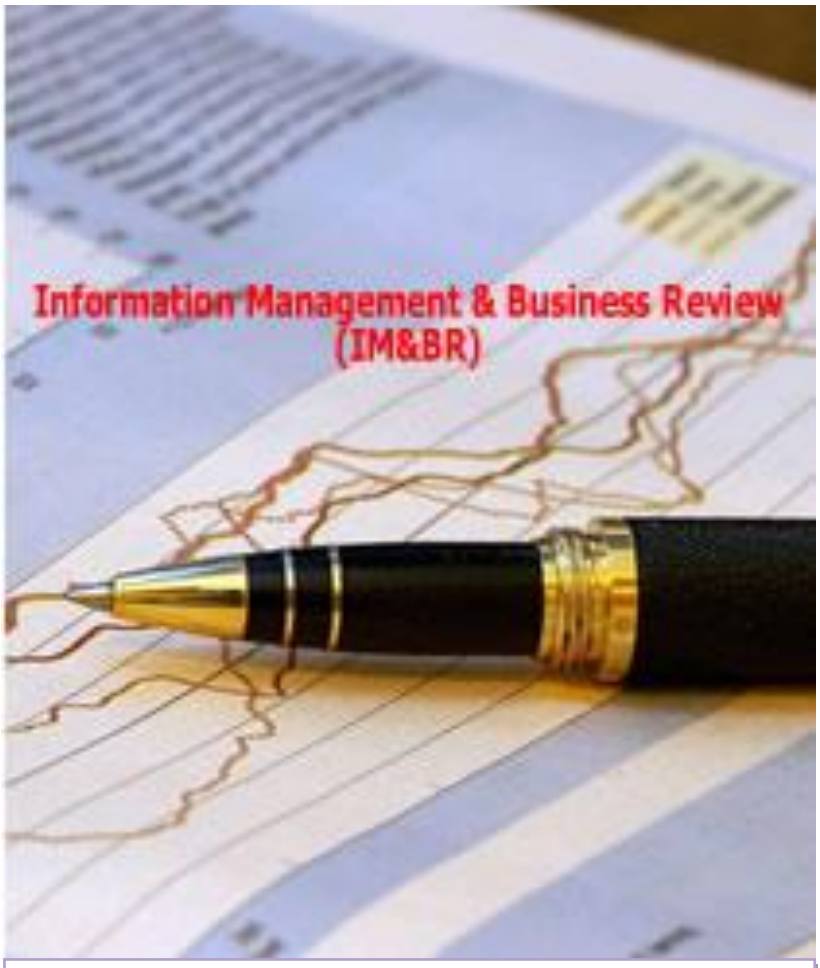



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**Editorial**

Information Management and Business Review (IMBR) provides a unique platform to scholars around the world to share their knowledge and publish research work in the fields of information management, business, management and related disciplines. The work submitted for publication consideration in IMBR should address empirical and theoretical developments in the subjects related to scope of the journal in particular and allied theories and practices in general. Scope of IMBR includes: subjects of finance, accounting, auditing, cost & management accounting, financial psychology, financial literacy, marketing, information management, human resource management, knowledge management, innovation, change management, enterprise management, e-commerce and information system. Author(s) should declare that work submitted to the journal is original, not under consideration for publication by another journal, and that all listed authors approve its submission to IMBR. It is IMBR policy to welcome submissions for consideration, which are original, and not under consideration for publication by another journal at the same time. Author (s) can submit: Research Paper, Conceptual Paper, Case Studies and Book Review. The current issue of IMBR comprises of papers of scholars from United Arab Emirates, Indonesia, Thailand, India and Malaysia. Implementation of corporate governance, supply chain management: just in time for competitiveness & corporate performance, motivation in online collaboration from an active learning perspective, challenges of the knowledge based economy, culture & retail SST, credit period & interest rates and relationship between commitment-based HR practices & organizational performance are some of the major practices and concepts examined in these studies. Journal received research submission related to all aspects of major themes and tracks. All the submitted papers were first assessed by the editorial team for relevance and originality of the work and blindly peer reviewed by the external reviewers depending on the subject matter of the paper. After the rigorous peer-review process, the submitted papers were selected based on originality, significance, and clarity of the purpose. Current issue will therefore be a unique offer, where scholars will be able to appreciate the latest results in their field of expertise, and to acquire additional knowledge in other relevant fields.

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**Table of Contents**


| Description | Pages |
|---|---|
| Title | 1 |
| Editorial | 2 |
| Editorial Board | 3 |
| Table of Contents | 4 |
| Papers | 5 |
| Analysis of the Implementation of Good Corporate Governance at PT Nusantara Infrastructure Tbk<br>Mediaty, Nurleni, Muhammad Muflih Ramlan | 6 |
| Effect of Supply Chain Management: Just in Time for Competitiveness and Corporate Performance in Industrial Area Manufacturing Company in Makassar<br>Yana Fajriah, Orfyanny S Themba, Pattarapanna | 20 |
| The Role of Motivation in Online Collaboration from an Active Learning Perspective<br>Ashwak Abdulsalam Yousif | 26 |
| Challenges of the Knowledge Based Economy in East Asia<br>Virachai Vongbunsin, John Walsh | 36 |
| Culture & Retail SST: Case of Hypermarkets in Jakarta<br>B. Balaji, Deblina Saha Vashishta | 50 |
| The Influence of Credit Period and Interest Rates on the Interest of Home Ownership Credit Users in PT. PANIN Bank (PERSERO) TBK<br>Rosnaini Daga | 54 |
| The Relationship between Commitment-based HR Practices and Organizational Performance: The Role of Organizational Learning Capabilities as a Mediator<br>Po Li Chia, Khulida Kirana Yahya, Tan Fee Yean | 63 |

# PAPERS

# Analysis of the Implementation of Good Corporate Governance at PT Nusantara Infrastructure Tbk

Mediaty, Nurleni, Muhammad Muflih Ramlan
CV Cipta Gelegar, Ruko Petterani Center Pettarani Makassar, Indonesia
dhycka99@gmail.com

**Abstract:** This paper aims to determine the implementation of the principles of good corporate governance at PT Nusantara Infrastructure Tbk. The principle of good corporate governance included transparency, accountability, responsibility, fairness, and independency. Data collection method in this research is questionnaires and collecting archives and documents. Data were analyzed using descriptive analysis method by using instrument quantitative research test (validity and reliability). The results in this study show that, in general, the principles of good corporate governance have been applied properly in order to protect the interests of companies and shareholders. The analysis of responses shows that the principle of responsibility, fairness, and independency has been applied properly, but still to be improved in several factors. The principle of transparency and accountability has been implemented very well.

**Keyword:** *Good corporate governance, principle of good corporate governance, implementation of good corporate governance*

## 1. Introduction

Good Corporate Governance (GCG) is one key to success for growing and profitable company in the long term as well as winning the global business competition, especially for companies that have been able to grow and go public. Through a system of good corporate governance of companies can organize, manage and supervise the business control process runs continuously to raise the value of the company. Increased the value of the company can be reached if the company is able to operate with achieving the targeted profit. Through the profits from the company will be able to give dividends to shareholders, enhance the company's growth by maintaining the viability of the company. But in achieving that goal, there are several obstacles to be faced by the company, where such barriers are generally fundamentals. The management is not enough just to make sure that the management process management runs efficiently. Need of new instruments and Good Corporate Governance (GCG) appear to ensure that management is going well, the power of Good Corporate Governance Budianti (2010); the effect of GCG, and business ethic (Pieris & Nizam, 2008). There are two things that are emphasized in this concept; the importance of the right of shareholders to obtain information correctly and in a timely manner. They are convinced of the profitability of the investment with a reasonable and high value. Second, the company's obligation to make disclosure (disclosure) is accurate, timely, and transparent to all the information the company's performance, ownership, and stakeholder (Thomas, 2006: 1). The businesses in Indonesia also agreed that the implementation of good corporate governance as a system of corporate governance that is good is an important thing, this is evidenced by the signing of Letter of Intent (LOI) with the IMF in 1998, one of the rules is inclusion of schedule improvement of corporate governance in Indonesia (Sulistyanto, 2003). It is then behind the birth of the National Committee on Corporate Governance (KNKCG) in 1999.

Good Corporate Governance is less than the maximum in terms of its implementation among Indonesian companies. One thing that is very contradictory, which on the one hand the application of GCG is believed to be very important in achieving corporate goals is sustainable, but on the other hand, many businesses are reluctant to implement in earnest the reason the impact is less significant to financial performance (survey CLSA, 2004). This contradiction became one of the backgrounds examined the application of the principles of Good Corporate Governance the companies. In this study, which will be conducted by researchers is the implementation of Good Corporate Governance which includes five principles of transparency, accountability, responsibility, fairness, and independency. The object of this study is a company listed on the Indonesia Stock Exchange. But the object of this research is focused on PT. Nusantara Infrastructure Tbk. Reasons for the selection of the research object, namely, in addition to satisfactory financial condition, PT. Nusantara Infrastructure Tbk also more accessible so as to minimize the time and cost in the conduct of research.

**Research Problem:** Based on the background of the problems that have been described, the formulation of the problem in this study is as follows:

- Is the principle of transparency, which is included in the Good Corporate Governance has been applied to PT Nusantara Infrastructure Tbk?
- Is the principle of accountability that is included in the Good Corporate Governance has been applied to PT Nusantara Infrastructure Tbk?
- Does the principle of responsibility are included in the Good Corporate Governance has been applied to PT Nusantara Infrastructure Tbk?
- Does the principle of fairness that is included in the Good Corporate Governance have been applied to PT Nusantara Infrastructure Tbk?
- Does the principle of independence is included in the Good Corporate Governance has been applied to PT Nusantara Infrastructure Tbk?

**Research Purposes:** Based on the research problem, then the purpose of this study is as follows:

- Understand and see the application of the principle of transparency which is included in the Good Corporate Governance in PT Nusantara Infrastructure.
- Understand and see the application of the principle of accountability that is included in the Good Corporate Governance in PT Nusantara Infrastructure.
- Understand and see the application of the principle of responsibility is included in the Good Corporate Governance in PT Nusantara Infrastructure.
- Understand and see the application of the principles of fairness that is included in the Good Corporate Governance in PT Nusantara Infrastructure.
- Understand and see the application of the principle of independence is included in the Good Corporate Governance in PT Nusantara Infrastructure.

## 2. Literature Review

**The Concept of Corporate Governance:** Corporate Governance can be defined as a process and structure used by the organs of the company (shareholders or owners of capital, commissioners or board of supervisors and directors) to improve the business and corporate accountability in order to create shareholder value in the long term by taking into account the interests of other stakeholders, based legislation and ethical values (Sutedi, 2011: 1). Good Corporate Governance is one key to success for growing and profitable company in the long term, while winning the global business competition. The economic crisis in Asia and Latin America are believed to arise because of the failure of the implementation of Good Corporate Governance (Setyani, 2010: 2). Good Corporate Governance as well as a pattern of relationships, systems and processes used by the company organs to provide added value that is sustainable in the long term for shareholders to keep into account the interests of other stakeholders, based on legislation and norms. To achieve long-term success, the implementation of good corporate governance principles needs to be guided by integrity. Therefore, a code of conduct that can be a reference for the company's organs and employees in applying the values and business ethics to become part of the corporate culture (Ministry of Finance Study Team Bapepam-LK, 2010: 9). Moeljono (2005: 88) suggests that good corporate governance as a fundamental principle of corporate governance. National Committee on Corporate Governance (KNKCG) in his book Faisal (2003: 3) defines corporate governance as structures, systems and processes used Organ Company sustainable in the long term for shareholders, with regard to other stakeholders, based on legislation and norms.

Single and Amin (2002: 3) that good corporate governance is as a matter relating to effective decision making are sourced from the corporate culture, ethics, values, systems, business processes, policies and organizational structure of the company that aims to encourage and support the development of enterprise, resource management and risk more efficiently and effectively, and corporate responsibility to shareholders and other stakeholders. The concept of good corporate governance is in line with the growing demands of the public who want the realization of business life healthy, clean and responsible. This demand is actually a public response to the rampant cases of irregularities corporations around the world. It also reflects the demands of the public wonder why corporate fraud cases could happen anywhere. On the other hand, it is

understood that in the era of globalization and the competitive business world increasingly open and competitive companies are required to have good corporate governance which contains provisions how companies referred to behave and act in the face of competition (Antosius, 2003: 1). The main purpose of Good Corporate Governance Usmansyah (2003: 5), namely: 1. Protect the rights and interests of shareholders. 2. Protecting the rights and interests of other stakeholders. 3. Increase the value of the shares and the company. 4. Improve the performance of the Board of Commissioners and Management. 5. Improve the quality of the relationship of the Board of Commissioners and Management. While Supporting Good Corporate Governance means that each company according Herwidayatmo (2003: 7), namely: 1. Formulation of the vision, mission and objectives of the company or organization that is clear. 2. The organizational structure that ensures the balance of the division of tasks and clarity of each task, as well as avoiding overlapping and bureaucratic obstacles. 3. Clarity of responsibilities and authority as well as the mechanism of action. 4. Culture and corporate ethics. 5. The system of control and performance measurement.

**Basic Principles of Good Corporate Governance:** Good Corporate Governance is needed to encourage the creation of a market that is efficient, transparent and consistent with the laws. Implementation Good Corporate Governance needs to be supported by three pillars are interconnected, the state, and the device as a regulator, the business world as a market participant, and the community as a user products and business services. The Code of Good Corporate Governance is issued by the Indonesian National Committee for Governance (NCG) in 2006. This research refers to research conducted by Rastiani (2009), entitled Analysis of Implementation of Principles of Good Corporate Governance (GCG) in Relation to Performance PT. Bank Rakyat Indonesia (Persero), Tbk. Where the results of research conducted by using a questionnaire, where each variable gain value amounted to 84.65% and 84%. This shows that the implementation of the implementation of the principles of Good Corporate Governance (GCG) and the implementation of the performance at PT. Bank Rakyat Indonesia (Persero), Tbk. have been executed better. While the relationship implementation of Good Corporate Governance (GCG) on the performance at PT. Bank Rakyat Indonesia (Persero), Tbk. is the result of the calculation of rank correlation 0.914 or 91.40%, which means having unidirectional relationship is very strong. Furthermore, the coefficient of determinant means that the relationship between the two variables have an influence at 83.53%. Where the implementation of the principles of Good Corporate Governance (GCG) affect the performance of 83.53% and the remaining 16.47% influenced by other factors outside the principles of Good Corporate Governance (GCG). The study also draws on research conducted by Febryanto (2013), entitled Analysis of Good Corporate Governance (GCG) Performance Against Company (Empirical Study of Companies Listed in Indonesia Stock Exchange Year 2008-2012). The study was conducted by collecting the data of 40 manufacturing companies listed in Indonesia Stock Exchange in the form of evidence, records or historical reports that have been compiled in archival or documentary data. Secondary data were obtained from the Indonesia Stock Exchange, Indonesian Capita Market Directory, and Internet. The results of these studies indicate that the effect of GCG in the case of the Independent Board of Commissioners, Board of Directors and Institutional Ownership positive and significant impact on company performance

## 3. Methodology

**Research design:** The study design is a process of collecting and analyzing research data, and other than that the study design was made for the implementation of the research can be carried out properly, correctly and smoothly. The research design used in this study is related to the quantitative study using inferential statistics through the use of questionnaires.

**Location and Time Research:** The location of this research is focused on PT. Nusantara Infrastructure Tbk, Bosowa Tower, 4th Floor, Jalan Sudirman No. 5, Makassar, South Sulawesi. This research was conducted in June 2015.

**Field Research (Field Research):** Collecting data in this study conducted with questionnaires, which is a method or methods of research using a list of questions to be answered by people who are subject to or referred to the respondent. According to Hadi (1991: 157), this questionnaire in the shape is based on a report about themselves (self-report) on personal knowledge or belief. Purpose of the questionnaire is to obtain information relevant to the survey objectives and to obtain information that is reliable and valid as

high as possible. As instrument this study researchers used a Likert scale, the measurement method used to measure attitudes, opinions and perceptions person or a group of social phenomenon (Sugiyono, 2012: 93).

**Population:** According Sugiyono (2011: 61) that the population is generalization region consisting object / subjects that have certain qualities and characteristics defined by the researchers to learn and then drawn conclusions.

**Data analysis method:** The method of analysis used in this study are as follows: Descriptive analysis is an analysis conducted to describe or illustrate the application of the principles of good corporate governance conducted at PT. Nusantara Infrastructure Tbk through questionnaires distributed to a sample of respondents in this study. This study uses a Likert scale to the calculation method of questionnaires distributed to respondents to assess the scale of attitudes of a particular object. The steps used in the application of this method are: a. Determination Score Answers, Scores of the answer is the value of the existing answers given by respondents, according Sugiyono (2012: 94), that the first thing to do is determine the score of each scale answer will be given. This study used a 5 point likert scale: Very Not Good (VNG), No Good (NG), Good Enough (GE), Good (G), Very Good (VG). The following is a table showing each evaluation on the scale used. b. Ideal score, the ideal score is a score used to calculate the scores to determine the rating scale and the total answer. To calculate the total score of the ideal (criterion) of the entire item, use the following formula:

**The criterion score = Value Scale x Number of Respondents**
**c.** rating Scale
The rating scale is used to overcome the results of the questionnaire data and interviews in general and the overall obtained from the assessment questionnaire.
d. percentage Answer
To determine the number of answers from the respondents by a percentage, which is used the following formula:

$$p = \frac{f}{n} x\ 100\%$$

Description:
p: percentage
the frequency of each answer
n: number of ideal score
100: number remains
1. Test Instruments Research

**a. Validity test:** Test validity is a measure that indicates the validity or validity of an instrument, an instrument is said to be valid if it is able to measure what you want measured (Sugiyono, 2007: 137). Terms of not valid research instrument means that it has a correlation value above 0.25 at a significance level of 5%, and 0.3 at 1% significance level.

**b. test Reliability:** Reliability test is an analysis to determine how far the measurement results remain consistent if performed more than twice against the same symptoms with the same measurement tool. Research Instrument is considered reliable if the value of Cronbach's alpha on top of 0.60. Measurement validity and reliability is absolutely necessary, because if the instruments are no longer valid and reliable research results it certainly would not be valid and reliable.

## 4. Results and Discussion

**Validity test:** Validity test is used to measure whether or not a legitimate or valid questionnaires. A questionnaire considered valid if the questions on the questionnaire were able to reveal something that will be measured by the questionnaire. This study uses SPSS software to analyze the questionnaire data obtained so as to produce output that is called Pearson Correlation by comparing the count and the r-r-correlation tables are the result of respondents' answers to each question (indicator of any GCG). Test analysis in this study is said to be valid if it has a value of Pearson Correlation above 0.25 at a significance level of 5% and 0.3

at a significance level of 1%. The following is a table of test results the validity of the principles of transparency, accountability, responsibility, fairness, and independence:

**Reliability test:** Reliability test is used to determine whether the indicators used are trustworthy or reliable as a measurement variable and can be used twice on the same symptoms and the same measuring instrument. Reliability of a questionnaire can be seen from the value of Cronbach's Alpha (α), i.e. when the value is greater than 0.6. Meanwhile, when the value of Cronbach's Alpha (α) is smaller than 0.6, the indicators used are not reliable. The following table shows the results of reliability test on any good corporate governance principles are used. Cronbach's Alpha value of the indicator shows the number above 0.60, so it can be said that the indicators used in the questionnaire on the principles of Good Corporate Governance otherwise reliable or trustworthy.

**Table 1: Validity of Test Results**

| Principle | Code Indicator | Pearson Correlation | R table | Description |
|---|---|---|---|---|
| Transparency | x1.1 | 0.590 | 0.30 | Valid |
| | x1.2 | 0.606 | 0.30 | Valid |
| | x1.3 | 0.581 | 0.30 | Valid |
| | x1.4 | 0.290 | 0.25 | Valid |
| Accountability | x2.1 | 0.316 | 0.30 | Valid |
| | x2.2 | 0.859 | 0.30 | Valid |
| | x2.3 | 0.836 | 0.30 | Valid |
| | x2.4 | 0.749 | 0.30 | Valid |
| Responsibility | x3.1 | 0.395 | 0.30 | Valid |
| | x3.2 | 0.512 | 0.30 | Valid |
| | x3.3 | 0.434 | 0.30 | Valid |
| | x3.4 | 0.352 | 0.30 | Valid |
| Fairness | x4.1 | 0.568 | 0.30 | Valid |
| | x4.2 | 0.487 | 0.30 | Valid |
| | x4.3 | 0.578 | 0.30 | Valid |
| | x4.4 | 0.670 | 0.30 | Valid |
| Independence | x5.1 | 0.587 | 0.30 | Valid |
| | x5.2 | 0.609 | 0.30 | Valid |
| | x5.3 | 0.680 | 0.30 | Valid |
| | x5.4 | 0.626 | 0.30 | Valid |

Source: Appendix SPSS

The above table shows the Pearson Correlation numbers above 0.25 and 0.3 are all indicators show that the question of the application of the principles of good corporate governance has been valid. For more details about the validity of the results of the test using SPSS program will be presented in the appendix.

