td>
</tr>
<tr>
<td>Laura</td>
<td>Karoni</td>
<td>138</td>
<td>Rp 690 mill</td>
<td>( \Delta Y = I \times \frac{1}{MPI} = 690 \times (1/0, 83) ) = Rp 831 mil</td>
</tr>
<tr>
<td>Rindi</td>
<td>Kabaru</td>
<td>688</td>
<td>Rp 3.440 mill</td>
<td>( \Delta Y = I \times \frac{1}{MPI} = 3.440 \times (1/0, 83) ) = Rp 4.145 mil</td>
</tr>
<tr>
<td>Pohunga Lodu</td>
<td>Mbrukulu</td>
<td>138</td>
<td>Rp 690 mill</td>
<td>( \Delta Y = I \times \frac{1}{MPI} = 690 \times (1/0, 83) ) = Rp 831 mil</td>
</tr>
</tbody>
</table>

While the combination of livestock investment and irrigation network is as follows:

Table 3. The Difference Between investment in irrigation networks and livestock development

International Conference BINUS | IMHA - 2012
Impact on Employment
Multiplier effect of the development of irrigated farm area also includes the promotion of employment opportunities can be approached from the employment opportunities generated through business development and construction of the irrigation farm itself. For the construction of irrigation labor opportunities that can arise are:

Table 4. Type of Irrigation Development and Employment Opportunity

<table>
<thead>
<tr>
<th>Type of work</th>
<th>Surface Irrigation</th>
<th>Ground water Irrg</th>
<th>Pond Irrgt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>5 people</td>
<td>3 pl</td>
<td>3 pl</td>
</tr>
<tr>
<td>Construction</td>
<td>10 people</td>
<td>5 pl</td>
<td>6 pl</td>
</tr>
<tr>
<td>O&amp;m</td>
<td>3 people</td>
<td>2 pl</td>
<td>1 pl</td>
</tr>
<tr>
<td>Total</td>
<td>18 people</td>
<td>10 people</td>
<td>10 people</td>
</tr>
</tbody>
</table>

While for each region, employment opportunities that can arise due to the construction of irrigation for farms is as follows:

Table 5. The Employment Opportunity in several Irrigation Development

<table>
<thead>
<tr>
<th>District/ Sub distr</th>
<th>Name of area</th>
<th>Type of Irrgt</th>
<th>Emplo Opport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Umbu Ratu Nggay</td>
<td>Ur Nggay</td>
<td>Surface Irg</td>
<td>18 people</td>
</tr>
<tr>
<td>Mambora</td>
<td>Watu Asah</td>
<td>Surface Irg</td>
<td>18 people</td>
</tr>
<tr>
<td>Laura</td>
<td>Karoni</td>
<td>Ground water Irg</td>
<td>10 people</td>
</tr>
<tr>
<td>Rindi</td>
<td>Kabaru</td>
<td>Surface Irg</td>
<td>18 people</td>
</tr>
<tr>
<td>Pohunga Lodu Mbrukulu</td>
<td></td>
<td>Ground Water Irg</td>
<td>10 people</td>
</tr>
</tbody>
</table>

While the area of livestock business development, employment opportunities be created consisting of men and women is as follows:

Table 6. Employment Opportunity in Area Livestock Development

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment Opprt ( people )</th>
<th>Cattle population</th>
<th>Average ( cattle/people )</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>24,459</td>
<td>592,589</td>
<td>19,7</td>
</tr>
<tr>
<td>2003</td>
<td>13,475</td>
<td>512,999</td>
<td>38</td>
</tr>
<tr>
<td>2004</td>
<td>19,080</td>
<td>522,929</td>
<td>27,4</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td>28,0</td>
</tr>
</tbody>
</table>

So with the combination of irrigation development with the livestock business development in the area irrigated farms, the number of job opportunities are grown can be calculated as follows:

Table 7. Employment Opportunity in integrated Livestock and Irrigation Development