**Table 2: Reliability Test Results**

| Indicator | Cronbach's Alpha (α) | Reliabilities Standard | Description |
|---|---|---|---|
| Transparency (x.1.1, x.1.2, x1.3, x1.4) | 0.660 | 0.60 | Reliable |
| Accountability (x2.1, x2.2, x2.3, x2.4) | 0.779 | 0.60 | Reliable |
| Responsibility (x3.1, x3.2, x3.3, 3.4) | 0.711 | 0.60 | Reliable |
| Fairness (x4.1, x4.2, x4.3, x4.4) | 0.690 | 0.60 | Reliable |
| Independence (x5.1, x5.2, x5.3, x5.4) | 0.736 | 0.60 | Reliable |

Source: Appendix SPSS

**Descriptive Analysis Research on Implementation of Principles of Good Corporate Governance:** Each company must ensure that the principles of good corporate governance applied to the business aspects and at all levels of the company. It aims to encourage the creation of a market that is efficient, transparent, and consistent with the laws .Good Corporate Governance is good corporate governance, which in this study emphasized on PT Nusantara Infrastructure Tbk. It is very important to consider the company in determining the objectives to be achieved in the operational management of the company. The following are the responses of respondents regarding the implementation of corporate governance principles in the company so that it can be seen how much the implementation of GCG in PT Nusantara Infrastructure Tbk. This study uses a Likert scale of measurement in the data analysis. Here is a description of the measures used for analysis with Likert scale measurement methods:

**Scoring answers:** This study uses five point likert scales and each scale response was assessed with each score. Answer Very Not Good (VNG) rated with a score of 1, answer Not Good (NG) rated with a score of 2, answers Good Enough (GE) were assessed with a score of 3, the answer Good (G) rated with a score of 4, the answer Very Good (VG) rated with a score of 5 (table 3.1.1 Scale Answer).

**Score Ideal:** Ideal score is determined using the following formula:

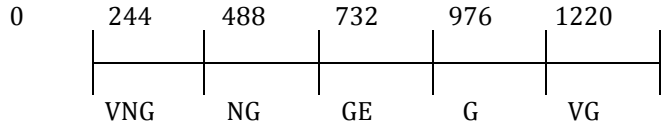
**The criterion score = Value Scale x Number of Respondents:** In this study, determined the number of respondents as many as 61 people. Each of Good Corporate Governance has four indicators, so each time you answer a questionnaire at each scale accumulated answers first. Multiplied by the total number of respondents so that the indicator is 244 respondents. So the ideal score obtained is presented in the following table:

**Table 3: Ideal score for each scale**

| Score Ideal | Scale |
|---|---|
| 5 x 244 = 1.220 | VG |
| 4 x 244 = 976 | G |
| 3 x 244 = 732 | GE |
| 2 x 244 = 488 | NG |
| 1 x 244 = 244 | VNG |

The table shows that the ideal score for each scale the answer is: 1.220 to scale Very Good (VG), 976 on a scale of Good (G), 732untuk scale Good Enough (GE), 488 to scale Not Good (NG), and 244 to scale very Not Good (VNG).

**Rating Scale:** Value rating scale and distance interval taken by ideal score table, so it can be described as follows:




With the following conditions:

Based on the table, can be classified, within the interval 0-244 in the category Very Not Good (VNG), the distance interval 245-488 in the category No Good (NG), the distance interval 489-732 in the category Good Enough (GE), distance interval 733-976 in the category Good (G), and the distance interval 977-1220 in the category of Very Good (VG).

**Table 4: Value answer to Scale Answer**

| Value | Scale |
|---|---|
| 977 - 1.220 | VG |
| 733– 976 | G |
| 489– 732 | GE |
| 245– 488 | NG |
| 0 – 244 | VNG |

**Percentage Answer:** Calculating the percentage using the formula:

Description:
p: percentage
the frequency of each answer
n: number of ideal score = 1.220
100: number remains

$$p = \frac{f}{n} x\ 100\%$$

**Respondents Regarding Transparency:** Transparency, the basic principle is to maintain objectivity in doing business, companies must provide information that is material and relevant in a way that is easily accessible and understood by stakeholders. Enterprises should take the initiative to express not only the problem that required by legislation, but also things that are important for decision-making by shareholders, creditors and other stakeholders. For more details, the following will be presented respondents regarding the principle of transparency, which can be viewed through the following table:

**Table 5: Respondents about Transparency**

| No | Statement | Respondents | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | VNG | NG | GE | G | VG | |
| 1 | Development and application of accounting system based on accounting standards and ensure financial reporting and disclosure. | - | - | 6<br>9.8% | 17<br>27.8% | 38<br>62.3% | 61 |
| 2 | The development and application of information technology management. | - | - | 9<br>14.8% | 34<br>55.7% | 18<br>29.5% | 61 |
| 3 | Application of risk management within the enterprise level. | - | - | 13<br>21.3% | 41<br>67.2% | 7<br>11.5% | 61 |
| 4 | Condensed financial information and other information material. | - | - | 4<br>6.6% | 51<br>83.6% | 6<br>9.8% | 61 |
| Total | | - | - | 31<br>13.1% | 143<br>58.6% | 69<br>28.3% | 244 |

Source: Primary Data 2015

**Table 6: Results Total Scale Score Answer Transparency**

| Scale answers | Scale answer x scale value | Result |
|---|---|---|
| VNG | - | - |
| NG | - | - |
| GE | 31 x 3 | 93 |
| G | 143 x 4 | 572 |
| VG | 69 x 5 | 345 |
| Total | | 1.010 |

Source: Primary Data 2015

Based on the results of the questionnaire, it can be said that the average respondent to respond to selection Good (G) of the principle of transparency that is equal to 58.6%. The above table shows that three out of four statements is dominated by a large selection of Good (G). 62.3% of respondents opting to Very Good (VG) in a statement that the company has developed an accounting system based on accounting standards and ensure financial reporting and disclosure. In a second statement that companies develop information technology management, shows that 55.7% of respondents choose the option Good (G). The third statement that the company developed a risk management within the enterprise level is dominated by a large selection of Good (G) of 67.2%. In the fourth option that the company publishes financial information and other information material, most respondents chose a selection Good (G). The above data is then used as the basis used to measure the Likert scale on the responses of respondents regarding the principle of transparency. Based on these data, the results of the scoring are presented in the following table. The above results indicate that the total score of the principle of transparency is 1.010. Based on the rating scale that has been determined, then a score of 1,010 into the local scale of Very Good (VG). Percentage of responses from the total score of the above percentages are calculated using the formula = frequency of each answer the questionnaire: the number of ideal score x 100%, the percentage is 1.010: 1.220 x100% = 82.8%.

**Respondents on Accountability:** Accountability, the company's basic principles include accountability for its performance transparent and fair manner. Companies must be properly managed, scalable, and in accordance with the interests of the company by taking into account the interests of shareholders and other stakeholders. Performance of sustainable enterprises can be achieved by applying the principle of accountability. The table below shows the responses of respondents regarding the principle of accountability within the company.

**Table 7: Respondents on Accountability**

| No | Statement | Respondent | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | VNG | NG | GE | G | VG | |
| 1 | Implementation of the audit committee. | - | - | 3<br>4.9% | 42<br>68.9% | 16<br>26.2% | 61 |
| 2 | Implementation of the role and function of internal auditor. | - | - | 6<br>9.8% | 7<br>11.5% | 48<br>78.9% | 61 |
| 3 | Implementation of job grading system. | - | - | 5<br>8.2% | 9<br>14.8% | 47<br>77% | 61 |
| 4 | The use of external auditors is qualified and independent. | - | 3<br>4.9% | 18<br>29.5% | 29<br>47.5% | 11<br>18.1% | 61 |
| Total | | - | 3<br>1.2% | 32<br>13.1% | 87<br>35.7% | 122<br>50% | 244 |

Source: Primary Data 2015

Based on the above table, as much as 50% of respondents provide options Very Good (SB). In the first statement, the company set up an audit committee, 68.9% of respondents chose Good (B). While in the second statement, the majority of which is as much as 78.9% of respondents chose a selection Very Good (VG). The third statement that the company establishes a performance evaluation system is dominated by the respondents chose Very Good (VG) that is equal to 77%. Most respondents choose the option Good (G) in the

fourth statement; the company uses qualified external auditors and independent. The data used as the basis used for the measurement with the Likert scale on the responses of respondents regarding the principle of accountability. Based on these data, the results of the scoring are presented in the following table:

**Table 8: Results Total Scale Score Answer Accountability Principles**

| Scale answers | Scale answer x scale value | Result |
|---|---|---|
| VNG | - | - |
| NG | 3 x 2 | 6 |
| GE | 32 x 3 | 96 |
| G | 87 x 4 | 348 |
| VG | 122 x 5 | 610 |
| Total | | 1.060 |

Source: Primary Data 2015

The above results indicate that the total score of the principle of accountability is 1.060. Based on the rating scale that has been determined, then a score of 1060 into the local scale of Very Good (VG)). Percentage of responses from the total score of the above percentages are calculated using the formula = frequency of each answer the questionnaire: the number of ideal score x 100%, the percentage is 1.060: 1.220 x100% = 86.9%.

**Respondents Regarding Responsibility:** Companies must meet legislation and to implement responsibilities towards society and the environment so that it can maintain the continuity of the business in the long term and to be recognized as a good corporate citizen. Here are the responses of respondents regarding the principle of responsibility within the company.

**Table 9: Respondents Regarding Responsibility**

| No | Statement | Respondent | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | VNG | NG | GE | G | VG | |
| 1 | Companies consider social responsibility. | - | 2<br>3.3% | 22<br>36.1% | 28<br>45.9% | 9<br>14.8% | 61 |
| 2 | Companies avoid the abuse of power. | - | 1<br>1.6% | 15<br>24.6% | 38<br>62.3% | 7<br>11.5% | 61 |
| 3 | Private company formed a professional and adheres to ethics. | 1<br>1.6% | 13<br>21.3% | 25<br>41% | 20<br>32.8% | 2<br>3.3% | 61 |
| 4 | The company creates good business environment. | 1<br>1.6% | 2<br>3.3% | 16<br>26.2% | 38<br>62.3% | 4<br>6.6% | 61 |
| Total | | 2<br>0.8% | 18<br>7.4% | 78<br>32% | 124<br>50.8% | 22<br>9.0% | 244 |

Source: Primary Data 2015

The above table shows that the majority of respondents (50.8%) chose a selection Good (G) concerning liability company. The first statement that companies consider social responsibility is dominated by the respondents who choose the option Good (G) that is equal to 45.9%. The second option, companies avoid the abuse of power, shows that the majority of respondents chose a selection Good (G) that is equal to 62.3%. Respondents were also dominant choose Enough Good selection (GE) in the third statement that the company established a personal professional and adhere to ethics (41%). By 62.3% of respondents choose the option Good (G) on the fourth option, the company created a good business environment. The above data is then used as the basis used to measure the Likert scale on the responses of respondents regarding the principle of responsibility. Based on these data, the results of the scoring are presented in the following table:

**Table 10: Results Total Scale Score Answer Principle Responsibility**

| Scale answers | Scale answer x scale value | Result |
|---|---|---|
| VNG | 2 x 1 | 2 |
| NG | 18 x 2 | 36 |
| GE | 78 x 3 | 234 |
| G | 124 x 4 | 496 |
| VG | 22 x 5 | 110 |
| Total | | 878 |

Source: Primary Data 2015

The above results show that a total score of 878. Based on the principle that responsibility rating scale that has been determined, then a score of 878 into the local scale of Good (G). Percentage of responses from the total score of the above percentages are calculated using the formula = frequency of each answer the questionnaire: the number of ideal score x 100%, the percentage is 878: 1220 x100% = 72%.

**Respondents Regarding Fairness:** Companies in the implementation of its activities should always take into consideration the interests of shareholders and other stakeholders based on the principles of equality and fairness. Companies should give provide fair and equitable treatment to stakeholders in accordance with the benefits and contributions made to the company. The following table describes the responses of respondents regarding the principles of fairness in its implementation in the company.

**Table 11: Respondents Regarding Fairness**

| No | Statement | Respondent | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | VNG | NG | GE | G | VG | |
| 1 | Application of the company's rules on the protection of the interests of shareholders. | - | 2<br>3.3% | 15<br>24.6% | 41<br>67.2% | 3<br>5% | 61 |
| 2 | Implementation of policies to protect against errors that comes from within. | 1<br>1.6% | 18<br>29.5% | 23<br>37.7% | 17<br>27.9% | 2<br>3.3% | 61 |
| 3 | Implementation of the roles and responsibilities of commissioners and management. | - | - | 9<br>14.8% | 36<br>59% | 16<br>26.2% | 61 |
| 4 | Disclosure of any information fair. | - | - | 14<br>23% | 34<br>55.7% | 13<br>21,3% | 61 |
| Total | | 1<br>0.4% | 20<br>8.2% | 61<br>25% | 128<br>52.2% | 34<br>14% | 244 |

Source: Primary Data 2015

According to the table above concerning the principles of fairness, the average respondent provides an option Good (G) that is equal to 52.2%. The first statement that the company establishes firm rules to protect the interests of shareholders, 67.2% of respondents opting Good (G). In a second statement that the company established a policy to protect against errors that comes from within, most respondents (37.7%) chose a selection of Good Enough (GE). As many as 59% of respondents choose the option Good (B) on the company's statement establishes the roles and responsibilities of commissioners and management. In a recent statement that the company discloses any information fairly, amounting to 55.7% of respondents choose the option Good (G). The above data is then used as the basis used to measure the Likert scale on the responses of respondents regarding the principles of fairness. Based on these data, the results of the scoring are presented in the following table:

**Table 12: Results Total Scale Score Answer Principle of Fairness**

| Scale answers | Scale answer x scale value | Result |
|---|---|---|
| VNG | 1 x 1 | 1 |
| NG | 20 x 2 | 40 |
| GE | 61 x 3 | 183 |
| G | 128 x 4 | 512 |
| VG | 34 x 5 | 170 |
| Total | | 906 |

Source: Primary Data 2015

The above results show that a total score of 906. Based on the principle of fairness that rating scale that has been determined, then a score of 906 into the local scale of Good (G). Percentage of responses from the total score of the above percentages are calculated using the formula = frequency of each answer the questionnaire: the number of ideal score x 100%, the percentage is 906: 1220 x100% = 74.3%.

**Respondents Regarding Independence:** The basic principle is to launch deploy the principles of Good Corporate Governance; the company must be managed independently so that each organ of the company does not dominate the other and cannot be interfered with by other parties. This can be demonstrated by not involving the influence of outside parties that are not in accordance with the principles of corporate and avoid conflicts of interest so that the activity of the company is doing well and dynamic. Here is a table that describes the application of the principle of the independence of the company:

**Table 13: Respondents Regarding Independence**

| No | Statement | Respondent | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | VNG | NG | GE | G | VG | |
| 1 | The use of experts in financial reporting. | 1<br>1.6% | 2<br>3.3% | 24<br>39.4% | 23<br>37.7% | 11<br>18% | 61 |
| 2 | Companies avoid the involvement of the influence of outside parties that are not in accordance with the principles of healthy corporate. | - | 2<br>3.3% | 19<br>31.1% | 32<br>52.5% | 8<br>13.1% | 61 |
| 3 | Companies avoid conflicts of interest. | - | 1<br>1.6% | 7<br>11.5% | 41<br>67.2% | 12<br>19.7% | 61 |
| 4 | Companies run the activities of the company with a good and dynamic. | - | - | 14<br>23% | 31<br>51% | 16<br>26.2% | 61 |
| Total | | 2<br>0.82% | 11<br>4.5% | 68<br>27.9% | 122<br>50% | 41<br>16.8% | 244 |

Source: Primary Data 2015

The above table shows that the principle of independence, the majority of respondents, 50% chose a selection Good (G). In the first statement on the use of experts in financial reporting, dominant respondents chose Good Enough selection (GE) that is equal to 39.4%. A total of 52.5% of respondents in a statement that the company does not involve the influence of outside parties that are not in accordance with the principles of healthy corporate, choose the option Good (G). In the third statement of the company to avoid any conflict of interest, 51% of respondents choose the option Good (G). In a recent statement that the company runs activities of the company with a good and dynamic, as much as 51% of respondents opting Good (G). The above data is then used as the basis used to measure the Likert scale on the responses of respondents regarding the principle of independence. Based on these data, the results of the scoring are presented in the following table:

**Table 14: Results Total Scale Score Answer Principle independence**

| Scale answers | Scale answer x scale value | Result |
|---|---|---|
| VNG | 2 x 1 | 2 |
| NG | 11 x 2 | 22 |
| GE | 68 x 3 | 204 |
| G | 122 x 4 | 488 |
| VG | 41 x 5 | 205 |
| Total | | 921 |

Source: Primary Data 2015

**Table 15: Recapitulation Calculation Results Questionnaire**

| GCG Principle | Percentage | Criteria |
|---|---|---|
| Transparency | 82.8% | Very good |
| Accountability | 86.9% | Very good |
| Responsibility | 72% | Good |
| Fairness | 74.3% | Good |
| The independence | 75.5% | Good |

The above results show that a total score of 921. Based on the principle of the independence of the rating scale that has been determined, then a score of 921 into the local scale of Good (G). Percentage of responses from the total score of the above percentages are calculated using the formula = frequency of each answer the questionnaire: the number of ideal score x 100%, the percentage is 921: 1220 x100% = 75.5%.

**Recapitulation Calculation Results Questionnaire:** Based on data analysis using a Likert scale questionnaire on every principle of Good Corporate Governance (GCG), the recapitulation of the calculation of the questionnaire are presented in the following table.

Based on the analysis of questionnaires regarding the judgment relating to the implementation of good corporate governance as a means of accountability at PT Nusantara Infrastructure Tbk, it can be described as follows: 1. Application of the principle of transparency in PT Nusantara Infrastructure Tbk, which is Very Good with the score total of answer scale is 1,010 with a percentage of 82.8%. It is clear that the majority of respondents stated that the company is open in presenting material and relevant information as well as open in the decision making process. 2. Application of the principle of accountability at PT Nusantara Infrastructure Tbk, which is Very Good with the score total of answer scale, is 1,060 with a percentage of 86.9%. It is clear that clarity of function and implementation of organ liability company ran very effectively. 3. Application of the principle responsibility of PT Nusantara Infrastructure Tbk, namely Good with the score total of answer scale is 878 with a percentage of 72%. It is clear that there is conformity and compliance in the management of the company towards healthy corporate principles appropriate legislation and regulations. 4. The application of the principle of fairness in PT Nusantara Infrastructure Tbk, namely Good with the score total of answer scale is 906 with a percentage of 74.3%. This shows that in the fulfillment of the rights of stakeholders arising under treaties and legislation conducted in a fair and equal. 5. Application of the principle of independence of PT Nusantara Infrastructure Tbk, namely Good with the score total of answer scale is 921 with a percentage of 75.5%. This shows that a professionally managed company with no conflicts of interest and pressures from any party that does not comply with the legislation in force and the principles of healthy corporate.

## 5. Conclusion

Based on the results of research supported by the data and information that has been stated previously, the authors conclude that good corporate governance (GCG) at PT Nusantara Infrastructure Tbk in general has been well implemented. Here are the conclusions drawn from each of the GCG principles that have been

applied by PT Nusantara Infrastructure Tbk: Application of the principle of transparency. Indicators that have been implemented very well are the first indicator of the development of the accounting system based on accounting standards and ensure financial reporting and disclosure. While other indicators are still in the good category. The results of the total score of the scale of the answer are 1,010 with a percentage of 82.8%. So it can be concluded that in general the principle of transparency has been implemented very well. Application of the principle of accountability. Indicators that have been applied with a very good second and third indicator are the implementation of the role and function of internal auditors and the implementation of corporate performance assessment system. While other indicators are dominated by the respondents that the first and fourth indicators that make up the audit committee as well as the use of external auditors qualified and independent application is still classified in either category. The results of the total score of the scale of the answer are 1,060 with a percentage of 86.9%. In general it can be concluded that the principle of transparency has been implemented very well. The application of the principle of responsibility. Of respondents indicate that the indicator first, second, and fourth, each of which is considered a social responsibility, to avoid abuse of power, and create a good business environment that are in either category. While all three indicators that make up the personal professional and adhere to ethical application is still quite good.

The results of the total score of the scale of the answer are 878 with a percentage of 72%. Overall, the principle of responsibility has been implemented properly. Application of the principle of reasonableness. Indicators of the first, third, and fourth the company's application of the rules on the protection of the interests of shareholders, the implementation of the roles and responsibilities of the commissioner and management, and fair disclosure of any information that are in either category in its application. As for the second indicator which is to establish policies to protect against errors that come from within, its application is still classified in the category quite well. The results of the total score of the scale of the answer are 906 with a percentage of 74.3%. Thus, it can be concluded that the overall implementation of the principle of fairness that are in either category. The application of the principle of independence. The first indicator that the use of experts in financial reporting is still in good enough category. While indicators of the second, third, and fourth namely avoiding the involvement of the influence of outside parties that are not in accordance with the principles of healthy corporate, avoid conflicts of interest, as well as the activity of the company is well run and are dynamic in both categories in its application. The results of the total score of the scale of the answer are 921 with a percentage of 75.5%. Thus, it can be concluded that the implementation of the principle of independence in general have been executed well.

**Recommendation:** Based on research on the implementation of Good Corporate Governance (GCG) at PT Nusatara Infrastructure Tbk, then there are some suggestions that are expected by the researcher to be used as material for consideration by the company: On the principle of transparency, PT Nusantara Infrastructure Tbk should further develop information technology management and risk management the enterprise level, as well as more attention to the publication of financial information and other information material. On the principle of accountability, PT Nusantara Tbk Infrastructure should pay more attention on the establishment of an audit committee as well as the use of external auditors is qualified and independent. On the principle of responsibility, PT Nusantara Infrastructure Tbk should consider more social responsibility, avoiding of power and the creation of a good business environment. Companies also should emphasize matters related to the establishment of professional and personal ethics adhere. On the principle of fairness, PT Nusantara Infrastructure Tbk should pay more attention to matters concerning the company rules that protect the interests of shareholders, the role and responsibilities of the commissioner, and disclosure of information are reasonable. Companies also should emphasize matters relating to the establishment of policies to protect against errors that come from within. On the principle of independence, PT Nusantara Infrastructure Tbk should be focusing attention on the use of experts in the financial statements. Companies also should pay more attention on the involvement of the influence of outside parties that are not in accordance with the principles of healthy corporate, avoid conflicts of interest, as well as the implementation of good corporate activity and dynamic.

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# Effect of Supply Chain Management: Just in Time for Competitiveness and Corporate Performance in Industrial Area Manufacturing Company in Makassar

Yana Fajriah, Orfyanny S Themba, Pattarapanna
STIE Muhammadiyah Palopo, Indonesia
yanafajriah.stiem@gmail.com

**Abstract:** This research design using survey method with data collection in cross-section through a questionnaire. The samples using simple random sampling with the number of respondents is 132 Managers in Manufacturing Company in Makassar Industrial Area. Data analysis method used in testing the hypothesis was Structural Equation Modeling (SEM). The results of the study provide evidence that just in time has no significant effect on the performance of the company. Supply chain management and competitive advantage have significant influence on the performance of the company. Supply chain management has significant influence on the competitive advantage. Competitive Advantage is a complete mediation in describing just in time for the performance of the company while in explaining the effect of supply chain management on the performance of the company, acting as a competitive advantage partial mediation. The practical implications of this research may provide an improved understanding of managers in improving company performance through competitive advantages influenced by supply chain management and just-in-time. Limitations of this study on a sample size of only using the manager just limiting the generalization the research finding. Originality of this study provide a basis for the development configuration modeling using SEM and conceptual models that prove the influence of supply chain management and just-in-time to the improvement of the performance of the company by entering a competitive advantage as mediation relationships between variables, which in previous studies carried out separately.

**Keywords***: Supply Chain Management, Just in Time, Competitive Advantage, Corporate Performance*

## 1. Introduction

Changes in the business environment and competition due to globalization requires companies to always be proactive in responding to the changing environment that is dynamic by creating and developing a business strategy (Wortzel & Wortzel, 1997). Global competition becomes something that must be faced by the company if it wants to survive and had to have a competitive advantage to compete in the global market (Porter, 1985). Global environment had an impact on changes in business strategy and objectives of the organization (Flaherty, 1996). Among the few changes; (1) that the company will compete in a variety of dimensions, not just one-dimensional so they have to continuously improve the Performance business and expanding product lines, (2) companies the opportunity to operate internationally and face greater pressure from competitors operates in several countries, (3) the company will be able to adapt and integrate a network of international operations in the country or have branches in other countries independently. Customers today feel not enough just to get cheap and quality products, but the variety of products is also becoming increasingly important as well as the demands of the customers on aspects of response speed, innovation and flexibility (Anatan & Ellitan, 2008). enterprise by establishing a system that is unique and has the advantage compared with competitors, and can be done by giving the best (as expected) to consumers efficiently and can be maintained (Heizer & Render, 2005). The present global conditions are in hyper competitive, characterized by high customer demand and product life cycles are getting shorter requires companies doing continuous innovativeness to create a product that is completely new and unique so that no other companies that manufacture these products. Products that are considered valuable are new and different products.

**Formulation of the Problem:** Based on the description of the background, there are various contradictions of theoretical and research on the application of supply chain management and just in time to enhance the competitive advantage (competitive) and corporate performance. The main problem in this research Does the application of supply chain management, and just-in-time impact on competitive advantage (competitive) and corporate performance.

## 2. Literature Review

Operational Management is a set of activities that produce value in the form of goods and services by transforming inputs into outputs (Heizer & Rander, 2009: 4). Evans & Collier (2007) expressed the same view and that the operational management is the science and art to ensure that goods and services are created and successfully delivered to customers. Based on these definitions, it can be argued that the focus of operational management is the process of creating goods and services. Daft (2006: 216) defines operations management as a management area that specializes in the production of goods. This is the only operating activity focusing on the activity of producing goods and solves the problems related to the production sector. According to Sofjan (2004:12) the management of production and operation of the process of achieving resources to manufacture or produce goods or services that are useful as an effort to achieve the goals and objectives of the organization. Another view that emphasizes decision making process proposed by Slack et al. (2010) that, operations management took the decision in respect of an operation function and system transformation in the study of decision-making from an operating function. Krajewski et al. (2010) defines the operational management as a systematic design, direction, and oversight processes that transform inputs into outputs (goods and services) to internal, external, and consumer.translation strategic decisions in operational management includes ten (10) decisions of a strategic nature (Haizer & Render, 2009).

Based on the development of Supply Chain Management by Movahedi et al. (2009) were grouped into six major movements were observed in the evolution of supply chain management studies, that era: Creation, Integration, Globalization, Specialization Phases One and Two, and SCM 2.0. Supply chain management is an approach that is used to achieve the integration of more efficient organization of suppliers, manufacturers, distributors, retailers, and customers. This means that goods produced in the right quantity, at the right time and the right place with the aim of achieving the cost of the overall system minimum and also achieve the desired service level (Simchi-Levi et al., 2000). The goal of the Supply Chain Management is to maximize the overall value generated to meet the needs and demands of customers. On the other hand, the goal is to minimize the overall costs (fees, storage costs, raw material costs, transportation costs, etc) (Chopra & Meindl, 2004). Supply Chain Management (Supply Chain Management) is an overarching process in which the products are created and delivered to the consumer from a structural point. A supply chain (supply chain) refers to a complex network of relationships that sustain the organization with business partners to source production in conveying to the consumer. Kalakota, 2000: 197) Supply Chain Management (SCM) is the management of a network of interconnected businesses involved in the provision of end product packages and services required by the final consumer (Harland, 1996). More general definition and acceptable supply chain management is, Supply chain management is the coordination, systemic strategic traditional business functions and the tactics across business functions within a particular company and across companies in the supply chain, for the purpose of increasing the long-term performance of individual companies and supply chain as a whole (Mentzeret al., 2001).

Supply chain system must be responsive to customer needs (Hines et al., 2004: 76). Supply chain management is the integration of key business processes across the supply chain for the purpose of creating value for customers and stakeholders (Lambert, 2008). In essence, supply chain management integrates supply and demand management within and across the enterprise. Krajewski et al. (2010) suggests that supply chain management is the process of synchronization of the company with suppliers and customers to match the flow of materials, services, and information based on customer demand. The concept of supply chain management is relatively new, is actually an extension or development of logistics concepts. Logistics management is more focused on setting the flow of goods in the supply chain management while the company considers that internal integration is not enough. Company relative to be able to achieve a high degree in the internal integration (cooperation and coordination between internal processes) and external (cooperation and coordination with suppliers and customers) after applying supply chain management (Stevens, 1989; in Gimenez and Ventura, 2005) , Supply chain is an extension of the concept of logistics. Only logistics management is more focused on setting the flow of goods within the company, while supply chain management considers that it is not enough internal integration (Indrajit, 2002; Anatan & Ellitan, 2008). Integration should be achieved for the entire chain from upstream to downstream. Therefore, supply chain focused on setting the flow of goods between related companies, from upstream to downstream. Supply chain is a network of companies which together work to create and deliver a product to the hands of the end user

(Indrajit & Djokopranato, 2005; Pujawan, 2005; Anatan & Ellitan, 2008). These companies typically include suppliers, manufacturers, distributors, store or retail, as well as companies support such as logistics services company Supply chain is the physical network, the companies involved in the supply of raw materials, produce goods, and submitting it to the end user.

According Simamora (2002: 106), just in time is a manufacturing management system and comprehensive inventory where raw materials and various spare parts purchased and produced at the time will be produced and the time will be used in every stage of the production process and manufacturing. Meanwhile, according to Garison et al. (2006: 16) states, just-in-time is a system of inventory control and production requires raw materials purchased and units produced only limited needs of consumers. The goal of a just-in-time is to produce and deliver the product at the time will be sold profitably, and to purchase raw materials and spare parts at the time will be placed into the manufacturing process

## 3. Methodology

Quantitative research with analysis of Structural Equation Model (SEM) analysis technique used in this dissertation research is Structural Equation Modeling (SEM) using Moment of Structural Analysis program (AMOS). The reasons underlying the use SEM (AMOS) are: (1) the study using latent variables were measured through indicators, SEM is one of the multivariate analysis techniques that enable analyzes a series of several latent variables simultaneously so as to provide statistical efficiency. (3) The purpose of this research is to test and analyze and explain the phenomenon being studied or problems investigated.Variable in this study indicate the variables group of interconnected either directly or indirectly through intervening therefore to test a series of relationships of interdependence between the variables simultaneously. Hair et al. (2010) indicated that due diligence equivalent models with confirmatory analysis, test parameters that are equivalent to the estimated regression, and determine the dominant path equivalent to the path analysis.

## 4. Discussion of Results

Deepening study on the development of operational management in manufacturing companies in the Industrial Area of Makassar associated with variables research is an attempt to shoot a good position or a bad supply chain management and just in time as well as high and low competitive advantage and company performance. Explanation of the measurement model causal relationship between constructs or variable supply chain management, just-in-time, competitive advantage and corporate performance are the way down to the model studies it appears that the goodness of fit index has an acceptable / appropriate, further interpreted to explain the causal relationship between the constructs or latent variables. Thus the discussion of the results of this study combined with theory, the results of previous empirical research and empirical facts that occurred on the object to be studied to determine whether the results of this study support or reject the theory and the results of previous studies or the renewal of the research results. Design constructs built in this study refers to the phenomenon by analyzing empirical / filling the research gap the company's performance through the use of competitive advantage variables which act as variables that mediate the effect of supply chain management and just-in-time to the company's performance in previous studies are generally conducted separately- separation (partial). Such conditions led to the desire of researchers to examine the relationship of these variables by inserting variable competitive advantage as antecedent variables of the company's performance. Grand theories used to design variable-latent variables and indicators of this research is the theory of operational management which states that the supply chain management and just-in-time is a strategic decision in operational management, key to increase competitive advantage and performance of the company lies in the ability of the company to build effectiveness the relationship between business partners.

The success of a company is determined not only the performance of the company itself, but is also determined by the performance of the entire network (Haizer & Render, 2010; Ramarapu et al., 1995). Based on this theory, the company is said to have the performance, if the company has a competitive advantage (Gimenez and Ventura, 2005). Past research has shown supply chain management as a major driver of corporate performance (Kannan & Tan, 2005), as well as just-in-time (JIT), that in order to face global competition, every company is required to always improve competitive advantage, both in the domestic

market as well in the global market. To improve competitive advantage, many companies implement various management models, one of them just-in-time. Some studies suggest that successful implementation of JIT in the company can improve the quality of products and services produced, reduction in operational costs, and increase customer satisfaction that affect the improvement of financial performance (Flynn et al., 1995; Golhar & Stamm, 1991). The study results Flynn et al. (1995) suggested that companies that use just in time to improve the performance of product quality by improving the quality of inputs and processes. In manufacturing, JIT role in reducing inventory costs and improve customer service levels through the leveled production, reducing set up time, and lot sizes. Similarly, a study conducted by Golhar and Stamm (1991), concluded that the application of JIT provide the benefit of reducing inventory costs; improve productivity and better product quality.

Findings Chi et al. (2009) stated that the problem of the supply chain to improve the performance of the company lies in the problem of competitive advantage. High competitive advantage can directly increase the company's performance; the statement is supported by the results of the study (Li et al., 2006; Gimenez, 2004; Gimenez and Ventura, 2005). There are gaps of research on testing the effect of competitive advantage to the company's performance. Chi et al. (2009) suggest there is a significant correlation between the competitive advantages of the performance of the supply chain is only accepted at the high performance of the company but rejected the company's performance is low. The argument put forward by the researchers is that the companies that have low performance have a low ability to perform cost reduction, quality improvement, and a low priority delivery performance. Based on the findings of previous studies, separately stated that the antecedents of the company's performance is supply chain management and just in time as well as a competitive advantage (Golhar & Stamm, 1991; Ramarapu,et al., 1995; Flynn et al., 1995; Sakakibara et al., 1997; Gimenez and Ventura, 2005; Kannan & Tan, 2005; Kim, 2006; Li et al., 2006; Chi et al., 2009; Ou Chin et al., 2010; ALshbiel & Al-Awawdeh, 2012; Danese et al., 2012). Referring to these ideas, the main purpose of this study was to examine and analyze empirically the effect of supply chain management and just-in-time to the company's performance in mediation by the competitive advantage. In this study conducted an analysis of the effect of the direct effect and the indirect effect between variables. Based on the results of data analysis in this study, the discussion of the results of this research combines theory, the results of previous research and empirical facts that occurred on the object to be studied to confirm the results of this study reinforce or reject the theory as well as the results of previous studies or the result of new findings.

Results of testing the feasibility of structural model designed and proven to be estimated in this study are in accordance with the data of observation. Conclusion: Based on the results of discussions and research findings, some conclusions can be stated as follows: Just in time is either not significant influence on the company's performance, competitive advantage is just in time mediation influence on company performance. That is the relationship between just in time directly did not significantly affect the increase in the company's performance, but just in time take effect on firm performance when no competitive advantage is high, so it can be explained that the responsibility for the production employees to control the products are not able to increase profits (profit) and expanding market share (market share) directly but through the provision of products that comply with the wishes and needs of customers, then just in time significantly affect the company's high performance. Supply chain management is well proven to improve the performance of the company. These results indicate that the better the interactions made by the company with customers in setting standards of delivery, and response to customers to increase profits (profit) and expanding market share (market share) of the company which is the embodiment of the company's performance. Supply chain management is getting better, the higher the company's competitive advantage. It means that customer well established relationship between companies and customers can enhance the company's ability to innovate products.

**Suggestions:** For the management of manufacturing enterprises should improve inventory control of raw to avoid waste (just in time) so that the company's performance can be increased toward the high, but it is not independent of the management of the supply chain (supply chain management) is good and also cannot be separated from the company's competitive advantage. For the government, the company manufactures in its management have a variety of problems that impede its growth, such as the provision of infrastructure, the availability of gas, electricity and conducive investment climate, for the government is expected to give full attention to the problems faced so that the manufacturing sector are believed to be able to play a greater role

in promote national economic growth. For advanced researchers are expected to develop this research by adding multiple constructs (variables) or object of research that have differences in terms of the characteristics of the company.

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# The Role of Motivation in Online Collaboration from an Active Learning Perspective

Ashwak Abdulsalam Yousif
Emirates College of Technology, Abu Dhabi, United Arab Emirates
ashwak.yousif@ect.ac.ae

**Abstract:** The purpose of this research study paper was to explore the role of motivation in online collaboration from an active learning perspective. This study utilized qualitative and quantitative mixed methods design. To collect data, the researcher implemented initial group interviews with the grade 12 students who were involved in online projects using the PBworks wiki. The interviews aimed at exploring the reasons for the students' reluctance to collaborate online, while they used to do so physically in the classroom. Themes that were generated by these interviews were used to develop a questionnaire that aimed at analyzing the students' perceptions about online collaboration. The participants were 32 female students at AlShumoukh High school where the researcher works as a teacher of English for grade 12 students. Those students were involved in English continuous assessment projects online using the class PBworks wiki as part of their ongoing assessment in English in this academic year. Students were given the opportunity to work in groups or individually to complete their projects. However, all of them decided to work individually and were reluctant to collaborate online. Moreover, they wanted their pages to be hidden because they did not want their classmates to see their work online. The researcher knows very well the importance of collaboration for language learning and the role of motivation in that. Therefore, by using Keller motivational design model, this study tried to promote motivation for online collaboration. The findings of this study indicated a positive role for motivation in online collaboration: all grade12 students were involved in English collaborative ongoing assessment projects. However, the findings indicated also an essential role for the teacher in promoting and sustaining the students' motivation to collaborate online.

**Keywords:** *Motivation, Active learning, Online Collaboration, Wikis*

## 1. Introduction and background

Teachers can see clearly that their students are motivated when they pay attention; ask questions and volunteer to answer, discuss learning issues and begin working on tasks immediately (Palmer, 2007). Likewise, in online learning, teachers can decide clearly if their students are motivated by observing their activities, postings, questions and answers, discussions and by the time they spend working online. The researcher as a teacher of English for non-native speaker students knows that motivation and collaboration while learning a foreign language have had a positive impact on the students' active learning and their academic achievement. As part of the assessment system in English, Grade 12 students in Al-Shumoukh School (An Abu Dhabi School) should submit a portfolio at the end of each trimester. In this portfolio, they have to display their individual and collaborative assignments. Some of the skills that the students have to show in their portfolios are: writing essays, short stories, peer editing, peer reflection and evaluation, peer suggestions and recommendations, discussion activities with questions and answers, in short collaborative projects related to the theme of the unit that includes process and product …etc. They used to submit paper-based portfolios at the end of each trimester and in this portfolio, students had to include evidences for all the above-mentioned skills. However, this year the teacher of English has changed the paper-based portfolio into an electronic one using "PB Works" wiki. The teacher of English created pages for all the students and explained clearly that all the skills required should be in these electronic portfolios. Students started working in their own electronic portfolios actively; however, the teacher could notice clearly that there was no sign of collaborative work. The students were working individually and, even more, some students requested to make their pages hidden because they did not want their classmates to see them.

**Statement of the Problem:** Using team assignments in an online course can be an excellent way to create community and improve learning (Kelly, 2007: P5). However, it is not always easy to motivate students to actively collaborate online. The researcher, as a teacher of English language for non-native -speaker students, knows very well the importance of collaboration among students to improve their English language skills and extend the use of English at home. A workspace on PBworks was created to motivate students to work

collaboratively and prepare their trimester projects online. However, students were reluctant to collaborate and preferred to make their own projects individually. Moreover, most of them asked the teacher to make their wiki pages hidden to prevent their classmates from looking at their projects.

**The Research Questions:**
-Can using "Keller Motivational Design Process Model" motivate grade 12 students in Al Shumoukh School to collaborate online using the class PBworks space?
-What role does motivation have in the online collaboration?

**The Purpose of the study:** The main purpose of this study was to investigate the role of motivation in online collaboration from an active learning perspective. By using "Keller Motivational Design Process", this study aimed at stimulating the students' motivation to collaborate actively online using the class wiki to prepare online English continuous assessment projects. The researcher tried to promote the students' motivation by following the four steps of the motivational design process: Analyze the audience, define motivational objectives, design a motivational strategy and try out and revise as necessary (Keller, 2010).

**The research Significant:** This research study has a potential significance because it contributes to the limited research initiatives about the role of motivation in online collaboration in a country like the UAE. The researcher could locate no research addressing this topic in the UAE or any other Arab countries. Moreover, the use of such tools (wikis) in online collaboration is not common at schools in the UAE, as the researcher knows.
1. The findings of this research can help the researcher as a teacher to improve her performance and motivate her students' motivation to learn English collaboratively.
2. This research could be a good reference for future research about the same topic.

**Motivation:** The energy that makes students learns or behaves in the required way.
**Online Collaboration:** Working collaboratively in groups to complete a project or discuss a topic using the class wiki (in this research paper).
**Active learning:** Enthusiastic participation in the learning process.
**PBworks: "**It is a commercial real-time collaborative editing system created by David Weekly" (Wikipedia, 2012)

## 2. Literature Review

This section explores the literature review about the researchers' identification of motivation and its role in stimulating active learning. The benefits of Collaboration in enriching the learning social experience and motivating students are explored with more focus on online collaboration using PBworks wiki for creating collaborative online projects.

**Motivation:** The question of what is motivation and its role in learning "has been the subject of investigation for many years (Driscoll, 2005: P310). For example, Weiner (1990) said: "Motivation is often inferred from learning, and learning usually is an indicator of motivation for the educational psychologist" (p.618) (cited in Driscoll, 2005: P310). Motivation can be conceptualized as students' energy and drive to engage in the learning process, and it plays an important role in students' interest and enjoyment in the learning activities (Martin, 2003).

**Collaboration:** Research suggests that learning is situated in a social and cultural context where learners have the opportunities to interact with each other to construct their learning experiences and they do not learn in isolation (Brown et al., 1989). Shank (2007) states that learning benefits can accrue from collaborative learning activities. These activities create social interaction and influence positively learning, motivation, and problem solving. Activities such as collaborative authoring, joined vocabulary workbooks creation, editing, document review, group projects, reflection notes and others have been tried out using wikis as facilitating tool (Zvi, 2007). "In online courses, especially, social interaction and collaborative activities can help learners avoid feelings of isolation and improve motivation and persistence" (Shank, 2007: P12).

**Wikis:** Wiki can be considered as a social networking technology that can support language learning and it has "potential learning supremacy in cognitive and mechanical interaction in reading, creating, and editing the Wiki content supplied by the student and Wiki content supplied by others"(Twu, 2010: p57). Moreover, Wikis are good tools that foster collaborative learning; provide teachers with opportunities for creating socially engaged tasks, such as group project or class projects (Hadjerrouit, 2011). As wikis are supportive for teachers, "they are supporting for pupils' active learning and collaboration" (Chang et al. 2010: P291). Researchers predicted that Wikis could be used for enhancing language learning "by improving collaborative writing, publicizing collaborative writing and deeper language learning content" (Twu, 2010, p. 58).

## 3. Methodology

This study utilized mixed method design using interviews and questionnaire to explore the perceptions of AlShumoukh grade 12 students about the main factors that motivate or de motivate them to be involved in online active collaborative learning using the class PBWorks space.

**Participants:** The participants are 32female students at Al Shumoukh School in Al Marfa city in the UAE. They are grade 12 students who were involved in preparing electronic portfolios using PBworks wiki to prepare their English Continuous Assessment Rich Task (ECART).

**The Instruments:** The instruments of the study were qualitative and quantitative: initial interviews that generated themes for the questionnaire. The interviews had only two questions one asked about the main reasons that the students report for their reluctance to be involved in online collaborative learning using the class wiki. The other question was: "why do you collaborate effectively in the classroom while you don't do that online?" Themes generated from these interviews were used to develop the questionnaire. The questionnaire consisted of ten items using Likert 5-points scale with "strongly agree" 5 to "strongly disagree"1.These ten items explored the participants' perceptions about online collaboration and their reasons for being reluctant to collaborate online. At the end of the questionnaire, there was an open part with two questions. The first asks the students to give some suggestions to make online collaboration more interesting for them and the second asks the students to add some other reasons for being de motivated to collaborate online.
"Keller Motivational Design Model" was used as a tool to promote the students' motivation to collaborate online. After using Keller's Design, yes /no poll was done using only one question: "Are you going to collaborate while doing your projects in the class PBworks space?