<table>
<thead>
<tr>
<th>District/ District sub</th>
<th>Name of Area</th>
<th>Type of livestock irrigation</th>
<th>Land area</th>
<th>Capacity (cattl)</th>
<th>Employment Opportunity (people)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Umbu Ratu Nggay</td>
<td>Ur Nggay</td>
<td>Surface irrigation</td>
<td>17.055</td>
<td>18+(17055/28)= 627 people</td>
<td></td>
</tr>
<tr>
<td>Mambora</td>
<td>Watu Asah</td>
<td>Surface Irrigation</td>
<td>10.728</td>
<td>18+(10728/28)= 401 people</td>
<td></td>
</tr>
<tr>
<td>Laura</td>
<td>Karoni</td>
<td>Ground water Irg</td>
<td>138</td>
<td>10+(138/28)= 23 people</td>
<td></td>
</tr>
<tr>
<td>Rindi</td>
<td>Kabaru</td>
<td>Surface Irg</td>
<td>688</td>
<td>18+(688/28)= 43 people</td>
<td></td>
</tr>
<tr>
<td>Pohunga Lodu Mbrukulu</td>
<td></td>
<td>Ground Water Irg</td>
<td>138</td>
<td>10+(138/28) = 15</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>1,109 people</td>
<td></td>
</tr>
</tbody>
</table>

Preparation of Data Base Analysis
Preparation of the data base is a data processing activities to a specific format of the data collection of primary and secondary outcomes. Data processing, among others: pendigitian maps, data socio-economic, land-use of data, data from field surveys, and previous planning data. Likewise, data from surveys, should be processed first to be ready to be analyzed for subsequent use as one of the data to be presented. Data analysis was performed to determine the correct input format to fill the existing data in Geographic Information Systems software (GIS). With the right data analysis and accurate will be accountable. Data analysis activities are generally carried out simultaneously (simultaneous) with the preparation of data base activity as described previously. Upon completion of this activity, then the next job is a job preparation recommendations.

Basically, the data processing activities are the activities tabulated according to the criteria and conditions of the irrigation network functions that have been expressed in the faces and activities of the preparation of data base. Review evaluation of the condition is performed using a spreadsheet based on building condition survey and the data field size and location of farm land that it serves.

CONCLUSIONS

Results analysis of potential land and water resources can be utilized for the development of beef cattle on the island of Sumba are respectively:

<table>
<thead>
<tr>
<th>Sub District</th>
<th>Name of Area</th>
<th>Water Potential</th>
<th>Total area (ha)</th>
<th>Land capacity (cattle / area)</th>
<th>The increase (cattle)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Water source</td>
<td></td>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>Umbu Ratu Nggay</td>
<td>UR, Nggay</td>
<td>River</td>
<td>3,707.6</td>
<td>5.932</td>
<td>17,065</td>
</tr>
<tr>
<td>Mambora</td>
<td>Watu Asah</td>
<td>River</td>
<td>2,332.2</td>
<td>3.731</td>
<td>10,728</td>
</tr>
<tr>
<td>Laura</td>
<td>Karoni</td>
<td>groundwater</td>
<td>29.9</td>
<td>48</td>
<td>138</td>
</tr>
<tr>
<td>Rindi</td>
<td>Kabaru</td>
<td>river</td>
<td>149.5</td>
<td>240</td>
<td>688</td>
</tr>
<tr>
<td>Pohunga Lodu</td>
<td>Mbrukulu</td>
<td>river</td>
<td>29.9</td>
<td>48</td>
<td>138</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>6.249,1</strong></td>
<td><strong>9.999</strong></td>
<td><strong>28.747</strong></td>
</tr>
</tbody>
</table>

(1) Zone "UR Nggay" is located in District Umbu Queen Nggay in Central Sumba Regency with the condition and potential:
- Source of water from the river Palamedo, with a capacity of 1240 liters / sec, and ground water sources that will be able to provide 10 liters / second.
- The productivity of land had been only 1.6 head / ha, can be upgraded to 4.6 head / ha, an increase of 187.5 percent.
- Potential areas covering 3737.5 ha that can be utilized for the development of 17 196 head of beef cattle throughout the year.
- The area of water will be available throughout the year, so hopefully not experience the dry months of the month, and farmers will tend to alter the pattern intensification extension is expected to be more efficient.
- The income of farmers will increase from 6.25 times per year starting from (Rp1, 8 to Rp. 30.5 billion) into (9.8 to Rp 151.4 billion).
- Extensive maintenance system will tend towards a more intensive maintenance system, which will further increase the capacity of the land, while increasing the number and quality of livestock feed.
- Multiplier effect of development on the area irrigated livestock income areas get the added value of Rp. 86.4 billion and employment for 627 people.
- The results of the feasibility analysis shows NPV = Rp. 202.5 billion, and IRR = 39%. 