**Procedures:** The researcher decided to use Keller's Motivational Design Model to motivate grade 12 students to collaborate online. In order to analyze the audience (the students), initial group interviews were done. Using the themes generated from the interviews, a questionnaire was developed in order to have more specific and individual understanding of the audience (learners). The teacher explained for the students the importance of expressing their perceptions about online collaboration because that will help in planning for motivational strategies and in modifying the online activities. The results and the analyses of the qualitative and quantitative instruments: the group interviews and the questionnaire were used to promote the students' motivation. The students' suggestions that were feasible were taken into consideration. Extrinsic motivators that were marks are very important for grade 12 students because of the university requirements. Therefore, the researcher used these rewards as part of the process of promoting the students' motivation. The teacher who planned some strategies for promoting the students' motivation was ready to "try out and revise as necessary" (Keller, 1987).

**Limitations:** There are some limitations in this research study. First one is the design of the research is supposed to be an action research one, and again due to the time limits, the researcher relied on the participants' perceptions to report the results of the action. After applying Keller's motivational design process, the researcher had a poll with yes/no question to find out whether the students are ready to collaborate online after promoting their motivation. Another limitation is related to the number of the participants and their age. The participants were 32 students in grade 12 and in this class the age of the

students ranges between17-19. The online collaboration in this study was restricted to the class wiki although there are some other tools that can be used for that.

## 4. Results and Analyses

**The qualitative data analysis and results:** Group interviews and a questionnaire were done to analyze the audience (students) and plan strategies for stimulating their motivation for online collaboration accordingly. This section is displaying the results of the interviews and the results of the questionnaire are displayed in the next section. Students were asked two questions in the group interviews: Why are students reluctant to collaborate online using the class wiki? and the second question: Why do you collaborate effectively in the classroom while you don't do that online? The students answered these two questions and mentioned some conditions for online collaboration. The following table shows the details of the students' answers categorized into themes and conditions that students suggested for online collaboration.

**Table 1: Interviews Analysis**

| Questions | Themes generated. | Conditions for collaboration (suggested by the students) |
|---|---|---|
| Why are students reluctant to collaborate online using the class wiki? | - Some students are lazy and do nothing in groups. However, they get marks like the others.<br>We don't like the others to criticize my work.<br>We don't like to do the others' work.<br>Collaboration is a waste of time when we edit the others' work or give them recommendations to improve their work, when do we do our work? | -If the teacher assigned the responsibilities and what each of us has to do, collaboration will be good.<br>Teacher should punish students who criticize the others' work and encourage them to help each other.<br>If the teacher rewards me, I will help the others. However, it is unfair to have the same grade as those who don't know how to do their work.<br>If a student helps her classmates, she must not have assignments herself.<br>Teacher should assign students to edit and help the others, but those students should not have some other assignments to do.<br>Teacher should reward those who help the others by giving them more marks than their classmates. |
| Why do you collaborate effectively in the classroom while you don't do that online? | The teacher in the classroom observes all the students and knows who works and who doesn't.<br>The teacher always rewards good group work in the classroom.<br>Physical activities in the classroom are interesting. For example, we enjoy role playing and presenting our group discussions.<br>Writing short stories in groups is fun because some of us write and some others draw and some give ideas. However, online we cannot do that.<br>We don't know how to collaborate online. However, in the classroom, the teacher | The teacher should observe students online and ask them to work if they are not doing so.<br>The teacher must reward students who work hard online as she does in class.<br>If we have activities online similar to what we have in the classroom, we will collaborate.<br>Why doesn't the teacher give points for online collaboration as she does in the classroom? |

**Table 1: Interviews Analysis**

| Questions | Themes generated. | Conditions for collaboration (suggested by the students) |
|---|---|---|
| | explains exactly what we are supposed to do. | |

**Quantitative Data Analyses and Results:** Using the themes generated in the qualitative data collection, a questionnaire was developed using "SurveyMonkey.net". A link of the questionnaire was posted on the class wiki front page and the teacher asked the students to fill it. This section displays the results of the questionnaire calculated by "SurveyMonkey.net" analysis feature using frequency and percentage. In response to the statement "I feel that online collaboration is interesting if we select our team members", 90.7% responded by "strongly agree" and "agree", while 0% responded by "strongly disagree" or "disagree". In response to the statement "I am willing to participate in online discussion if the topic is interesting", 77.4% answered, "strongly agree" and "agree", while 0% answered by "strongly disagree" or "disagree" and 22, 6 responded by "not sure". The responses to the statement "I am willing to collaborate online if the teacher rewards me" were as the following: 73.3% responded by "strongly agree" or "agree", 26.7% responded by "not sure" and 0% responded by "strongly disagree" or "disagree". In response to the statement " I am willing to collaborate online when the task is divided equally and each of us does her part" 78.2% responded by "strongly agree" or "agree", 0% responded by "strongly disagree" or "disagree" and 21.8 responded by " not sure".

**Table 2: Percentage and the Frequency (P+F) of the Students' Responses**

| Areas | Statements | Strongly agree(P+F) | Agree (P+F) | Not sure (P+F) | Disagree (P+F) | Strongly disagree (P+F) | Total number of students |
|---|---|---|---|---|---|---|---|
| Perception about collaboration online | I feel that collaboration is interesting if we select our team members. | 59.4% 19 Sts. | 31.3% 10 Sts. | 9.3% 3 Sts. | 0% | 0% | 32 |
| | I am willing to participate in online discussion if the topic is interesting. | 29.0% 9 Sts | 48.4% 15 Sts | 22.6% 7 Sts | 0% | 0% | 32 |
| | I am willing to collaborate online if the teacher rewards me. | 43.3% 13 Sts | 30% 9 Sts | 26.7% 8 Sts | 0% | 0% | 32 |
| | I am willing to collaborate online when the task is divided equally and each of us does her part. | 31.3% 10 Sts | 46.9% 15 Sts | 21.8% 7 Sts | 0% | 0% | 32 |
| | I feel happy if my classmates help me in my project. | 59.4% 19 Sts | 34.4% | 6.2% 2 Sts | 0% | 0% | 32 |
| | I feel happy if I help my friends. | 65.6% 21 Sts | 25.0% 8 Sts | 6.3% 2 Sts | 0% | 3.1% 1 St | 32 |
| | I feel that it is very beneficial for all of us to help each other at work. | 56.3% 18 Sts | 40.6% 13 Sts | 3.1% 1 St | 0% | 0% | 32 |
| Reasons for the reluctance to collaborate online | Editing my work by one of my classmates makes me frustrated. | 3.1% 1 St | 12.5% 4 Sts | 50.0% 16 Sts | 25.0% 8 Sts | 9.4% 3 Sts | 32 |
| | I don't like my classmates to read my writing because I don't | 0% | 9.4% 3 Sts | 15.6% 5 Sts | 34.4% 11 Sts | 40.6% 13 Sts | 32 |

**Table 2: Percentage and the Frequency (P+F) of the Students' Responses**

| Areas | Statements | Strongly agree(P+F) | Agree (P+F) | Not sure (P+F) | Disagree (P+F) | Strongly disagree (P+F) | Total number of students |
|---|---|---|---|---|---|---|---|
| | want them to criticize me. | | | | | | |
| | I don't want to work in groups to complete a project because some students are lazy and get marks for doing nothing. | 9.4%<br>3 | 34.4%<br>11 | 15.6%<br>5 | 25.0%<br>8 Sts | 15.6%<br>5 Sts | 32 |

In response to the statement "I feel happy if my classmates help me in my project", 93.8% responded by "strongly agree" or "agree", 6.2% responded by "not sure" and 0% responded by "strongly disagree" or "disagree". In response to "I feel happy if I help my friends", 90.6 % responded "strongly agree" or "agree", 6.3% responded by "not sure" and 3.1% responded by "strongly disagree". In response to the statement " I feel that it is very beneficial for all of us to help each other at work, 96.9% responded by "strongly agree" or "agree", 3.1% responded by "not sure" and 0% responded by "strongly disagree" or "disagree". In response to the statement "Editing my work by one of my classmates makes me frustrated", 15.6% responded by "strongly agree" or "agree", 50% responded by "not sure" and 34.4 % responded by "strongly disagree" or "disagree". The responses to the statement "I don't like my classmates to read my writing because I don't want them to criticize me" were as the following: 9.4% "strongly agree" or "agree", 15.6% "not sure" and 75% responded by "strongly disagree" or "disagree". In response to the statement " I don't want to work in groups to complete a project because some students are lazy and get marks for doing nothing", 43,8% responded, "strongly agree" or "agree", 15.6% responded by " not sure" and 40.6% responded by "disagree or "strongly disagree". The percentage and the frequency (P+F) of the students' responses are displayed in the following table 2 in alignment with the questionnaire statements.

**Discussing the results and the motivational strategies applied using a modified version of Keller Motivational Design Model:** The qualitative and quantitative data collection explored the students' perceptions about online collaboration. The main purpose of the data collection was to analyze the learners and find out how likely they are motivated and ready to collaborate online using the class wiki. Through the data got about the students, the teacher could define motivational objectives and design a motivational strategy (Keller, 2010). When the strategy is tried out, it is revised as necessary either to continue or to modify according to the students' reactions. The following is a discussion of the students' perceptions about the online collaboration and the motivational strategies the teacher is going to follow accordingly. Using Keller's motivational design model, the researcher is going to address the students' motivation and find out the role of motivation in their online collaboration.

In the group interviews the students gave abundance of themes related to the online collaboration and the reasons for being reluctant to collaborate online, while they are active collaborators inside the classroom physically. These themes gave an insight for the teacher about the strategy to be used; moreover, they were used to develop a questionnaire for better understanding. Themes mentioned in the qualitative data collection and used in the questionnaire developing were related to the teacher's role in promoting the students' motivation to collaborate online. Students reported that the teacher in the classroom sees those who don't work and provokes them to do so, while online the teacher doesn't do that. The teacher rewards those who collaborate inside the classroom, but she does not do that online. Another theme was generated in the interviews was related to giving the students' the right to select their group members and the topic they discuss. In response to these items in the questionnaire, the majority of the students responded by "strongly agree" or "agree" that online collaboration would be interesting if they could select their team members and the topic they discuss. This means that students don't like the teacher to select their group members, nor the discussion topic. The strategy that the teacher is going to take in order to have heterogeneous groups and give the students the opportunity to select their group members is the following. The teacher selects coordinators for each group (Grade 12 students in Al Shumoukh School don't like the term "leader" of a

group) and a vice- coordinator. These two students are strong enough to manage the group's work. The teacher identifies the responsibilities of these two group members and helps them to have plans that mandate collaboration in their groups. The reason for assigning the group coordinators and vice-coordinators by the teacher is to ensure that there is equity in the groups and not all strong students are in one group. The other members of the class decide which group they want to work in, but not more than 5 students in each group. The coordinators give the lists of the groups to the teacher who seats them in the same groups physically inside the classroom. Teacher gives the students a chance to select some discussion topics they enjoy and if some of the topics are good enough for the theme of the unit, the teacher asks them to continue discussion online. However, the discussion that starts inside the classroom is motivated by the teacher and when the teacher can see clearly that the students are highly motivated; she stops discussion and asks them to continue online.

Findings indicate that extrinsic motivation is important for grade 12 students to collaborate online as the majority of them report that they are willing to collaborate online if the teacher rewards them. Although research shows that intrinsic motivators fosters long term interest of the students in the behavior required; collaboration online in this study, the findings here indicate that grade 12 students are more interested in extrinsic motivators. "A child who is intrinsically motivated undertakes the task for very different reasons than the child who is extrinsically motivated. Marks that are extrinsic motivators are very important for grade 12 students because the university orientation and the students' future majors rely on the students' final percentage in this year. Therefore, the teacher's strategy was to modify the learning contract that was signed at the beginning of the year and add part for the types of rewards for active groups. Moreover, the teacher knows very well the importance of praising and encouraging o promote the students' motivation. Therefore, she made one of her habits to write some comments on the group project files and words of appreciation on the front page of the wiki to be seen by the other members. The majority of the students report that they are willing to work online when the task is divided equally and each member does her part in the group project. In order to have equality in the effort, the teacher gives some recommendations for the group work to be done equally. For example, those who are not good writers in English can search for resources and materials needed for the topic. They read these materials and underline the relevant information for the project and post them in the group's folder. Those who are good at photography or videotaping, they can contribute to the group project by uploading the photos or videos required. As for writing group stories online, the teacher or the coordinator can start with an interesting sentence that stimulates students to write. Each student in the group is required to write a sentence that completes the group story. The coordinator edits the writing of the others or asks the teacher for help.

The majority of the students in grade 12 don't have any issues in helping each other in their work. They reported that they feel happy if they help their friends or their friends help them. They have acknowledged the importance of collaboration in improving their performance. However, they reported some concerns regarding some lazy students who don't work and get marks for doing nothing. They perceive that the teacher has to find ways to make those students work. In order to address this issue, the strategy selected is to give weekly comments for groups showing that the teacher has already seen what they are doing and who is working and who is not (It is possible to see those who work in the wiki by the administrator (the teacher). Using Keller motivational design steps, the teacher analyzed the students and tried to define the motivational objectives according to the analysis. Moreover, the strategies used to promote motivation for online collaboration were designed according to the analysis made through the group interviews or questionnaire. Addressing the students' concerns and trying to promote their motivation, a poll with yes/no question was posted on the wiki page. The question was: Are you going to work collaboratively online to complete your trimester project? 100% of the students answered by yes. The teacher created group pages and could notice that students are working actively to complete their collaborative project.

**Summary of Findings:** The results of the qualitative and quantitative data collection indicated a positive role for motivation in online collaboration. Using Keller's motivational design model to analyze the students, define motivational objectives according to the data collected about them and design motivational strategy indicated willingness and enthusiasm to collaborate online as the students confirmed in the yes/no poll. All the students reported that they would be active participants in the group projects and they would collaborate to produce high quality projects. However, the role of the teacher in promoting the students' motivation is

crucial. These findings support Xie and Ke (2011) findings that indicated an important role for motivation in students' online interaction and they recommended that teachers in online classes should promote students' motivation, and more importantly, scaffold student moderators in meaningful learning during peer-moderated online discussions (P.916).

**Limitations:** In addition to the limitations mentioned before in this study, there are few other limitations related to the students who were involved in the study; it was the first time they had the experience of online work, therefore the factors that might have impacted their motivation for online collaboration might be different if the students had been used to such online activities. The findings depended on the students' self-reporting and observing real collaboration and reporting the role of motivation in that, but it did not evaluate the impact of this collaboration on the students' achievement. Another limitation that was mentioned before is related to the size of the sample that was very small because the number of the students involved in online activities is limited to grade 12 students whom the researcher is teaching. Finally, the tool that was used for online collaboration might have a positive or a negative impact on the students' motivation to collaborate. In this study, the researcher used the PBworks wiki to create online activities and did not use some other tools that might have different results.

## 5. Conclusion and Recommendations

The main purpose of this study was to explore, analyze and promote motivation for online collaboration using PbWorks wiki in Al Shumoukh high school in Al Mirfa City in the UAE. The study analyzed the students, defined the motivational objectives from the analysis results, designed motivational strategy and planned for trying out and revising as necessary. The findings indicated positive role for motivation in online education and an essential role for the teacher in promoting the students' motivation.

**Recommendation and areas for future studies:** Although the same teacher used the same tool at the beginning of the year, the students were not ready to collaborate online. However, when the teacher used some strategies to promote the students' motivation, students indicated willingness and excitement to collaborate online. Therefore, the study recommends that teachers should have professional development in how to involve their students in online collaboration and how to promote their motivation for that.

- Since this research study focused on online collaboration using wiki, it is recommended to study the role of motivation in online collaboration using some other technological tools to see whether the technological tool used has a role in motivating students to collaborate or not.
- The role of motivation in online collaboration was investigated by exploring the students' perceptions and observing them working. Therefore, it is recommended to have more empirical research to find out the role of motivation in online collaboration to improve the students' performance (in terms of grades).

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## Appendices

**The Group Interviews**

Dear Students,

You have been working in your English Continuous Assessment Rich Task (ECART) projects for three years now. However, this year you were involved in online projects using (AlshumoukhAshwaqPbworks). I have noticed that some of you were not so motivated to collaborate with their classmates and preferred to implement their projects individually. Since I am interested in understanding your points of views and how to address your interests, I appreciate your help by answering these two questions:

**1- Why are students reluctant to collaborate online using the class wiki?**

_____
_____
_____
_____

**2- Why do you collaborate effectively in the classroom while you don't do that online?**

_____
_____
_____
_____

**The questionnaire**

Dear Students,

You have been working in your English Continuous Assessment Rich Task (ECART) projects for three years now. However, this year you were involved in online projects using (AlshumoukhAshwaqPbworks). I have noticed that some of you were not so motivated to collaborate with their classmates and preferred to implement their projects individually. The purpose of this questionnaire is to explore your perceptions about the main factors that motivate or de-motivate you to collaborate online. Therefore, I appreciate your help by filling this questionnaire

| Areas | Statements | Strongly agree | Agree | Not sure | Disagree | Strongly disagree |
|---|---|---|---|---|---|---|
| Perceptions about collaboration online | I feel that collaboration is interesting if we select our team members. | | | | | |
| | I am willing to participate in online discussion if the topic is interesting. | | | | | |
| | I am willing to collaborate online if the teacher rewards me. | | | | | |
| | I am willing to collaborate online | | | | | |

| Areas | Statements | Strongly agree | Agree | Not sure | Disagree | Strongly disagree |
|---|---|---|---|---|---|---|
| | when the task is divided equally and each of us does her part. | | | | | |
| | I feel happy if my classmates help me in my project. | | | | | |
| | I feel happy if I help my friends. | | | | | |
| | I feel that is very beneficial for all of us to help each other at work. | | | | | |
| | Please write your suggestions to make online collaboration more interesting and beneficial form your point of views:<br>_____<br>_____ | | | | | |
| | _____<br>_____ | | | | | |
| Reasons for the reluctance for online collaboration. | Editing my work by one of my classmates makes me frustrated. | | | | | |
| | I don't like my classmates to read my writing because I don't want them to criticize me. | | | | | |
| | I don't want to work in groups to complete a project because some students are lazy and get marks for doing nothing. | | | | | |
| | Please write some other reasons that make students de-motivated to collaborate online:<br>_____<br>_____ | | | | | |

**Online Poll**

Dear students,
I appreciate your views and stances and I am ready to modify the activities that you do not enjoy according to your suggestions. We have already discussed collaboration online using the class wiki and decided some strategies that were approved by all of you. You have already mentioned your concerns and your motivators and we agreed on some specific strategies to address these concerns and make the online collaboration more interesting. Therefore, I want to you to respond to the following statement frankly:
**- I am willing to collaborate with my group members to complete our English continuous assessment project for this trimester.**
**a-Yes**
**b-No**

# Challenges of the Knowledge Based Economy in East Asia

Virachai Vongbunsin, John Walsh
Shinawatra University, Bangkok, Thailand
jcwalsh100@hotmail.com

**Abstract:** The knowledge-based economy (KBE) is widely considered to be the foundation of the next stage of economic growth, following agriculture, manufacturing and services. Countries seeking to enter the KBE must take care to ensure that their resources 'particularly human resources ' are willing and able to fulfil the roles requested of them. That in turn means that countries must be aware of what challenges and difficulties they will face in taking this next step in development. This paper attempts to outline at the macro-social level the issues involved in this process with a view to identifying an agenda of state-level developmental goals to be tackled.

**Keywords:** *Knowledge based economy, economic growth, East Asia*

## 1. Introduction

Inspired by the work of Hofstede (1980; 1984; 2010), attempts have been made to characterize states by aggregate constructs and relate these to social and economic development factors in those states. Khalil and Marouf (2015), for example, found the uncertainty avoidance, future orientation, institutional collectivism and performance orientation all exhibited positive influences on the ability of the state to be ready to embrace the knowledge-based economy (KBE). Cultural factors are not the only ones to have an influence on ability to embrace the KBE. Institutional factors within a country have been found to be relevant (Andrés, Asongu & Amavilah, 2015) and the competencies and agility of firms in taking advantage of innovations (Scuotto & Shukla, 2015; Gausdal, 2015). At a time of rapid regional integration, as witnessed by the initiation of new phases of the ASEAN Economic Community (AEC), the need for economies to open themselves to the benefits of the KBE becomes more imperative. Consequently, this paper seeks to evaluate the nature and scope of the KBE in the East Asian context and makes some assessments concerning how well countries are prepared for the challenges ahead. Definitions of the KBE are often difficult to pin down because they rely on an understanding of what knowledge is that has itself not been properly defined (Brinkley, 2006). This has led to a number of problems with comparing figures across countries or even across industries within the same country because of differences in definitions and practice. For example, according to the Thai government, the majority of activities taking place within the country's knowledge economy both by volume of activities and by value come from jewellery manufacturing by industry workers (Kenan Institute, 2009).

However, this understanding is quite different from the general understanding of what knowledge generation in work should be. Consequently, it is necessary to provide a definition of the knowledge-based economy (KBE) that is sufficiently broad as to be useful for outlining the different ways in which it should be managed. The concept of the importance of knowledge in the economy has been recognized for many years – Marx wrote about it, for example – but it was not until the middle of the twentieth-century that it started to become a focus of attention for those involved in studying organizations, particularly firms, and their role in the development of economies and societies. At this time, the knowledge was mainly considered to be a function of the composition to improve the quality of education of young people going in to the workforce. Some efforts were made to try to match the skills and competencies of the workplace entrants with what industry might require through the use of vocational schools and technical colleges. However, such efforts to match supply and demand for skills in East Asia have generally been unsatisfactory for several reasons:

- Lack of technical capacity and ability to provide the kinds of industry-specific skills required;
- Strong preference in society for a Confucian view of education for a young persona but takes the view that most prestigious type of education is university-based in a strictly hierarchical system of universities with preference for a comparatively small number of academic subjects;

- Labour market systems are set up to reward the level of qualifications individuals possess when they enter the workplace and receive annual incremental salary increases that maintain the differentials established at entry throughout the career of individuals.