(2) Regions "Watu Asah" is located in District Mambora, Central Sumba, with the condition and potential:
- Source of water from the river with a capacity of 780 liters / sec, and if necessary can still be level with the ground water of 10 liters / second. For each unit in the water pump.
- Potential areas cover 2332.2 ha which can be utilized for the development of some 10 728 head of beef cattle throughout the year.
- The productivity of land had been only 1.6 head / ha, can be upgraded to 4.6 head / ha.
- The area of water will be available throughout the year, so it does not run dry month of every year.
• The income of farmers will increase 7.3 times (USD 4.2 - Rp.28, 2 billion) each year before the project becomes (Rp 31.9 to 190.8 billion) each year after implementation of the project.
• Maintenance of the extension system will tend towards a more intensive, so it would be more efficient, as well as will increase the capacity of the land for broad unity.
• Multiplier effect of development on the area irrigated livestock income areas get the added value of Rp. 506.1 billion and employment for 401 people.
• The results of the feasibility analysis shows NPV = Rp. 106.5 billion, and IRR = 32%.

(3) Zone "Karoni" Laura is located in the District of Southwest Sumba district, with the condition and potential:
• In this area there are no rivers, but ait land use sources (ground water) with a capacity of 10 liters / sec for each pump unit. However, there is potential for ponds that can also be used. However, in these studies were conducted specifically for the analysis of the potential ponds.
• Potential areas cover 29.9 ha which can be utilized for the development of some 138 head of beef cattle for each unit, throughout the year
• The productivity of land had been only 1.6 head / ha, can be upgraded to 4.6, head / ha, an increase of two times.
• The area of water will be available throughout the year, so it does not run dry month of every year.
• The income of farmers will increase 1.3 times from (Rp.0. 08 - Rp. 0.7 billion) each year before the project becomes (Rp.0 0.2 to 1, 3 billion) each year.
• Maintenance of the extension system will tend towards a more intensive, so it would be more efficient.
• Multiplier effect of development on the area irrigated livestock income areas get the added value of Rp. 1.3 billion and employment by 23 people.
• The results of the feasibility analysis shows NPV = Rp. 982.6 million, and IRR = 26%.

(4) Regions "Mbrukulu" is located in District Pohunga Lodu, East Sumba with the conditions and Potential:
• In this area using the river as a source of water, capacity of 10 liters / sec
• Potential areas cover 29.9 ha which can be utilized for the development of some 138 head of beef cattle, throughout the year.
• The productivity of land had been only 1.6 head / ha, can be upgraded to 4.6 head / ha.
• The area of water will be available throughout the year, so it does not run dry months of the month.
• The income of farmers will increase 5.3 times that of the (Rp 0.1 - Rp. 0.3 billion) each year before the project becomes (Rp 0.8 - Rp. 3 billion) each year after the project
• Maintenance of the extension system will tend towards a more intensive, so it would be more efficient.
• Multiplier effect of development on the area irrigated livestock income areas get the added value of Rp. 4.2 billion and employment by 43 people.
• The results of the feasibility analysis shows NPV = Rp. 1.1 billion, and IRR = 26%.