As a result of these issues, labour market systems have been established in Japan and South Korea in particular in which, post-graduation, young people are integrated into the large companies on the understanding (sometimes contractual in nature) that they will work with those companies on an extended period of time, even to the extent of taking up lifetime employment. The reason for this is that it is accepted by the employer that the new entrant will have little actual value in the workplace at first but does have the potential to contribute over the long-term because they can learn both on-the-job and during their period of employment generally. Mincer (1962) observes of on-the-job training that it ranges from formally organized activities such as apprenticeships and other training programs to the formal processes of learning from experience. He went on to observe that, historically, nearly all skills have been learned on the job and the delayed entry into the workplace represented by lengthy secondary and tertiary levels of education are recent innovations which do not necessarily provide skills or knowledge that are directly transferable to the workplace.

It is clear, then, that this early conception of the importance of knowledge in economic activities depended on a static situation in which the principal issue was the worker's ability to complete the work allocated effectively. To become effective meant learning the use of the tools, systems and so forth that everybody else also used. This is a system that was well-suited to an economy in which demand exceeded supply and it was the role of factories to produce what goods they were able to produce at maximum output knowing there were customers ready to buy them and, if there should be some kind of failure and foods were left unsold, salespeople could be hired to solve the problem. However, in the contemporary world, this situation has changed significantly:

- In most consumer goods in particular, there is now an excess of supply over demand, meaning customers are unwilling to accept second or third preferences;
- Further, manufacturing technology has developed to the point that small batch processes can provide variations according to taste to customers willing to pay a premium for the service;
- This variation is further required because of the spread of international production and consumption around the world, meaning that more cultural and historical factors have to be incorporated into production decisions.

In this situation, it is evident that workers simply learning how to use tools to make a specific product are insufficient to the needs of a modern company. At the very least, they must be able and willing to adapt themselves to changing systems and the need to find ways to change production methods in short periods of time – the same is true of service sector activities as well as the manufacturing sector. The accelerated speed with which it is necessary to act – because of shortening product life cycles and the increased choice available to most consumers – make it more important than ever that workers understand their role and their ability to contribute to the company as a whole through improving the production process and matching it to customer demand. To do so, they must make use of two types of knowledge, explicit knowledge and tacit knowledge:

- Explicit knowledge: this is the type of knowledge that is externally expressed (written or digitized) and so available to anyone given access and usually organized in a rational and sequential process. It can cover theoretical issues where these are relevant;
- Tacit knowledge: this is the kind of knowledge that is not written down for some reason but has to be obtained by the individual through practical experience and relates theory to pragmatic observation. It relates theoretical issues to how they work in practice and they include all kinds of interpersonal details, relationships and histories that are never recorded officially (Nonaka & Takeuchi, 1995).

Since it takes time for employees to learn all this knowledge –even to find out what kind of knowledge it is necessary to learn – as well as to keep abreast of any changes, it is apparent that the longer the individual remains with a company, the more valuable that individual is to the company. Insofar as the individuals involved are aware of their enhanced value, they might expect to receive seniority-based salary increases. This is a situation that can be problematic in that it can make a small number of people apparently

irreplaceable and lead to bottlenecks in decision-making. Managing such situations is to some extent what justifies the high salaries that HR managers these days are able to command. This paper outlines the nature of the KBE in East Asia and considers topics such as the educational aspirations of East Asian students and their parents, the business schools and universities of the region in comparative perspective and the importance of intellectual property rights and the threat of intellectual piracy.

**What Is Information?** The nature and extent of information have increased enormously in recent years. Business information used to be confined to the presence and cost of various commodities and the people interested in buying or selling them. This was usually specialized information that would be expensive and kept secret where possible. Traders and commerce were regulated by the state, especially in the sinicized countries and networks competed with each other. People who lived in places of production had an incentive to attract more traders so as to increase demand and, hence, prices and this conflicted with the interests of the merchants. Business information of this sort became part of the tradable system. During the period of colonization, local knowledge started to become commodified on a large scale as newly arrived explorers and would-be traders sought new markets and the best way to reach them. The various attempts to find a southern passage to China via Burma or the River Mekong, for example, witnessed local people being grilled for knowledge and converted into guides to help in achieving business goals. In due course, all parts of colonized lands became important to be known, mapped and categorized both to facilitate control of those territories but also to convert them into taxable items. After the Japanese occupation of Taiwan, for example, the people were subjected to a range of censuses and surveys aimed at developing knowledge, understanding and control of the Japanese people (Yao, 2006:37-61). The purpose of this knowledge generation may initially have been bureaucratic-administrative in nature but soon the commercial applications became apparent. In the contemporary business world, it is very obvious that the creation of an accurate database of potential customers is a worthwhile commercial activity in its own right. As the number of personal computers and similar equipment has multiplied, people spend increasing amounts of time online and they provide all kinds of commercially-valuable information about themselves conveniently collected together for cultivation. People who register with a social networking site such as Hi5 or Facebook, for example, seem happy to reveal their birthdays, the people they consider their friends, their favorite music and movies and all kinds of information about their daily consumption decisions. This information represents a treasure trove for marketers and, indeed, for cyber criminals.

## 2. Data and Information

The ability to collect information and store it for lengthy periods has made it more important than ever to distinguish between information and what is actually only data. Data are points of information or observations that in themselves are of little or no value but which can be useful if processed and presented appropriately. For example, barcode technology makes it possible for shopkeepers automatically to record every occasion when an item is purchased at the same time. All of this data is recorded by the scanner attached to the cash register and placed in computer storage. In this state, it is data of no real value. However, if someone then analyses the data to find out that, for example, people are more likely to buy large sacks of rice at the weekend or that those who buy instant noodles are also likely to buy kimchi at the same time, then this becomes useful information that can be used to create successful point of sale promotions. Information, then, is data refined to a specific purpose. Usually, it would be expected that it must be people involved with the process of converting data into information but this need no longer be the case. Software programs exist which can be launched and which will semi-intelligently work their way through means of data searching for structures and patterns in a process known as 'data mining.' There are so many new batches of data being created every hour or every day that it is not feasible to imagine there being enough time to analyze it all. However, computing power has increased so much that it is possible to use machines and programs to lead the way with Knowledge Discovery in Databases (KDD) (Fayyad, Piatetsky-Shapiro & Smyth, 1996).

In some cases, curators of scientific databases have turned to citizen science to assist in the KDD: starting with the Search for Extra-Terrestrial Intelligence (SETI) located in California, datasets have been made freely available for members of the public to download and their computers run the relevant programs when they are not otherwise occupied. This model offers an opportunity for research institutes to obtain some data-mining support for their work, even if it appears that the ability to record new observations is matching the

increasing capacity to analyze them. The point is that the initial parameters set can be used to guide the way that data mining is conducted and results can be uploaded automatically during any period when the machine is idle but an active internet connection is available. The parameters can also be varied by a simple download and the user can select her own degree of involvement in any changes made. Of course, this is a similar model to that which is used by cyber criminals using viruses to turn users' machines into zombies delivering plague around the world. KDD has many applications in the business world, ranging from marketing to manufacturing to finance. In each case, large databases of observations are analyzed in the hope of identifying patterns of data which are non-random in nature and to which meaning can be attached. The difference between data-mining and KDD is the difference between the launching of the algorithm on the database and the set of processes necessary to define and collate the database and assess and deal with the findings. So, while data mining might be sufficient to identify matching sequences of numbers that might indicate credit card fraud, KDD is required to search for opportunities to improve manufacturing efficiency and possible quality improvements in an operational database.

One important area for KDD has become that of customer relationship management (CRM). Depending on the nature of the relationship between company and customer, a wide variety of data may be collected by the former on the latter. Some of that information might prove to be useful in improving the relationship between the two or else in terms of increasing potential sales. Salespeople will be familiar with the double diary technique: one diary is used in the normal way to record meetings and contact details, while the second diary is used to keep information about prospects (e.g. married, golf-player) which might be gleaned from a meeting and which can be used in any subsequent meeting to try to demonstrate an interest in the customer as an individual. This process can be computerized and can add automated telephone or SMS reminders about appointment, messages of thanks and the like.

**Business Information Systems:** Business Information Systems (BIS) are technological systems that enable managers to make the best use of the information they possess. They are related to other information systems that provide assistance to management in understanding the external environment and analyzing changes with a view to obtaining competitive advantage. Such systems include knowledge management systems, on-line analytical processing systems, decision-support systems and executive information systems (Thierauf, 2001). Knowledge management systems are means of collating and managing information available to an organisation, including such items as tacit knowledge used in production and information about customers and other important stakeholders. One aspect of a knowledge management system is the customer relationship management (CRM) approach, which aims to systematize and computerize as far as possible every form of interaction between the company and stakeholders and both make the relevant information available to employers involved in subsequent interactions and, also, to structure decisions about the stakeholder that might be made. CRM originated in the IT sector and was initially seen as a possible solution to the cost-saving desire for computerized sales force automation. However, it has subsequently been seen as a central plank of the strategically-minded marketing department and its role in driving shareholder value as a whole (Payne & Frow, 2005).

While CRM has proven to be useful in some sectors, the claims made for it have not always come true and there are many customers who have resisted the use of automated systems to sell additional items to the. It is necessary for marketers to appreciate the unprecedented and indeed previously unimaginable increase in the number of interactions that individuals now have with both automated systems and with commercial transactions. Research indicates the CRM improvements in business objectives tend to be relatively modest (Verhoef, 2003) and are difficult to sustain when human interactions are involved. Nevertheless, CRM has burgeoned into a flourishing industry and has many proponents and exponents. For example, Taiwan's largest baby and children's wear manufacturer, Les Enphants, was founded in Taipei in 1971 and now supplies not just shops but its own tourist factory, where interactive features enable children to discover the joy of designing and making clothes. The company also distributes a number of other internationally renowned child fashion brands (e.g. Oshkosh B'gosh, Armani Junior, Combi) and in retail spaces ensures that a number of CRM systems are convenient to record customer feedback, market trends and the nature of customer demand (Her, 2012).

On-line analytical processing systems (OLAP) are software tools that enable users to address multi-dimensional analytical questions. Business data are recorded from a variety of different perspectives: retail sales data, marketing and advertising support and effectiveness data, manufacturing productivity and costs and so forth. All of these sources of data are aggregated, since each one might singly or in combination with others provide insights of use to managers or researchers. OLAP tools can use either the totality of the data, the smallest level of data collection or some subset of the data specifically designed for interrogation of a particular problem. For example, researchers in Japan created a database ('warehouse') of various kinds of information recorded in different departments and institutions that could then be used to identify and match patient identity and care and medical conditions data (Akinobu et al., 2003). These advanced computations yield results that can then be viewed using a technology as straightforward as Microsoft Excel, which is important in that it broadens the number of managers capable of using and acting on the data analysis.

## 3. East Asia and Educational Aspirations

East Asia has, generally, long had an excellent reputation for the educational aptitude of its students, particularly those societies which have a strong Confucian tradition and in the more quantitative mathematical and scientific skills. To some extent, this results from the historical tradition of the imperial examinations system. In China and Vietnam, in particular, all boys were theoretically able to take the examination, which was based on memorising the classics of literature and history, calligraphy and other skills. Successful candidates, in an intensely competitive environment, could find themselves elevated into a high bureaucratic position and, further, their entire family could be elevated alongside them (Elman, 2000). The tradition of educational achievement has persisted into the modern age and has led to generations of parents placing pressure on their children to achieve the highest possible levels to enter the best schools and universities.

One of the principal purposes of the imperial examination system was the desire to introduce social mobility by offering talented young boys the opportunity to raise their families to a higher level. This also implied, of course, that some at least of those at the top level had to vacate their positions and move down, almost certainly involuntarily. That some degree of competition among East Asian students and their parents has continued to the present day and there are numerous stories in the public media concerning the lengths to which Japanese and Korean families will go to try to get their children into prestigious schools. The hyper-competitiveness of the Chinese parents entering a world in which such competition is becoming a lifelong phenomenon has even reached the point of self-parody. Chinese-American mother Amy Chua, for example, provided an extensive account of her relationship with her daughters and how she tried to regulate every waking moment of their lives so as to make them the most potent, high achievers possible (Chua, 2011).

The high level of competitiveness has contributed to some very high standards in East Asian schools in which, most commonly, middle and upper class children have been admitted. These standards are generally higher in subjects such as science and mathematics which focus on quantitative skills and which are generally considered to be more prestigious in the region and, hence, lead to better careers. Numerous studies have been conducted to try to identify some kind of essentialist factors which distinguish between children of different ethnicities. Irrespective of these studies, the preference for a small range of specific skills has led to some structural problems in East Asian labour markets. Notable among these problems is the concentration of much of the best talent into a very narrow range of activities in which the most talented graduates are concentrated in those activities for which there may not be a great deal of market demand but there will, nevertheless, be an expectation that high salaries and prestige will accompany them. As a result, other career options will be less-well regarded and will attract, in general, people of less talent. In countries which have a formal labour market plan that includes powerful incentives to match supply and demand in the market place, some of these structural problems can be addressed. However, most East Asian states do not have formal labour market plans of this kind.

An additional feature of the importance with which education is treated in East Asia is the extent to which opportunities are provided for investment and business. The English language market across the region is enormous and provides opportunities for teachers (formally trained or not), textbook publishers, language school entrepreneurs and providers of technical education in fields not yet widely covered in the region.

While East Asian states import large amounts of education services from western nations (including the export of throngs of students for overseas education), sometimes the process is reversed. Thailand has, for example, successfully exported therapeutic massage, meditation and cookery lessons, while many people have found it desirable to try to learn to be a sushi chef or martial art exponent.

**The Importance of Learning and Education:** A recent study by the World Bank (2012) found that, despite impressive gains having already being made; higher education could be making additional contributions to economic growth in East Asia. The report went on to describe five 'disconnects' that are acting as constraints to further growth:

- a gap between education institutions and the skill needs of employers;
- a weak research and technology nexus between higher education institutions and companies;
- a separation between teaching and research institutions (or more generally teaching and research functions);
- a disconnect between higher education institutions themselves and between these providers and training providers;
- A separation between higher education institutions and earlier education institutions (schools) (*ibid: 2*).

A number of these problems have resulted from, at least in part, the distortions in the labour market caused by cultural and prestige factors as mentioned above. To some extent, market incentives alone will be sufficient to encourage students to move to the newer fields that will accommodate them better, although this process would be more effective with government or social support. For example, the Korean government made strong and coherent efforts to support the computer games industry (particularly the online sector) after it recognised that this would be a strategically importance industrial sector of the future. Such support included:

- coherent and well-resourced institutional support for the industry, responsibility for setting legislation, monitoring companies and providing training and resources for the private sector as needed;
- establishing career paths for graduates wishing to pursue games programming and design to move smoothly from educational institutes to the private sector;
- Raising the status of computer games within society by helping organise and support a competitive league of teams in specific games and ensuring extensive and positive media coverage (Walsh & Techavimol, 2009).

This regime of support included the essential areas of good policies, education and social solidarity. Providing support in all three of these areas is one of the best ways for government to try to enact industrial policy of this sort.

**Business Schools and Learning:** One of the principal means of spreading international best practice in the business world is the business school. The number and quality of business schools in East Asia has increased enormously over the past 40 years and there appears to be an almost inexhaustible demand for acquiring business based degrees at both undergraduate and graduate levels. This may be attributed to some extent to the propensity for education in the region as a whole and the recognition of business as a means of finding better income opportunities in the future. Yet the trend seems to go beyond this, since bookstores are full of business self-help volumes of one sort or another and, even in societies in which reading is little appreciated, people may be found on public transportation consulting those books in different formats. Many East Asian languages do not have a word for 'reading' that is separate from 'studying' and this indicates the lack of the concept of reading for pleasure and also perhaps explains the comparatively low levels of popular fiction in many parts of the region. Since people read for self-advancement or self-improvement, any reading material should be virtuous such as Buddhist meditation or business sense development.

Analysis of the personnel of boards of listed companies in East Asia reveals that the majority of people have at least some international exposure and, very often, experience of business education in an international context (Walsh & Sentell, 2008). This factor reduces the culturally-specific nature of any particular

organization as it has the tendency to migrate towards international best practice. This has been made possible by the fact that business schools themselves now have the opportunity to teach international standard business education because the curriculum and teaching styles have effectively become globalised. Although there are of course some variations in quality and level of educational support, it is reasonable to suppose that a reputable business school anywhere in East Asia is providing a very similar level of knowledge and understanding to what might be available at the most expensive and prestigious universities in Western Europe and the USA.

**World's Best Universities: Asia:** The *US News* World's Best Universities Rankings based on the QS World University Rankings, available at: http://www.usnews.com/education/worlds-best-universities-rankings/best-universities-in-asia (2012).

**Table 1: World's Best Universities, Asian Region**

| Position | Name | Country | Score (max 100) | Worldwide Position |
|---|---|---|---|---|
| 1 | Hong Kong University of Science and Technology | Hong Kong | 100 | 40 |
| 2 | University of Hong Kong | Hong Kong | 99.8 | 22 |
| 3 | National University of Singapore | Singapore | 99.3 | 28 |
| 4 | University of Tokyo | Japan | 97.4 | 25 |
| 5 | Chinese University of Hong Kong | Hong Kong | 97.2 | 37 |
| 6 | Seoul National University | Korea | 96.9 | 42 |
| 7 | Kyoto University | Japan | 96.3 | 32 |
| 8 | Osaka University | Japan | 96.1 | 45 |
| 9= | Tohoku University | Japan | 94.3 | 70 |
| 9= | Tokyo Institute of Technology | Japan | 94.3 | 57 |
| 11 | Korea Advanced Institute of Science and Technology | Korea | 94.2 | 90 |
| 12 | Pohang University of Science and Technology | Korea | 93.6 | 98 |
| 13 | Peking University | China | 93.3 | 46 |
| 14 | Nagoya University | Japan | 92.8 | 80 |
| 15 | City University of Hong Kong | Hong Kong | 91.2 | 110 |

Source: based on the QS World University Rankings (2012), available at: http://www.usnews.com/education/worlds-best-universities-rankings/best-universities-in-asia
Source: above

**Table 2: Number of Universities in the Top 100 by Country**

| Position | Country | Number of Universities |
|---|---|---|
| **1** | Japan | 26 |
| **2** | Korea | 16 |
| **3** | China | 14 |
| **4** | Taiwan | 11 |
| **5** | India | 8 |
| **6** | Hong Kong | 6 |
| **7=** | Malaysia | 5 |
| **7=** | Thailand | 5 |
| **9** | Indonesia | 4 |
| **10=** | Philippines | 2 |
| **10=** | Singapore | 2 |
| **12** | Pakistan | 1 |

It might be noted that lists of best universities are notoriously controversial and, it may be argued, unreliable because there are so many different ways n which measurement may be tackled: quality of teaching, research output, grants attracted, service to the community and so forth. There are also problems related to unevenness within the universities concerned – some schools or departments might be ranked completely

differently from other departments in the same university. In some cases, the quality of students graduating from a university or college might depend to a considerable extent on the ability of the institution to attract high-quality students to enlist there. In other words, lists of best universities should be considered with some caution and possibly a grain of salt.

**The Smart City:** A smart city is one which integrates the different systems necessary for an urban settlement to have zero carbon dioxide emissions while still maintaining a high level quality of life. Organizing all the different systems involved is quite complex and it would be more convenient, at the present, to create new settlements rather than reconfigure existing ones. However, this is not always possible and it is in any case a necessary step for progress to be made and it is one that is being taken in the Japanese city of Kitakyushu. The city as a whole consists of more than one million people located in the southern prefecture of Fukuoka, where one of the principal employers is Nippon Steel. As part of its regular methods of production, the steel industry produces some 500 million cubic metres of hydrogen gas annually as a by-product. Using this gas for generating heat within households is one of the principal energy management strategies to be employed in Kitakyushu. Japan, in common with the rest of North-East Asia, lacks access to its own resources of oil and gas and must import them from the Middle east and elsewhere, which is both expensive and energy inefficient. One important alternative which has been employed in the country, nuclear energy, is always controversial in Japan, which is the only country in the world to have been attacked with atomic weapons. That level of controversy multiplied in the wake of the March 2011 earthquake and tsunami, which led to a major incident with one of the three reactors of the Fukushima nuclear power plant. The long-term health implications of this disaster have still not become clear but the urgency with which alternative sources of energy are being sought has become more evident. In the case of Kitakyushu, therefore, that alternative will chiefly be hydrogen and recharging stations are being located throughout the area. This will fuel homes and also cars, since modern cars can now travel up to 600 km on the basis of ten minutes of charging.

Householders will also be encouraged to use solar panels for roof-top use and these, if the problem of the initial expense can be resolved, will feed into a sophisticated system in which low energy-usage eco-houses will draw power from the grid to supplement hydrogen and solar energy according to a flexible pricing structure depending on variable demand throughout the day. Additional utilities treated to the smart approach include water provision and waste disposal. The aim for water treatment is to make used water into potable water through the use of membrane bioreactors, ultra-filtration membrane systems and reverse osmosis. These technologies have successfully produced clean water from water used by industry and seaweed, although regulations currently prevent it from being used for drinking purposes. Waste treatment features extensive use of recycling to the extent that cars are now broken down completely, with considerable disassembly or previously assembled components and crushing of the remainder into a 600 kg cube which is them sent to a smelting plant for reuse. Kitakyushu has also become a centre for a cluster of industries working with smart technologies. They have together helped to create a model which is being applied to dozens of other sites in Japan and certain technologies, especially the water cleaning treatments, has been profitably exported to the Middle East and elsewhere. For an individual country, therefore, the creation of a smart city can be of value not just for the benefit of elevated standards of living for its citizens and the overall environmental impact but also for the financial compensations that might be received. Eventually, of course, profitability from exporting will decline because existing technology will mature and be diffused around the world. That will require a continuous effort in R&D and suitable investment in public and private sector institutions (Thapanachai, 2012).

## 4. Intellectual Property Rights and TRIPS

The World Trade Organization (WTO) defines intellectual property rights (IPR) as: “Intellectual property rights are the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time (WTO, 2011).” It goes on to say that IPR are usually divided into two areas, which are copyright related issues and industrial issues. Copyright issues deal with the rights of producers of intellectual content (e.g. songs, books and videos) or of performers or broadcasters of those works to protection from other people using that content without express permission and, if necessary, paying an appropriate fee. The purpose of this form of IPR is said to be “to encourage and reward creative work.” This is rather a new concept, since historically people had been

free to use intellectual creations in whichever way they saw fit in their own productions. Shakespeare, for example, happily drew upon ideas and stories that had been created by others in their own productions. This was considered standard practice and part of a great tradition of intellectual creativity. Stories, once created, were released into the world and became clay for others to work upon as they see fit. Poets and artists relied upon the artistic and aesthetic sensibility of patrons and audience members to be able to discern between what is good and what is bad and to reward the purveyors of the former appropriately. This situation changed with the technological changes of the twentieth century, which made it possible for electronic transmission or recording of intellectual productions to be made and to be broadcast for profit by intermediaries. When money became involved, as is generally the case, the question of how profits should be divided became important. In the case of the recorded music industry, the recording artists themselves were principally represented by the record labels, that is, the corporations who pay a fee (usually on a multi-product exclusive contract basis with the artistes) for intellectual products, ownership of the recorded instance of which is transferred to that company. This usually involved a revenue-sharing scheme, with the relative strength and power of label and artiste determining the relative proportions of the division of revenue.

The recording industry has responded over the years to a series of apparent threats with an attempt to have the challenging behaviour criminalised and to lobby for the law to be used to prosecute supposed miscreants. This has ranged from the use of tape recorders to record music from the radio to the use of peer-to-peer file sharing internet services. In each case, the argument used was that people who were able to obtain the product for 'free' would not buy it in the normal way and, hence, the recording industry would be wrongly deprived of its proper revenue. Further, this would not have just an impact on bottom line profitability but would also negatively impact upon the willingness of the company to invest in future products by researching, developing and promoting new generations of artistes. In some cases, the recording industry has been able to enlist various artistes to support its stance and to try to persuade people that the home copying process was not just illegal but also immoral and personally damaging to the artistes involved. It has not just been the recording industry that has been involved, although it has been prominent in the campaign. In addition, producers of books, television programs, feature films, video games and software any other intellectual content that may be transmitted via the internet or a less advanced but illicit distribution channel. The principal means by which IPR are administered in international trade are provided by the WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights, which is commonly known by the acronym TRIPS. This agreement concerns protection of IPR in commercial production as it is expressed in a variety of formats. Information in the following section is drawn from WTO (2012).

**Copyright:** this is the right of an author or creator of some form of IP to have the exclusive use of that property and for any reference to it by another person or organization to cite the owner properly and, in some cases, pay any license fees for the temporary use of the property. When Bill Clinton's autobiography and the Harry Potter novels were due to be published, reports emerged that faked versions had already been published in China, which would be a clear case of copyright violation. Copyright also includes related rights to the performance or enactment of the IP concerned. Owners of IP have the exclusive right to perform or reproduce those productions for gain – it is genuinely considered acceptable for people to sing other people's songs at home or even in public, although the situation may be different if money changes hands as a result.

**Trademarks:** a trademark is any combination of graphics and text used to indicate a specific product, service, brand or organization which represents a form of IP. Some trademarks are obvious and well-known, for example Toyota and Honda vehicles are immediately recognizable. Others are less well-known and may be subject to geographic limitation: the picture of a smiling fish, for example, is well-known in Thailand as the brand of a range of snack goods. However, it is not recognized outside of the country. In recent years, a number of local competitors have tried to obtain benefits by association with famous international brands by creating 'MacBurgers,' 'Donald's Burgers' and so forth. However, this phenomenon has largely burned itself out as consumers have become more familiar with the genuine products and are less likely to accept substandard substitutes. Brand owners themselves have also been active in placing pressure on host governments to end such unfair competition.

**Geographical indications:** some products are so closely associated with particular geographic regions that people will be prepared to pay a premium for what is considered to be the original and authentic version. These geographical indications might be quite vague in nature – e.g. Hokkaido scallops or Thai durian – while others may be specific and deliberately caused. In any case, this indicator is now considered to be an important part of IP and it is illegal to claim such an association when one does not exist.

**Industrial designs:** industrial design involves the use of artistic techniques and engineering skill to create products which may be not just aesthetically pleasing and easy-to-use but also distinctive of a particular company. Much of the litigation between rival mobile (cell) telephone producers in recent years has focused on the extent to which designed features of a device – the position and shape of buttons, the means of interacting with the screen and so on – may actually be considered to be IP-protected industrial design elements.

**Patents:** a patent is a form of IP that marks the inventor or creator of a product or process or some other definable form of information. Patents are licensed in specific territories for specific periods of time and protection is accorded by the law in return for public disclosure of the IP concerned – after the patent elapses, therefore, anyone can use the previously patented information in their own products. The number of patents registered by people in particular countries is considered to be an important indicator of the KBE.

**Layout-designs of integrated circuits:** miniaturization of computer equipment has revolutionized consumer electronic goods and the computational power of such items has progressed to the extent that it is now considered feasible for mobile telephones to be used in space as machines to control satellites, collect data and provide useful communication media (Amos, 2011). Critical factors of size and weight to sophistication in such devices can rely upon the architecture of integrated circuits and so it has been determined to be a form of IP that should be protected.

**Undisclosed information:** the extent to which commercial organizations have been able to influence legal systems for their own benefit is perhaps indicated by the fact that large amounts of undisclosed information, including test data and trade secrets (i.e. nearly everything that a company does behind the scenes) have now been declared to be protectable IP. Given that larger companies have more resources both to claim protection of their own information and to try to prosecute anyone they might consider to be misusing it, it is clear that IPR can be used to create barriers to entry in an industry and to prevent new entrants gaining a foothold. It might be noted that most of these issues are very detailed and complex and offer a great deal of highly-paid work for corporate lawyers qualified to practice in the area: for those people with an interest in this subject, this could represent a lucrative career opportunity. The type and extent of competitive advantage that a firm can obtain, whether on a temporary or sustainable basis, has increased significantly as firms have come to understood better the possibilities offered by different forms of business model. As these possibilities have emerged, it is perhaps not surprising that firms have sought to protect their own innovations and processes so as to help preserve their advantage in what might be a very competitive market environment. This may be understandable but it is certainly a change from the past since most rapidly growing East Asian states achieved much of their success by following western countries in ignoring IPR completely and undertaking patent piracy, reverse engineering and similar techniques (Chang, 2002). TRIPS are administered by the World Trade Organization and members which have accepted the agreement are listed as follows.

The TRIPS agreement contains three major areas: the definition of standards on an international basis; the enforcement of IPR protection measures within particular countries and the mechanisms of dispute resolution when agreement cannot be reached between parties. The principle followed in creating and enforcing rules is to provide the minimum that can be agreed upon by all members, with the freedom provided to individual members to add extra measures if they so desire. Experience and observation of international relations demonstrates that, in cases in which countries deal directly with each other, asymmetries of power come into play making sure that large countries (e.g. the USA or China) are generally able to enforce their will on the smaller powers involved.
However, this has not always occurred and there are examples in which solidarity among smaller powers together with support from the public in developed countries to place pressure effectively on IPR holders. This happened in the case of generic medicines: that is, medicines produced locally that replicate the effects

of foreign, branded medicine through parallel production or reverse engineering techniques. When the TRIPS legislation was introduced following the Uruguay Round the tariff reductions in 1995 by the predecessor to the WTO, people in developing countries were suddenly faced with massive increases in the costs of the drugs on which they relied to survive. For example, people receiving drugs for HIV/AIDS found the cost of drugs they needed rising from US$150 per year to US$10,000 per year. Such a rise represented a death sentence for those affected – and people with a wide range of medical conditions at a less severe level were also forced into similar circumstances. And yet, as Nobel Prize winning economist Joseph Stiglitz has observed, IP varies from other types of property in that there is no cost attached to allowing another person to use it. Economists speak of zero marginal costs or non-rivalrous consumption, while former president of the USA Bill Clinton observed that using one candle to light another does not diminish the light of the first (Stiglitz, 2006).

**Table 3: Nation Members of the Trade Related Intellectual Property in Services (TRIPS)**

| Country | Date of Accession | Country | Date of Accession | Country | Date of Accession | Country | Date of Accession |
|---|---|---|---|---|---|---|---|
| United States | (17 December 2005) | Singapore | 28 September 2007 | Morocco | 2 December 2008 | Former Yugoslav Republic of Macedonia | 16 March 2010 |
| Switzerland | 13 September 2006 | Hong Kong, China | 27 November 2007 | Albania | 28 January 2009 | Uganda | 12 July 2010 |
| El Salvador | 19 September 2006 | China | 28 November 2007 | Macau, China | 16 June 2009 | Mongolia | 17 September 2010 |
| Rep. of Korea | 24 January 2007 | European Union | 30 November 2007 | Canada | 16 June 2009 | Croatia | 6 December 2010 |
| Norway | 5 February 2007 | Mauritius | 16 April 2008 | Bahrain | 4 August 2009 | Senegal | 18 January 2011 |
| India | (26 March 2007) | Egypt | 18 April 2008 | Colombia | 7 August 2009 | Bangladesh | 15 March 2011 |
| Philippines | 30 March 2007 | Mexico | 23 May 2008 | Zambia | 10 August 2009 | Argentina | 20 October 2011 |
| Israel | 10 August 2007 | Jordan | 6 August 2008 | Nicaragua | 25 January 2010 | Indonesia | 20 October 2011 |
| Japan | 31 August 2007 | Brazil | 13 November 2008 | Pakistan | 8 February 2010 | New Zealand | 21 October 2011 |
| Australia | 12 September 2007 | | | | | | |

Source: WTO, "Members accepting amendment of the TRIPS Agreement," (2011) available online at: http://www.wto.org/english/tratop_e/trips_e/amendment_e.htm.

Further, control of IPR in an industry such as medicine represents a monopoly which, whether the monopoly power is applied benevolently or malevolently, nevertheless represents a measure of economic inefficiency. In other words, it does not cost anything to pharmaceutical companies to permit the creation and distribution of generic medicines, although it might mean the loss of some unearned income although not, of course, very much because the demand for branded medicine in developing countries is very low. It is also the case that most pharmaceutical companies spend a great deal of their budgets on marketing and advertising rather than scientific research and that most of the profits that they have made have derived from inventions made some decades previously; few companies seem to be inventing important new breakthrough products these days and the cash cows on which they have relied are approaching the end of their protected IPR periods. Since many pharmaceutical companies have also benefited from the effective subsidization of their research by public sector support of universities, it is evident that they are vulnerable to some pressure by governments who can threaten them with the reduction or removal of some of those subsidies. As a result of these factors, diplomatic pressure from the civil society and developing sector governments led, after often fierce rearguard action from the pharmaceutical companies (Glasgow, 2001-2), to an agreement permitting the production of generic medicines under some conditions.

**Intellectual Piracy:** Intellectual piracy is the process of stealing intellectual property in a direct or indirect manner for the purpose of obtaining financial benefit. This involves such actions as duplicating copyrighted items for illegal sale, reverse engineering, incorporating copyrighted material into supposedly original productions, infringing upon registered trade dress or patented material, trading in an assumed name or any other form of acquiring benefit from IP that belongs to another. It is widely believed that, without proper IP

protection, there will be widespread copying of that IP and this will lead in the short-term to loss of revenue for owners of the IPR and, in the long-run, much reduced investment in the industry concerned because companies will have a negative incentive to invest in R&D and brand development. As a result, companies involved in the production and distribution of movies, music, books and similar forms of cultural production have generally been keen to enforce IPR around the world and warn that failure to protect them will lead to the collapse of the industry in which they are active. However, it is not entirely clear that such negative effects would actually occur. In the case of the fashion industry, for example, it has been argued that despite the weak IPR regimes available worldwide and the resultant rampant copying and imitation, investment and innovation in the industry remains at a high rate and there is a constant stream of fresh talent willing to break into the sector (Raustiala & Sprigman, 2006). This rather suggests that the KBE contains a number of industrial sectors which are not dominated by rational, microeconomic decisions but instead contain people wishing to demonstrate their creativity and their desire to participate in an activity for which they have some passion. However, it is necessary to consider the possibility of malicious attacks in cyberspace aimed at a variety of targets, since these have become increasingly prominent part of life and have tended to affect small businesses as much as or more so than individuals.

**Implications:** As economies follow each other along a trajectory of development that generally moves from agriculture to manufacturing to services and then to knowledge or information, it is evident that it becomes possible for followers to learn from the challenges faced by leaders and the ways that they have sought to overcome them. This implies, therefore, that the followers have taken steps to ensure they are able to benefit from research exploring previous challenges. An openness of the mind, at the national level, is required but it is difficult to put much credence on whether these are available among many of the autocrats that have come to power in various states. A second implication is that it is possible to predict what kinds of skills and competencies that will be required from individuals entering the labour market and, also, those SMEs which will help to facilitate the growth of the KBE. If it is possible to predict, then it is also possible to plan for the future. At various levels of government, therefore, planning units should be seeking to create educational, vocational educational and business development service strategies that are coherent, consistent and properly integrated across all relevant units. In general, such plans are more likely to produce positive outcomes if they seek to motivate individuals concerned through incentives rather than trying to dragoon them into undesired states.

Third, in terms of workplace relations, there is always a temptation for government to yield to corporate interests in enforcing so-called labour reforms aimed at reducing or removing hard-fought protections for workers and employees in terms of job security, freedom of association and right to collective bargaining (these rights are, of course, only available to a limited extent in the East Asia region). Yielding to these temptations will provide some limited short-term increases in profitability but, subsequently, atomization and alienation among the workforce that acts to stifle creativity and quality of service (Huws, 2015). Instead, governments will ultimately be rewarded in terms of social and economic development if they focus on cultivating social solidarity and eliminating the culture of impunity that disfigures various East Asian states. Finally, in an age of globalization which, since the Crisis of Austerity has appeared to be so much less than desirable to millions of people, there is a need to pay attention to those cultural values deemed helpful in terms of embracing the KBE and consider how these might be fostered. In some cases, changes to the regulatory framework might help this come about but it is rather more likely that improvements in the societal and educational realms will bear more fruit.

## 5. Conclusion

It is evident from the preceding analysis that states need to act in a variety of ways in order to prepare their people for the forthcoming KBE. Close coordination between the labour market, the educational system and any mechanisms put into place to promote innovation will be required. It is helpful, in this context, that most East Asian states maintain a basis of approbation for the educational system generally through Confucian and neo-Confucian cultural roots. There is also the confirmed willingness of some states (e.g. Korea and Singapore) to make their societies highly connected through online services of a high order. However, there remain difficulties with restrictions on freedom of expression and, consequently, the trust it is necessary to put on the people so as to enable them to be sufficiently creative and innovative as the KBE will require.

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# Culture & Retail SST: Case of Hypermarkets in Jakarta

B. Balaji, Deblina Saha Vashishta
R & D Centre, Bharathiar University
Imperial College of Business Studies, Bangalore, India
prof.bbalaji@gmail.com

**Abstract:** Developing economies like Indonesia are enticing global retailers with an attractive and expanding middle class, and a steadily growing economy. Dynamic changes in retailing across the globe have fostered technological advancements in organised retail. The entire retail experience is now leaning on revolutionary technology. But are all countries world-wide ready to accept this change? The Asian continent is held by strong cultural dimensions like team work, materialistic nature and risk-aversion tendency. Adoption of self-efficacy and acceptance of innovations in technology has a bearing on shopping experiences as compared to dependence on humans. This research paper explores the insights for the same in the Indonesian capital city of Jakarta.

**Keywords**: *Cultural, Customer Satisfaction, Retail SST, Technology Revolution*

## 1. Introduction

Countries are increasingly being shaped by citizens' mental stimulus and programming (Hofstede, 1991). A nation's culture in turn depends on a core set of values. Culture varies across countries and close insights into such culture and core values have a huge bearing on survival and growth markets. The diversity of the self-service technology along with other technological innovations has taken the consumption process to another level altogether. There has been a paradigm shift in retailer's perspective from multichannel business to international expansion. This transformation in the business perspective has been primarily fuelled by increasing options for retailer-consumer interactions. Online purchasing is rising even in developing markets. Growth in e-commerce and mobile commerce is replacing brick and mortar retail in nearly every market. The concept of consumer behaviour is holistic as it is the resultant of culture, values, beliefs and social relationships. Usage of technology or active participation in the technology revolution has also been affected by the cultural factor (Lee et al., 2010) and as a result, SST seems to have negligent success in retail scenario (Dabholkar et al., 2003).

## 2. Literature Review

**Consumer Behaviour in relation to Culture and its Dimensions:** Collective programming of the mind is what distinguishes different categories or groups of people Hofstede (2001). Culture comprises a set of meaningful symbols, ideas or values that help in communication, interpretation and evaluation by society. The rapid adoption of globalization is assumed to facilitate a borderless world. The reality is otherwise as cultural factors influence many aspects of consumers' buying behaviour. The term "Glocalisation" has come into existence and is definitely reaching vast expanses duly taking care of the local culture (Maheswaran and Sharon, 2000). The consumer is sometimes sceptical about new technology and this is influenced by cultural background. Store loyalty in foreign markets can only be achieved when a positive environment (ambience) is facilitated (Chang and Tu, 2005). Zhang et al. (2008) perused several service-related journals and analysed the issues related to customer service under mixed cultural scenarios. Hofstede (1980) undertook path breaking work on the dimensions of culture and proposed a framework which highlighted collectivism, uncertainty avoidance, femininity, individualism, masculinity, and power of distance

Individualism and uncertainty avoidance play a vital role in consumers' technology adoption (Lim et al., 2004). Individualism is described by a tendency to have concern for oneself and close family with lesser concern for others. People are able to express their opinions and act in a manner oriented to such thoughts. This gives an impetus for people to be open to new concepts and ideas thereby encouraging innovation (Erumban and de Jong, 2006). People have their own reasons for pursuing certain actions and tend to be creative at times. Collectivism, in contrast, encompasses strongly bonded groups with high commitment.

People in such cultures adhere to the rules and procedures laid down by the group (Erumban and de Jong, 2006). Uncertainty avoidance is not uniform amongst countries. Uncertainty avoidance is dependent on society members' orientation towards the unknown and uninitiated. The level of uncertainty and ambiguity in society has a relation to uncertainty avoidance (Hofstede, 1980). The ability to accept new kinds of products is affected in a negative way by uncertainty avoidance (Yeniyurt and Townsend, 2003).

**Self-Service Technology (SST):** Only a few studies had taken into account the usage of SST in retail (Weijter et al., 2007). There seems to be negligible focus on the level of consumer satisfaction and its consequence on behavioural intentions of consumers in the future (Chen et al., 2009). Retail SST is characterized by the use of ICT instead of service personnel. Information systems are being continuously updated and adapted to changing needs and e-commerce in retail has also been witnessing a new era. An era where customers themselves are performing the role of service personnel (Meuter et al., 2000). There is a plethora of options under Self-service technologies and they comprise Automated Interactive Voice Response, Automated Bank Teller Machines, and services on the World Wide Web. This phenomenon has gradually become popular in the retail service escape too. Customers can scan the barcode on their purchased items themselves while checkout (exiting the store). This makes checkout clerks redundant (Schliewe and Pezoldt, 2010). The use of such self-help options has not only reduced the manpower requirements but also associated operational costs. SSTs provide advantages in terms of speed, accuracy, and economy.

**Indonesia Cultural milieu:** Indonesia, being an Asian country, is defined by cultural dimensions which exhibit a low level of masculinity, a practice of collectivism, and the population prefer low to medium levels of avoiding uncertainty. Indonesians exhibit low masculinity when compared with some other Asian country inhabitants. Status and success are more important than materialism in Indonesia. The status held by a person is of paramount importance and the concept is called "gengsi" (outward appearances). "Gengsi" needs to be strongly maintained in order to create an aura of status. There is a strong preference toward separation of two entities: the internal and external. People are expected to practise harmony at the workplace thereby fostering good relationships. People generally desist from transmitting bad or negative news or feedback. The consensus perception of groups would determine if innovations in retail are adopted given the fact that social sensitivity is high and valued.

**Hypermarket Scenario:** A hypermarket is a big box store which combines the attributes of a supermarket and a department store. It is usually bigger when compared with a supermarket. The typical layout of a hypermarket would be in the range of 1.5 lakh to 3 lakh square feet. Indonesia's organised retail sector has great scope and prospects in the hypermarket sector. There is growing popularity for hypermarkets since they made their entry into the new millennium. Their contribution to the sector has risen to forty percent since the year 2003. The leader in terms of maximum market share is Carrefour. Matahari's outlets numbering 52 and Hero's Giant follow.