(5) Regions "Kabaru" is located in District Rindi, East Sumba with the condition and potential:
• Source of water from the river with a capacity of 5 0 liters / sec, and can also be used as sources of ground water another region if required.
• Potential areas include .149,5 ha which can be utilized for the development of some 688 head of beef cattle beef cattle throughout the year
• The productivity of land had been only 1.6 head / ha, can be upgraded to 4.6 head / ha or twice more.
• The area of water will be available throughout the year, so it does not run dry month of every year.
• The income of farmers will increase 2.1 times from (Rp.0. 08 - Rp. 0.9 billion) each year before the project becomes (Rp.0, 2 - Rp. 1.2 billion) after the project each year.
• Maintenance of the extension system will tend towards a more intensive, so it would be more efficient.
• Multiplier effect of development on the area irrigated livestock income areas get the added value of Rp. 1 billion and employment by 15 people.
• The results of the feasibility analysis shows NPV = Rp. 1.3 billion, and IRR = 18%.

REFERENCES
Nulik, Jacob and Bamualim Abdullah, (1998), *Large Ruminant Feed in Nusa Tenggara*, Institute for Agricultural Technology in collaboration with Eastren Naibonat Islands Veterinary Services Project. Nusa Cendana University Research Team in cooperation with the Regional Government of West Sumba with Research Institute of the University of Nusa Cendana Kupang, (2006), Final Report Assessment Preparation Activities Master Plan (Master Plan) Livestock Development in West Sumba,


Schmith, FH and JHA Ferguson, (1951), Rainfall Types Based on Wet and Dry Period Ratios for Indonesia.

Linsly, Kohler, (1990), Hydrology for Engineers.

Bappeda West Sumba, (2004), Spatial Planning District.


Bappeda East Sumba (2005), RPJM East Sumba.


SNTP Processing of Ground Water Development and NTT, the Directorate General of Water Resources, Department of Public Works, (2007), Ground Water Plan Location Dam on the island-the island of Timor, Flores and Sumba .


CPM Puslitbangnak, (2003), Analysis of Potential Areas in East Nusa Tenggara Province.
ANALYSIS OF THE IMPACT OF HUMAN RESOURCE PRACTICES AND LEADERSHIP ON EMPLOYEE ENGAGEMENT IN EDSIN LESTARI EXPRESS

Laksmi Sito Dwi Irvianti, SE., MM  
Binus University, Jakarta, Indonesia  
Tjoa Angelia  
Binus University, Jakarta, Indonesia

ABSTRACT

Research was conducted in Edsin Lestari Express, llc. which engaged in the expedition (shipping and transporting goods or services). The purpose of this study was to determine the impact of human resource practices and leadership on employee engagement. This research data obtained through interviews and questionnaires to 36 respondents who are employed at Edsin Lestari Express, llc. using the method of correlation and regression. The results indicate that human resource practices and leadership are partially and simultaneously contribute in a positive and significant impact on employee engagement.


Introduction

Human resources is a very important assets for the company. They are an essential resource for achieving corporate objectives and determine the performance of the company. Contributions made by employees to the company also determine how well the company’s reputation in the eyes of the public.

Employee engagement touches almost all parts of human resources management. But many companies in Indonesia put employee engagement in a low priority so it causes a lack of engagement and it becomes a serious problem for the company. Employees and managers who are not engaged decreased levels of quality, decreased efficiency, inconsistent service, decreased initiative to provide advice to the company’s progress, and the high turnover rate.

On the other hand, employees who are emotionally engaged will dedicate themselves to the organization and fully participate in the work with great enthusiasm for his/her superior, to give something more over the original contract (Markos, Solomon; Sridevi, M Sandhya, 2010, p89-96). Research indicates that in Indonesia is only about 30 percent of the employees who are actively engaged with the remaining 70 percent were busy but did not make a considerable contribution, both individually and collectively (Titus Amol, 2010).

According to Gallup Organization, Employee Engagement Index (EEI) has a significant implications for customer satisfaction, sustainable growth, increasing profit, shareholder value, productivity and employee retention. This further proves how important growing the engagement of employees in the company.

According to Papalexandris and Galanaki (2009, p365-385) employee engagement also has relationships with leadership and according to Asad, Hussein, Nayyab, Ashraf, and Adnan (2011, p409-416) the success of employee engagement have a relationship with human resource practices.

If a manager at the company has a good leadership, then the flow of communication between managers and employees will be smooth and the self-development of employees will also be supervised so that it can grow rapidly. Companies that have good leadership will also have a clear and realistic vision. It will provide opportunities for employees and encourage employees to grow within the company. In addition, companies with a clear vision will provide certainty for the top management to be able to determine which direction the company should take.
If a company has a good human resource practices (including training and development, performance appraisal, performance reward, coordination), then the employee will contribute the to the depth exceeds the demands of the role in the workplace and given credit for his/her performance and as the implications, corporate profitability will rapidly increased.

Edsin Lestari Express, llc. is an expedition company located in North Jakarta. The company serves the delivery of goods and services, both local and international. Based on research on the company, the researcher found that the Employee Engagement Index in Edsin Lestari Express, llc. is 50 percent or 0.5. This figures shows that there are serious problems in the company management.

LITERATURE REVIEW

Human Resource Practices

Human resource practices is a practice related in moving and managing human resource such as training, performance reward, performance appraisal and coordination (Adnan, Asad, Ashraf, Hussain, & Nayyab, 2011).

The dimension and indicators of human resource practices that the researcher take to conduct this study according to Adnan, Asad, Ashraf, Hussain, & Nayyab:

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>1. Skills of employees</td>
</tr>
<tr>
<td></td>
<td>2. Employees can determine his/her attitude</td>
</tr>
<tr>
<td></td>
<td>3. Employees have the ability to think fast</td>
</tr>
<tr>
<td></td>
<td>4. Employees have the knowledge</td>
</tr>
<tr>
<td>Performance Reward</td>
<td>5. Submission to the laws and regulations</td>
</tr>
<tr>
<td></td>
<td>6. Cost-effectiveness for the organization</td>
</tr>
<tr>
<td></td>
<td>7. Internal fairness</td>
</tr>
<tr>
<td></td>
<td>8. External fairness</td>
</tr>
<tr>
<td></td>
<td>9. Individual fairness</td>
</tr>
<tr>
<td></td>
<td>10. Improved performance for the organization</td>
</tr>
<tr>
<td>Performance Appraisal</td>
<td>11. Consistent with the strategic mission of the organization</td>
</tr>
<tr>
<td></td>
<td>12. Useful as tools of development</td>
</tr>
<tr>
<td></td>
<td>13. Useful as an administrative tools</td>
</tr>
<tr>
<td></td>
<td>14. In accordance with the law</td>
</tr>
<tr>
<td></td>
<td>15. Work-related</td>
</tr>
<tr>
<td></td>
<td>16. Generally seen fair by employees</td>
</tr>
<tr>
<td></td>
<td>17. Effective in documenting employee performance</td>
</tr>
<tr>
<td>Coordination</td>
<td>18. Early Start</td>
</tr>
<tr>
<td></td>
<td>19. Direct Contact</td>
</tr>
<tr>
<td></td>
<td>20. Continuity</td>
</tr>
<tr>
<td></td>
<td>21. Dynamism</td>
</tr>
<tr>
<td></td>
<td>22. Simplified Organization</td>
</tr>
<tr>
<td></td>
<td>23. Self-Coordination</td>
</tr>
<tr>
<td></td>
<td>24. Clear-cut Objective</td>
</tr>
<tr>
<td></td>
<td>25. Clear definition of authority and responsibility</td>
</tr>
<tr>
<td></td>
<td>26. Effective communication</td>
</tr>
<tr>
<td></td>
<td>27. Effective Supervision and Leadership</td>
</tr>
</tbody>
</table>
Leadership

Leadership is the behavior of individuals who direct the activities of a group toward a common goal (Hemphill & Coons in the book of Gary Yukl, 2010, p21).

The dimension and indicators of human resource practices that the researcher take to conduct this study according to Gary Yukl:

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicator</th>
</tr>
</thead>
</table>
| The attitude of subordinate | 28. Satisfaction of the needs and expectations  
29. Fondness, respect and admiration to their leaders  
30. Confidence to their leader  
31. Leaders integrity  
32. Commitment to complete the task  
33. Improved quality of work-life  
34. Build self-confidence  
35. Ability improvement  
36. Psychological growth and development |
| Leaders contribution | 37. Improved integration and cooperation of members  
38. Perfect-lead  
39. Increased commitment of members  
40. Increased self-confidence of members  
41. Increased ability to solve the problems  
42. Increased decision making capability |
| The success of leader career | 43. Increased in leader career  
44. Leader forced to resign  
45. Succeeded in re-election as leader |

Employee Engagement

Commitment to the success of the work is often referred as employee engagement. This has been defined by one leading research organization as a high emotional connection that employee feels toward the organization that influence him/her to exert greater effort and free-will to work (Risher, 2010, p74).