## 3. Methodology

The current research was necessitated to analyse the impact of cultural dimensions on SST in hypermarkets of Jakarta. The three main brands of hypermarkets in Jakarta, namely, Carrefour, Lotte Mart and Giant Hero were studied. The research instrument for the survey was adapted from the version propagated by Schliewe and Pezoldt (2010). The instrument was suitably reframed to make it relevant in the context of cultural dimensions proposed by Hofstede's (2001). It is significant to mention here that Hofstede's measurement scale has been validated in numerous studies associated with culture. The measurement scale comprised 4-points wherein the lowest agreement level was indicated by 'strong disagreement' while the highest agreement level was indicated by 'strong agreement' with the given statement. The measurement instrument had four constructs, namely, Collectivism, Uncertainty Avoidance, Masculinity, and SST Acceptance. 436 Indonesian consumers were surveyed at Jakarta during. Proportionate Stratified Sampling was employed. The research instrument was found to exhibit high reliability as the Cronbach alpha was 0.816, greater than the acceptable value of 0.7 (Nunally, 1978). Hypotheses that were formulated were:
$H_1$: Culture has a significant influence on SST acceptance in hypermarkets.
$H_{1a}$: Degree of collectivism has a significant influence on SST acceptance for Indonesian hypermarket consumers.

$H_{1b}$: Uncertainty avoidance has a significant influence on SST acceptance for Indonesian hypermarket consumers.
$H_{1c}$: Masculinity has a significant influence on SST acceptance for Indonesian hypermarket consumers.

The content validity of the questionnaire was checked with the help of five experts in the area and through pilot testing of around 50 hypermarket consumers. Required modifications were made to add or delete some statements as per experts' recommendations and advice. Multiple regressions, a statistical technique, were employed to ascertain the significant influence of culture on SST acceptance. Initial and preliminary analysis was done to check on the assumptions required for hierarchical multiple regression. The assumptions are normality, linearity and homoscedasticity. Multicollinearity was ruled out as all the correlations were poor.

## 4. Analysis

The Indonesian sample had the following characteristics: 42% of the respondents were male while 58% were female. 53% used SST for bill payment while 31% used SST for online shopping. 48% were working professionals followed by students. 38% were adults between 21 and 30 years while a similar number were between 31 and 40 years. The results of hierarchical multiple regression analysis using the enter method was used to ascertain the influence of culture dimensions (collectivism, uncertainty avoidance, and masculinity) on SST acceptance are summarised Table 1.

**Table 1: Model Summary**

| | | | | | Change Statistics | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | 0.532[a] | 0.269 | 0.262 | 7.15678 | 0.265 | 36.152 | 2 | 289 | 0.000 |
| 2 | 0.621[b] | 0.368 | 0.362 | 6.68195 | 0.104 | 47.075 | 1 | 288 | 0.000 |

a. Predictors: (Constant), Collectivism, Uncertainty Avoidance
b. Predictors: (Constant), Collectivism, Uncertainty Avoidance, Masculinity
c. Dependent Variable: SST Acceptance

Model 1 is significant with F(2, 289) = 36.15; p<0.001 indicating 26.9% variance in SST acceptance, which is indicated in Table 1. The overall model significance (including all the independent variables) is evident from the ANOVA table (Table 2), with F(3, 288) = 42.63; p<0.001.

**Table 2: ANOVA**

| Model | Sum of Squares | Df | Mean Square | F value | p value |
|---|---|---|---|---|---|
| 1 Regression | 5689.569 | 2 | 1733.26 | 36.152 | 0.000[a] |
| Residual | 15412.742 | 289 | 48.219 | | |
| Total | 21102.311 | 291 | | | |
| 2 Regression | 7354.365 | 3 | 1765.48 | 42.632 | 0.000[b] |
| Residual | 12756.865 | 288 | 41.754 | | |
| Total | 20111.23 | 291` | | | |

a. Predictors: (Constant), Collectivism, Uncertainty Avoidance
b. Predictors: (Constant), Collectivism, Uncertainty Avoidance, Masculinity
c. Dependent Variable: SST Acceptance

The hierarchical multiple regressions have been performed in two stages. In the first stage only two predictors were entered (Collectivism and Uncertainty Avoidance) and the model has been found to be significant with F (2, 289) = 36.15; p<0.001 indicating 26.9% variance in SST acceptance. In the second step,

Masculinity was also entered and the whole model is significant at F (3, 288) = 42.63; p<0.001, explaining 36.8% variance in SST acceptance with $R^2$ change = 0.10. This clearly shown that all the three predictor variables is statistically significant. Hypotheses Testing for Indonesian consumers revealed that all hypotheses were accepted. Collectivism, uncertainty avoidance and masculinity have significant influence on acceptance of SST.

**Implications:** This research focussed on the impact of culture dimensions on the level of SST acceptance in hypermarkets Future research can be directed on differential parameters, including age groups or generations. It would be beneficial to ascertain whether young consumers (like millennials) would give priority to self-efficacy.

## 5. Conclusion

Indonesians, being highly collectivist with exhibiting low masculinity, are still getting used to the concept of SST. However, there is an emerging trend amongst the younger population who is more receptive to SST acceptance as they are more prone to low uncertainty avoidance.

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# The Influence of Credit Period and Interest Rates on the Interest of Home Ownership Credit Users in PT. PANIN Bank (PERSERO) TBK

Rosnaini Daga,.SE,.MM
STIMNitro Makassar, Indonesia
rosnaini.daga@nitromks.ac.id

**Abstract:** This study aims to examine the influence of credit period and interest rates on mortgages users' interest in PT. Panin Bank (Persero) Tbk. The method used in this research is multiple linear regression analysis using SPSS, which was processed based on the tabulated results of the observation sheet. From the analysis of the influence of credit period and interest rates on mortgages users' interest in PT. Panin Bank (Persero) Tbk. Makassar branch, it can be concluded that the term and interest rates have a positive effect on mortgages users' interest in the bank. The increase of the time limit will also increase the interests of customers. On the other hand, the increase of interest rates will decrease the interest of users. From these two researched variables, the most dominant variable affecting the mortgages users' interest in PT. Panin Bank (Persero) Tbk. Makassar branch is interest rates, because interest rates have the greatest t-count compared to the t-count of credit period. Therefore, it can be proposed that one of the most dominant variables affecting the interest of the mortgages users in the bank is the interest rates.

**Keywords:** *Credit period, term, interest rate,interest, mortgages users*

## 1. Introduction

Banking sector has a strategic position as an intermediary and supporting the payment system is a crucial factor of the national economic development process. Banks are intended as an intermediary for those who have surplus funds with the underfunded. Thus, the banks will be engaged in lending activities and a variety of services. The banks serve the financing needs as well as the launch system for the development of all sectors of the economy. One of the main elements of people's welfare is the fulfillment of their needs with regard to housings. At the moment, the need for housing is a national problem, especially in urban areas. The government together with employers and the society should look for a solution. Housing development companies (Developers) as a private party involved should also find a solution to the problem of housing, as their main business activity is to build and sell housing to consumers. The purchase of a house by a consumer can be done through two systems:

- The gradual cash system, in the purchase of the house, consumers pay gradually for a period of between 6 months to 1 year;
- House ownership credit system, in this system a consumers buys a house using a credit system in which they pay within a period of 5 to 20 years.

PT. PANIN Bank (PERSERO) TBK. is one of financial institutions operating in Indonesia; it cannot be separated from the problem of competition. It is because the products offered by the bank to customers are similar. Home Loan is one of the products offered by the bank to the public. In the provision of products of credit (KPR) instruments, the bank sometimes distinguishes between house ownership credit (KPR) and service credit in terms of the interest rate and terms in order to maximize the community participation in the banking industry, particularly in the mortgage (KPR).This study addresses the following question: "What time period and interest rates affect the interest of the mortgage credit users at the PT. PANIN Bank (PERSERO) TBK ? Thus, this study analyzes the effects of the duration and mortgage rates at PT.PANIN Bank (PERSERO) TBK.

## 2. Literature Review

**Understanding Credit:** According to the Banking Law number 10 of 1998 , credit is the provision of funds or equivalent claims based on a lending agreement or contract between the bank and other parties which requires the borrower to pay off the debt after a certain period of time with interest .Meanwhile, according to

Malay (2002 : 87 ), the third-party funds ( DPK ) is the main source of bank loans . The credit comes from an Italian word '*credere*' which meansconfidence. It refers to the confidence of creditors that debtors will repay the loan with interest in accordance with the agreement of both parties.Furthermore, according to Rivai (2006: 4), credit is the delivery of goods, services, or money from one party (creditor/or lender) on thebasis of trust to another party (the customer or debtor/borrower) with a promise to pay from the recipient credit to the lender on adate agreed upon by both parties.

**Elements of Credit:** Rivai (2006:6) proposes that credits are granted on the basis of trust that the provision of credit is a gift of trust. This means that the given achievement is believed to be returned by the recipient of the credit on the terms and conditions which have been agreed. Based on the above definitions, the elements of the loan are as follows:

a. The presence of the two parties, namely the lender (creditor) and credit recipients (customers). The relationship of the lender and recipient is a credit cooperative relationship of mutual benefit.
b. Lenders' trust to loan recipients based on the credit rating of credit recipients.
c. Approval, in the form of the agreement with the bankwhich promises to pay the other party of the recipient credit to the lender. The promise to pay can be verbal, written (credit agreement) or in the form of the instrument (Credit Instrument).
d. The delivery of goods, services, or money from the lender to the loan recipients.
e. The element of time (time element). The element of time is an essential element of credit. No credit is given without the element of time, specially in terms of the lender and the views from the credit recipients. For example, savers give credit today for greater consumption in the future. Manufacturers require credits because of the time gap between production and consumption.
f. There is an element of risk (the degree of risk) on the part of lenders and at the receiving end credits. The risk on the part of the lenders is a risk of default (risk of default), either due to the failure of the business (commercial loans) or the inability to pay (consumer loans). The risk of fraud on the part of the customer is of the creditors, which includes the provision of loans originally intended by the lender to annex companies given credit or land as collateral.
g. The element of interest is acompensation (achievement) to the lender. For the lender, the interest consists of various components, such as the cost of capital, the general costs (overhead costs), risk premium, and so on. If the credit rating is high, premium riskscan be reduced by safety discount.

**Types of Credit** According to Casmir (2010: 103), the classification of credit types is shown to achieve a particular goal or objective to remember that every type of business has a variety of specific characteristics. In general, the types of loans disbursed by banks are as follows:

a. Viewed from the aspect of use: Credit intention in terms of usability is to look at the use of the money used in the main activity or just an extra activity.
b. Investment loan: loan that is usually used for business expansion or building projects/new factory, generally used for a relatively longer period and usually the usefulness of this credit is for the main activities of a company.
c. Working capital credit: the credit is used for the purpose of improving production operations. For example, the working capital loans granted to buy raw materials, pay wages or other costs associated with a manufacturing company. Working capital loans represent loans on credit thawed to support existing investments.
d. Viewed from the aspect of loan purposes: This type of credit is seen from the purpose of using a credit, whether it aims for returning cultivated or used for personal purposes. Types of credit in terms of objectives are as follows:
    1) Credit Productive
    2) Consumer Credit
    3) Credit Trading
e. Viewed from the aspect of period: In terms of time period, meaning the length of credit time, loans can be classified into:
    1) Short-Term Loans
    2) Medium-Term Loans
    3) Long-Term Loans

f. Viewed from the aspect of guarantee: the guarantee means any provision of a credit facility to be protected with an item or marketable securities worth the minimum of loans. Types of credit in terms of the guarantee are as follows:
   1) Loans with collateral
   2) Loans without guarantee

**Understanding mortgages** According to the regulation of Bank Indonesia, housing loan is a credit facility granted by banks to individual customers who will buy or repair houses. In Indonesia, there are two types of mortgages:

a. Mortgage subsidy, that is a credit intended for middle and lower income people in order to meet the needs of housing or home improvements that have been owned.
b. Non mortgage subsidy, that is a mortgage intended for the whole community. Mortgage provisions are set by the bank, so that the determination of the amount of credit and interest rates are carried out according to the policy of the bank.

**Customer Interests:** According to Suryabrata (2002: 68), interest is "ataste more like and taste of interest in a matter or activity without being told". Interest is basically the acceptance of a relationship between the self with something outside the self. The stronger or nearer, the greater interest of the relationship. Interests can be interpreted as "the high tendency towards something, interested, attention, arousal and desire". Interest means the interest of a person against a good or service to be held or consumed. It also fits the theory of consumer behavior, which means the activity of individuals who are directly involved in obtaining and using goods or services, including a decision-making process in the preparation and determination of these activities. Interest is the tendency of a person's soul to something, usually accompanied by a feeling of pleasure. Interest does not arise suddenly; rather, it arises as a result of participation, experience and habits

**Factors Affecting Customers' Interests in Choosing Bank Products and Services (Credit):** Casmir (2010: 141) argues that with regard to a bank's product services, trust factor is the main weapon for attracting, influencing and maintaining loyalty. Therefore, the bank needs to pay attention to the following points:

a. The number of Bankers providing services to customers
b. The technology used in serving customers
c. A guarantee of the products / services rendered
d. Form of services rendered
e. Quality presented by bankers to customers in accordance with the expected capabilities

**Factors Influencing Customers' Decisions in Taking Credit:** Kotler (2005: 211) proposes that there are several factors that influence customers' decision to take credit, including:

a. Personal factors, which include age and life cycle stage, occupation, economic situation, lifestyle and income
b. Psychological factors, in which the psychological variables can be divided into needs (number of loans), motivation, perception, learning, beliefs and attitudes
c. Social factors, environmental factors around the customer which consist of a reference group and family
d. Factors of banks or financial institutions that offer credit to customers, include location, service, types of credit (loan), interest rate, term and loan procedure.

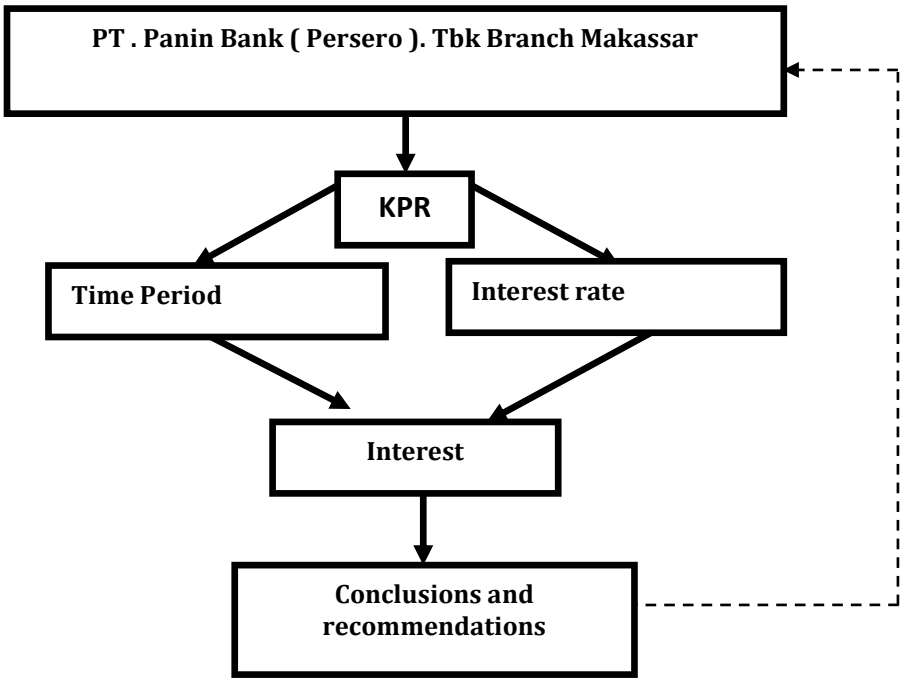
**Factors Affecting Price (Interest):** Casmir (2010: 137) argues that determining the size of the deposit rates and lending heavily are influenced by both, meaning that deposit and lending rates affect each other. Other factors that influence the price include the guarantee, term, government policy, and profit targets. The main factors that affect the size of the interest rate setting can be broadly described as follows :

a. Needs Funds
b. Competition
c. Government policy
d. Desired Target Profit
e. Time period

f. Quality Assurance
g. The company's reputation
h. Products and Competitive
i. Good relationship
j. Third party guarantee

**Other Factors Affecting the Determination of Interest Rate (Loan Pricing)**Credit interest rates charged to customers are different from one customer to another, or between one client to another client.According to Siamat (2004: 128 ), the difference is caused by several considerations/factors, such as credit period, the adequacy and quality of the collateral, the sensitivity of the company (business segment ) on the competition in the company's reputation ( clients ), the guarantees of the third party relationship banks with customers and certainly consideration a source of funds to finance the project.

**Figure 1: Conceptualization of the influence of Credit Period and Interest rate on the interest of home Ownership Credit Users in PT. PANIN Bank (PERSERO) TBK.**




PT. Panin Bank ( Persero ) Tbk. Makassar is a branch of a conventional bank providing Housing Credit. To determine customers' interest, indicators that affect the interest of the customers should be taken into account. The indicators include credit period and interest rate.
From the analysis, the interest of borrowers to the mortgage offered by PT . Panin Bank ( Persero ) Tbk . Makassar branch can be examined.

## 3. Methodology

The variables used in this study consist of two (2) independent variables: Period (X1) and Interest (X2), with onedependent variable, namely Users'Mortgage Interest (Y).

**Operationalization of Variables :**

a. The mortgage stands for Housing Credit. Bank mortgage is one of the products offered to users who want to buy a house on credit at the bank, calculated in the rupiah unit.
b. Duration of the credit is one of the elements that isuseful for determining the interest rate to be determined by the bank.

c. The interest rate refers tothe interest rate of credit determined by the bank based on the interest rate securities of Bank Indonesia (SBI) which is calculated in terms of percent.
d. Interest is a feeling or motivation arising from an interest.

**Analysis of data:** The analytical methods used to analyze the data in this study are:

**Statistical Methods:**The calculations were done using data processing analysis techniques with SPSS version 20. In this case, the data processedwith SPSS is the formulation of multiple linear regression analysis,based on the relationship between the two (2) independent variables (duration and interest rate) with the dependent variable, which is the user's interestin KPR with the formula:

$$\mathbf{Y = a + b_1X_1 + b_2X_2 + e}$$

Where :
Y = Users' Interest on mortgages of PT . Panin Bank ( Persero ) Tbk .
a = Value Constant
b1 = regression coefficient / factor of X1
X1 = Period
b2 = regression coefficient / factor of X2
X2 = Interest Rate
e = Error Term

## 4. Results and Discussion

The population in this study includes customers who take mortgages from PT .PANIN Bank (PERSERO) TBK. Within the period of 2014, there are 4,213 customers. The samples in this study are restricted to customers of PT.PANIN Bank (PERSERO) TBK in 2014, as many as 100 customers. The distribution of respondents by sex is dominated by male respondents, 52.00 % compared to 48.00 % of female participants.
1. Test Instruments
a. Test Validity

**Table 1: Validity of Test Results on Term Interest Rate**

| No | Indicator Code | Pearson Correlation | R Standar | Result |
|---|---|---|---|---|
| 1. Time Period ($X_1$) | X1 | 0,787 | 0,50 | Valid |
| | X2 | 0,851 | 0,50 | Valid |
| | X3 | 0,745 | 0,50 | Valid |
| 2. Interest rate ($X_2$) | X4 | 0,820 | 0,50 | Valid |
| | X5 | 0,711 | 0,50 | Valid |
| | X6 | 0,672 | 0,50 | Valid |
| 3. Users' interest mortgages (Y) | Y1 | 0,555 | 0,50 | Valid |
| | Y2 | 0,607 | 0,50 | Valid |
| | Y3 | 0,823 | 0,50 | Valid |

Source : processing results in 2015

Overall, the indicators of mortgages are influenced by interest rate;the validity of the test results showed that the questionnaire in this study can be said to be valid, because it has a range of corrected item total correlation that has been above 0.30 .
**b. Reliability Test:** In this study, the realibility test was done by showing the value of Cronbach's Alpha. If the coefficient Cronbach's Alpha is greater than or equal to 0.60,the instrument used as a measurement variable is realiable and vice versa.

**Table 2: Test results Realibility**

| No. | Variables | *Cronbach's Alpha value* | R Standard Value | Results |
|---|---|---|---|---|
| 1 | Time Period (X1) | 0,894 | 0.60 | Realible |
| 2 | Interest rate (X2) | 0,858 | 0.60 | Realible |
| 3 | User interest mortgages (Y) | 0,800 | 0.60 | Realible |

Source : processing results in 2015

**2. Multiple Linear Regressions**

**Table 3: Results of Multiple Linear Regression Coefficients Coefficient**

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| (Constant) | 3.585 | .731 | | 4.903 | .000 |
| Time Period | .307 | .127 | .326 | 2.416 | .018 |
| Interest rate | .449 | .120 | .504 | 3.735 | .000 |

a. Dependent Variable: user interest mortgages
Source: Results of Treatment SPSS 20.0

From the results of the data processing, the following regression equation is obtained:

**$Y = 3{,}585 + 0{,}307X_1 + 0{,}449X_2$**
Meaning: X1 = If X1 up 1 unit while X2 remains the value increased by 0.307.
X2 = If X2 up 1 unit while the X1 remains then the value will increase by 0.449.
From the above regression equation, a constant value of 3.585 is obtained. The dependent variable is positive because it has the value of the interest rate (X1) of 0.307, a period (X2) of 0.449. It means that the user's interest in mortgage is influenced by the term and interest rate. In other words, the meaning of the above equation is:

a. The constant Y = 3.585, which means that if there is no variable duration and interest rates, the interest of the mortgage will remain the same.
b. X1 regression coefficient of 0.307 reflects that if the period rises, the user's interest in mortgages will increase, amounting to 0.307 vice versa. If the period declines, the interest in mortgages will decrease, amounting to 0.307 users.
c. X2 regression coefficient of 0.449 indicates that if the interest rate increases, the interest in mortgages will decrease, amounting to 0.449 users. On the other hand, if the interest rate decreases, the user's interest in mortgages will decrease, amounting to 0.449

**Table 4: Determination Analysis Results Model Summary**

| Model | R | R Square | Adjusted Square | RStd. Error of the Estimate |
|---|---|---|---|---|
| 1 | .810[a] | .656 | .649 | .833 |

Predictors : ( Constant ) , interest rate , term
Source : Results of Treatment SPSS 20.0

Based on the table above, the contribution of the variable interest rate (X1) and period (X2) on user's interest in mortgages (Y) can be seen from the determination. Based on the table above, which is at 0.649 showing that the magnitude of the contribution made by the independent variable time period ( X1 ) and interest rate ( X2 ) on the dependent variable user interest mortgages ( Y ) was 64.9 %. While the remaining 35.1 % is influenced by other factors not examined. This means that the rate of change in the dependent variable is the

mortgage interest ( Y ), which can be explained by changes in the independent variable,the time period ( X1 ) and interest rate ( X2 ) amounted to 65.6 %. While the remaining 34.4 % ( 1 - R2 ) is influenced by other factors not examined in this study .