According to Thomas (2007) employee engagement is a stable psychological state and is the result of interaction between the individual and the environment where the individuals work.

Employee Engagement Index (EEI) is an index based on periodic surveys conducted to gauge how employees feel engaged to the company (Bucknall, Wei & Mercer, 2006, p80).

This is the formula that calculate the level of employee engagement in a company according to Bucknall, Wei & Mercer (2006, p80):

\[
EEI = \frac{\text{No. of Satisfied Employee}}{\text{No. of staff responding to survey}} \times 100\%
\]
The dimension and indicators of human resource practices that the researcher take to conduct this study according to Thomas:

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readiness</td>
<td>46. Ready to commit ourselves to work</td>
</tr>
<tr>
<td></td>
<td>47. Think of new ways to work more effectively</td>
</tr>
<tr>
<td></td>
<td>48. Enthusiast in carrying out the work</td>
</tr>
<tr>
<td>Willingness</td>
<td>49. Willingness to motivate themselves to achieve success</td>
</tr>
<tr>
<td></td>
<td>50. Willingness to work hard or extra hard</td>
</tr>
<tr>
<td>Pride</td>
<td>51. Their work is the source of their pride</td>
</tr>
<tr>
<td></td>
<td>52. The job done completely and thoroughly</td>
</tr>
<tr>
<td></td>
<td>53. Readiness to devote to the work</td>
</tr>
</tbody>
</table>

Theoretical Framework

![Diagram of EDSIN LESTARI EXPRESS, llc. Employee Engagement and Success]

RESEARCH METHODOLOGY

<table>
<thead>
<tr>
<th>Research Purposes</th>
<th>Research Model</th>
<th>Analysis of Unit</th>
<th>Time Horizon</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-1</td>
<td>Descriptive - Asosiative</td>
<td>Individual → Employees of EDSIN LESTARI EXPRESS</td>
<td>Cross sectional</td>
</tr>
<tr>
<td>P-2</td>
<td>Descriptive - Asosiative</td>
<td>Individual → Employees of EDSIN LESTARI EXPRESS</td>
<td>Cross sectional</td>
</tr>
<tr>
<td>P-3</td>
<td>Descriptive - Asosiative</td>
<td>Individual → Employees of EDSIN LESTARI EXPRESS</td>
<td>Cross</td>
</tr>
</tbody>
</table>
Table Information:
- P-1: To find out if there is an influence of human resource practices on employee engagement in Edsin Lestari Express, llc.
- P-2: To find out if there is an influence of leadership on employee engagement in Edsin Lestari Express, llc.
- P-3: To find out if there is an influence of human resource practices and leadership simultaneously on employee engagement in Edsin Lestari Express, llc.

This study uses population sampling to 36 respondents who are employed at Edsin Lestari Express, llc. Data were analyzed using regression analysis.

RESULTS

- HR Practices (X1) → Employee Engagement (Y) with 43.40%
- Leadership (X2) → Employee Engagement (Y) with 53.50%
- Leadership (X2) → Employee Engagement (Y) with 37.00%
CONCLUSION

Based on the result of this research analysis, can be concluded that:

- Improved human resource practices in the company may provide a positive contribution and have a significant influence on employee engagement.
- Increased leadership in the company may provide a positive contribution and have a low significant influence on employee engagement.
- Improved human resource practices and leadership at the company simultaneously may provide a positive contribution and provide an even greater impact on employee engagement.

SUGGESTION

- Provide incentive (like bonuses), and intrinsic reward (like employee of the month).
- Using BARS method to evaluate employees’ performance
- Using Cleared Defined Objective as coordination technique
- Provide leadership training for managers that focuses on charismatic and visionary leadership

REFERENCES