3. Hypothesis Testing

a. t test

**Table 5: Coefficients[a]**

| Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|
| **B** | **Std. Error** | **Beta** | | |
| 3.585 | .731 | | 4.903 | .000 |
| .307 | .127 | .326 | 2.416 | .018 |
| .449 | .120 | .504 | 3.735 | .000 |

a. Dependent Variable: user interest mortgages

Source: Results of Treatment SPSS 20.0

To determine the value Ttable, the level of significance of 5% with degrees of freedom df = (n - k - 1) is determined. If tcalculation> Ttable,Ho is rejected and Ha is accepted and if t count <T table, then Ho is accepted and Ha is rejected.Table 4.5 shows that T calculation of coefficient variable time period (X1) of 2.416> 1.98 Ttable significant at α = 5%. Where α <0.05 then Ho is rejected and Ha is accepted. If Tcalculation >T table, then Ho is rejected and Ha is accepted, meaning that the independent variable cannot explain the dependent variable and if t count <T table, then Ho is accepted and Ha is rejected, meaning that the independent variable cannot explain the dependent variable individually. This means that thevariable period doesnot individually affect the variable interest mortgage. **T** calculation coefficient variable interest rate (X2) of 3.735> 1.98 Ttable significant at α = 5%, where α <0.05 then Ho is rejected and Ha is accepted. This means the interest rate variable (X2) individually can affect the variable interest mortgage. Thus, the hypothesis that interest rates affect the interest of mortgage users can be accepted as true.

b. F Test

**Tabel 6: ANOVA[a]**

| Model | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 128.302 | 2 | 64.151 | 92.520 | .000[b] |
| Residual | 67.258 | 97 | .693 | | |
| Total | 195.560 | 99 | | | |

a. Dependent Variable: user interest mortgages

b . Predictors : ( Constant ) , interest rate , term

Source : Results of Treatment SPSS 20.0

F test is done to see how the variables of X1 and X2 simultaneously influence the dependent variable ( Y ) where F count > F table with a significant level of < 0.05 or 5 % thus the value Fcalculation92.520 > Ftable at 1.40 then the variable X1 ( period ) and X2 ( the interest rate ) simultaneously y affect user's interest of mortgage.The objective to be achieved in this research is to determine how much the duration and interest rate influence mortgage users' interest in PT . Panin Bank ( Persero ) Tbk . Makassar branch. To meet these objectives, a study involving100 respondents has been conducted.After testing the duration ( X1 ) and interest rate ( X2) on user's interest in mortgages ( Y ) with a multiple linear regression , t test , F test , test the validity and reliability test , the result is discussed as follows :

Based on the multiple linear regression equation obtained from the data processing, variable constants obtained the value of 3.585,thevariable period of time ( X1) of 0.307 and the interest rate ( X2 ) of 0.449 . From the results of the equation, it could be said that the interest of users is affected by the mortgage terms and interest rates. Thus, the regression equation can be obtained as follows:

$$\mathbf{Y = 3{,}585 + 0{,}307X_1 + 0{,}449X_2}$$

The regression equation shows a constant value of 3.585. Thevariable period of time (X1) and interest rate (X2) affect the interest of the mortgage users (Y), because it has a value of time period (X1) of 0.307 and the interest rate (X2) of 0.449 while the constant value of 3.585. From the calculation of multiple linear regression analysis, the magnitude of the contribution of independent variables or the time period (X1) and interest rate (X2) on user's interest in mortgages (Y) are as follows:

a. The constant Y = 3.585, which means that if there is no variable of interest rate and the term of the mortgage, the interest will remain the same.
b. X1 regression coefficient of 0.307 states that the rise of the period will increase user's interest in mortgages, amounting 0.307 vice versa. Thedecline of the period will lower the user's interest in mortgages amounting to 0.307.
c. X2 regression of the coefficient of 0.449 states that the increase of the interest rate will lower the user's interest in mortgages amounting to 0.449 users and vice versa, the decrease of interest rate will increase user's interest in mortgages amounting to 0.449.

The results of the reliability test of the instrument indicate that the entire instrument is reliable as a measurement of performance variables to influence user's interest in mortgages as presented in Table 4.2 which suggests that the variable declaration for the customer isquite reliablebecause the Cronbach's alpha for the period amounted to 0.894, the interest rate 0.858 and for the interest of the mortgage by 0.800.The t test results showed that the time period (X1) and interest rate (X2) has no effect on user's interest in mortgages (Y) for a period of t count = 2.476, t count interest rate = 3.735 showed that> 1.98. Thus, Ho is rejected and Ha is accepted. This shows that the independent variables of the time period (X1) and interest rate (X2) affectthe dependent variable of the user's mortgage interest (Y).This discussion focuses on the analysis of the extent to which time period (X1) and interest rate (X2) affect the variable of users's mortgage interest in PT. Panin Bank (Persero) Tbk. Makassar branch. The long time period (X1) and lowinterest rate (X2) can increase the user'smortgageinterest inPT. Panin Bank (Persero) Tbk.

## 5. Conclusion and Recommendations

Based on the analysis and discussion presented in the previous sections, the following conclusions can be proposed:

a. With regard to the results of the analysis of the influence of time period and interest rates on user's interest in mortgages in PT. Panin Bank (Persero) Tbk. Makassar branch, it can be concluded that the term and interest rate have a positive effect on user's interest in mortgages. If the time limit increases, the interest of customers will also in crease, whereas if the interest rate increases, the interest of the customers will decrease.
b. Fromthe two variables researched, the most dominant variable affecting the mortgages user's interest in PT. Panin Bank (Persero) Tbk. Makassar branch is the interest rate, because interest rates have the greatest tcount compared to thetcount of period of time. It can be said that one of the most dominant variables affecting the interests of the mortgage user is the interest rate.

This research suggests the following point:

Based on the conclusions that have been stated previously, it is recommended thatthe bank pays more attention to the interest rate and the term of mortgage, because these two instruments greatly affect the interest of the mortgage users.

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# The Relationship between Commitment-based HR Practices and Organizational Performance: The Role of Organizational Learning Capabilities as a Mediator

Po Li Chia, Khulida Kirana Yahya, Tan Fee Yean
Universiti Utara Malaysia, Sintok, Kedah, Malaysia
pollychia29@yahoo.com

**Abstract:** This study intends to investigate the relationship between commitment-based human resource practices (CBHRP) and organizational performance of the multi-national organizations in Malaysia with the present of organizational learning capability (OLC) as the mediator. The data were collected from 150 multi-national organizations, using a survey questionnaire. The returned response rate was 97 percent. A relevant statistical analytical such as regression analysis was used to test the hypotheses set forth in this study. The outcome of the analysis showed that the relationship between commitment-based HR practices and organizational performance was influence by organizational learning capability. The results imply that the multi-national organizations should enhance their CBHRP and OLC to strengthen their organizational performance.

**Keywords:** *Organizational performance, Commitment-based human resource practices, Organizational learning capability*

## 1. Introduction

Multinational (MNC) organizations in Malaysia play an important strategic role in Malaysia to foster economy growth enrich the job opportunity and increasing income (MIDA, 2012). Accordingly, the primary of MNCs in Malaysia is based on semiconductor industries, which handle electronics application products for consumer and industrial market. The contribution of semi-conductors MNCs owns the largest share of export value, which was 51 percent, compared to other sub-industries. It has also provided 41 percent of employment opportunity in the country (MIDA, 2014). According to Malaysia Investment Performance 2013 (MIDA, 2014), there was 118 Electronics and Electric (E&E) projects approved in 2013 that worth RM9.8 billion in the investment. The biggest investment came from Japan (45 percent) follow by United States of America (35 percent) and Germany (20 percent). This investment showed that the establishment of MNCs organizations in the country is valuable as they can boost the growth of Malaysia economic.

Unfortunately, the MNCs organizations contribution to the country GDP is still somewhat lacking compared with other developed countries. MNCs in Thailand are 4.9 percent while MNCs in Indonesia productive grew by 4.2 percent which better than Malaysian MNCs which only 1.96 percent (MPC, 2013). Besides this, the current volatile external environment and escalating global competition have forced the MNCs organizations to be more flexible their management and business strategies to survive and perform. Additionally, MNC's organization is moving towards the phase whereas the shortfall of skillful, knowledge and experience employees are the major concerned (Raida, 2009; Fathi, Mohmad & Kamal, 2013). As a result, this shortfall (e.g. knowledge, skill and experience employees) becomes a hinder for MNCs in Malaysia to retain their human resources for continuous growth and achieve better performance. According to Fathi, Mohmad and Kamal (2013) human resources asset (i.e. skill, knowledge and experience) are recognized as strategic tools that are essential to drive the organization to achieve higher performance.

## 2. Literature review

The key to achieving higher performance, organizations must be flexible and adapt quickly to market demand, help diversify economic activity through export and trade activities and enhance human resources development. Nonetheless, the primary objective of this study is to give attention to the importance of human resources development to unleash the organizational performance. Specifically, this paper intends to shed light on human resource management's (HRM) contribution to the performance of MNCs organization by investigating the OLC (organizational learning capability) stands as a mediator role between commitment-based HR practices and organizational performance.

The significant role of HRM in assisting the organization to achieve best performance has gained lot of attention to both researchers and human resource practitioners. This is agreeable by many scholars like Batt (2002), Becker and Huselid (1998), Collins and Clark (2003), Lopez et al. (2005) and Takeuchi et al. (2007). The scholars in their research has offered significant proof that human resources practices especially those known as 'high performance' or 'commitment-based' can influence employees' abilities and motivation and thus organizational performance. Nevertheless, the relationship tends to be relatively small in statistical terms (Lopez et al., 2005). Similarly, studied by Hooi and Ngui (2014) showed that the relationship between HRM and organization based line of performance did not offered direct cause-effect path. Meanwhile, other scholars like Youndt et al. (1996) cited that when HR practices create value and deliver results for the organization automatically the relationship between HRM and organizational performance is established. Thus, the question arises in the literature whether HRM can stand along to influence organizational performance or they must reinforce with other variables. More specifically, which individual HR practices and other variables have an exact influence on the organizational performance measures? These questions have urged many researchers to refine the existing theoretical models by including other mechanisms to strengthen the relationship between commitment-based HR practices and organizational performance.

Therefore, many researchers' have attempted to articulate this linkage by analyzing how HRM impact organizational progress since there was the lack of any theoretical explanation. Researchers like Lopez et al. (2005), Raj and Srivastava (2013) and Watkins and Marsick (1992) cited that certain HR practices have its ability to enhance the learning process of individual, group and organization level. To support this argument, scholars like Snell et al. (1996) and Jerez-Gomez et al. (2005) in their research found that HR practices such as selection, compensation and training and development served as a driver to orientate employees' behavior as well as motivation and thus influence their learning attitudes in the organization. Likewise, Lopez-Cabrales et al. (2011) and Jerez-Gomez et al. (2005) points out those employees contribute to learning when they notice that their organization gave full attention to their needs into account, value their contribution and commitment. The findings showed that it is essential to design HR practices that encourage employees to be competitive through cooperation and capabilities and subsequently, assist the organization to achieve its best performance. Nevertheless, this mediation effects has yet fully explored by the former researchers.

Subsequently, the development of organizational learning capability is essential due to capabilities to business success and to create as well as delivering commitment-based HR practices that able to act as the fundamental of competitive advantage (Hooi & Ngui, 2014; Lopez et al., 2006; Snell et al., 1996). Organizational learning capability is regarded as the fundamental source because through the learning process; the new knowledge can be acquired, create and transfer into the daily organizational process (Jerez-Gomez et al., 2005). When new insights (e.g. knowledge) interact with its environment, it makes the organization to understand deeper of its own strengthen and weakness and subsequently, helps the organization to pursue new business strategies that change, move and act faster than their competitors. Furthermore, organizational learning capability process helps the employees able to focus on the deliverables of their work to enhance the organizational performance continuously (Cavaleri, 2004, Jerez-Gomez et al., 2005, Hooi & Ngui, 2014, Lopez et al., 2006).

This present study proposes that the role of organizational learning capability mediate the relationship between commitment-based HR practices and organizational performance of MNC organizations. Despite their importance to the economic growth, high income, the diffusion of innovation and job creation, researcher concede that MNC organization in the country need to implement proactive HRM practices to enhance the organizational learning capability for sustained competitive advantage as well as improving organizational performance. Thus, researcher set out to validate the relationship. Before precede with the next step, the researcher reviews the literature on the impact of commitment-based HR practices on organizational learning capability and the effect of organizational learning capability on organizational performance. Following this, the researcher develops hypotheses representing the relationships between commitment-based HR practices, organizational learning capability and organizational performance. Subsequently, the researcher present the results gathered from statistical analysis and follow with the implications and conclusion.

**Organizational Performance:** Organizational performance (OP) is a tool that an organization uses to gauge its performance in terms of meeting the overall objectives and goals (Gharakhani & Mousakhani, 2012, Hamon 2003). In a case of Folan and Browne (2005) and Ho (2008), the scholars' definition of OP by looking at how closes the organization able to achieve its overall business and management objectives. Meanwhile, other authors like Abu et al. (1989), Birdi et al. (2008), Davis et al. (2000) and Moideenkutty et al. (2011) postulated that OP should be measured from financial perspective (e.g. sales growth, net profit, profit growth and so on). However, Schermerhorn et al. (2002) argued that just measuring finance performance is insufficient. It should also be looked at the overall performance, which includes non-financial performance such quality and quantity of individual productivity, services, good image of the organization. However, Delaney and Huselid (1996) stated that it would be better to assess organizational performance from external and internal perspective. The external perspective refers to organization performance in the market that covered the marketing of products or services, growth of sales, profitability, and market share. As for the internal perspective focus on its performance against the quality of the product, a satisfaction of the customers, new product development, ability to attract employees, ability to retain employees and relations between management and employees.

Burns and McKinnon (1993) pointed out that to measure organizational performance should include the financial and non-financial perspectives. By doing so, it is fair to the organization as a combination of a different perspective of measuring OP offers ways to transform strategies that end of the day benefit the organizations. Additionally, it provides a protection against the consequences of unforeseen outside events that may affect the organizational performance. Therefore, following the literature review, this study adapted to the suggestion by Delaney and Huselid (1996) to measure overall OP by defining OP as organization external and internal performance.

**Commitment-based HR practices:** HRM in today's management context has two distinguished roles: (1) to foster performance of an organization (Stavrou, Brewster & Charalambousa, 2010; Delery & Doty, 1996; Nazlina, SitiRohaida & Aizzat, 2011; Singh, 2004; Zheng, O'Neill & Morrison, 2009) and (2) to act as a support for achieving competitiveness through people (Collins & Smith, 2006; Huselid, 1995; Muhammad Asif, 2010; Wright, Dunford & Snell, 2001). In this regard, the focus shifted to the choice of HRM practices to be implemented in the organization. According to Arthur (1992), Bourne et al. (2013), Collins & Smith (2006) and Tsui et al. (1995), two HRM practices have emerged in the literature: 1) emphasizes on the individual short-term exchange relationships which were known as transaction-based HR practices and 2) focuses on long-term exchange and mutual relationship which known as commitment-based HR practices (CBHRP). Accordingly, in the literature, CBHRP has been regarded as the best solution due to its combination of practices that able to attract the employees' to display positive behaviors as well as combining their personnel and organization interest together (Arthur, 1992; Collins & Smith, 2006). To support this motion, many empirical evidences have showed organizations which implement CBHRP influence organizational performance better than transaction-based HRM practices (Batt, 2002; Bourne et al., 2013; Collins & Smith, 2006; Huselid, 1995; Youndt et al., 1996).

Collins and Smith (2006) and Bourne et al. (2003) cited that the used of HR practices to create commitment-based atmosphere is varies across organizations. Fortunately, they agreed that three specific dimensions of HR practice that results commitment-based environment as follows;

- Selection practices emphasizes on the opportunity of internal employment and selecting employees who match the organization set forth criteria instead of specific job requirements.
- Compensation practices by all means emphasize on enhancing employees' commitment and thus encourage them to accomplish the given tasks effectively for the purpose to achieve the set forth objectives and goals by the organization.
- Training and development practices by all means focus on improving and development of the organization specific knowledge and skills as well as team building.

Based on the definition as mentioned above, this study analyses the relation between CBHRP (selection, compensation and training and development) and organizational performance as well as organizational learning capability. The next section discuss in details of each dimension of CBHRP.

**Selection:** The definition of selection in CBHRP focuses on selecting the internal employees to fill in the vacant position in the organization (Bourne et al., 2003; Collins & Smith, 2006). Additionally, selection process also involves collection, measuring and evaluating information of the selected candidates (Marwat, Arif & Jan, 2009). By doing so, it ensures that the right candidates are being assigned to the positions where they can perform efficiently and effectively. This process, it enables the organization to select candidate who meet the criteria that had been set forth. The closer the candidates who possess the characteristics of the organization's need, the higher their chances of being chosen to fill up the vacant position. Furthermore, when the best candidates are hired, it will potentially increase the productivity and boost organizational performance (Huselid, 1995). In the simple words, selecting the right employees able the organization to go through the unpredictable environment derived from external or internal factors. It is also helps the organization to response and act faster in order to stay ahead in the competitive market. Therefore, organization needs to acknowledge that human resources are the significant assets in the organization due to their ability to enhance the organization reputation for the long term and ensure its future success.

**Compensation:** The definition of compensation in CBHRP emphasize on the incentive package offered to the employees to increase their commitment (Bourne et al., 2003; Collins & Smith, 2006). This is agreeable by (Noe, Hollenbeck, Gerhant & Wright, 2004) who cited that compensation originally designed to motive employees to increase their outputs towards achieving organizational objectives and goals. Additionally, the compensation also plays the role to attract and reward the employees who have put up extra efforts to achieve organization's set forth targets. Hence, compensation plays a key role as it is connected with employment relationship to both employers and employees. There is no deny that employees depends largely on the salaries and other financial benefits be it in terms of finance or non-finance to provide income for daily needs (Trevor, Barry & Boudreau, 1997). In addition, compensation also has the influence on employee attitudes and behaviors towards their organization (Phillips, 1997). For employers, compensation is one of the significant impacts on the business operation costs and thus, their ability to increase the organizational performance.

**Training and Development**: The training and development as defined in CBHRP emphasis on upgrading the needed knowledge and skills as well as strengthen team building in the organization. Specifically, the training process focus on acquires new knowledge and skills then migrate into the daily tasks assigned to the employees. In accordance to Armstrong (2006) stated that "is the use of systematic and planned instruction activities to promote learning". Sisson and Storey (2000) argued that employee perceive training as a symbol of employer's commitment towards them. In regard to the development process, it offers an opportunity to upgrade their position in the organization and accept the new responsibility, job tasks and so on. Similarly, Noe et al. (2004) reiterate that it is necessary for the organization to provide the development opportunity to their employees so that offer ways to improve the quality of job performance which benefit the organizations in the long term. In a summary, if the organization is able to develop a training program which tie up with the development of skills needed, it is likely to result a higher organization performance derive from the productivity and efficiency factors.

**Organizational Learning Capability:** The ability of the organization to create, acquire and blend the knowledge is known as organizational learning capability (OLC) that emphasis on enrich the resources and develop the capability in the organization (Jerez-Gomez et al., 2005). Likewise, Goh et al. (2012) see OLC as a continuous learning process for steady improvement to help the organization to succeed. This concludes that OLC is a process to increase employee's capabilities for better understanding and managing the organization's environment in order to increase organizational performance and thus, gives the opportunity for the organization to increase its learning capability and thus, enhance its ability to exercise the appropriate management practices, structures and procedures (Jones, 2000; Mohd Shamsul et al., 2011). Based on the above, it is obvious that OLC serves as the capability of an organization to create, acquire, transform and blend knowledge among organization members helps organization to achieve its best performance. To enhance the development of OLC, Jerez-Gomez et al. (2005) cited that the emphasis should be given to the aspects such as commitment from the managerial level, the uphold appropriate systems (e.g. management system or procedures), practicing of the openness and experimentation by the organization and lastly, the capability to transfer and integration the knowledge from the learning capability. It has been assumed that each dimensions of the OLC will result in a stronger learning capability throughout the organizations.

**Research model and hypotheses**

**Commitment-based HR practices and Organizational learning capability**: In the literature, it has been widely acknowledged that HRM practices are the determined factor in strengthening organizational learning capability (OLC) in the organization. The management can develop stronger commitment by employees through implement of distinctive HR practices to boost learning process at all levels in the organization (Hooi & Ngui, 2014; Minbaeva, 2005). Also, HR practices are useful to promote positive behaviors towards OLC and make it as habitual for people to sharpen their skills and develop right attitudes to promote learning (Raj & Srivastava, 2013; Swart & Kinnie, 2010). Therefore, to strengthen OLC, the first step is to increase the employees and organizational levels commitment through HR practices (Hooi & Ngui, 2014; Minbaeva, 2005). Specifically, the component in commitment-based HR practices (e.g. selection, compensation and training and development) can support OLC either individual or organization levels (Collins & Smith, 2006). Selection practices ensure internal employees are given the opportunity to fill up the vacant position in the organization. The organization will use formal selection procedure to ensure the organization chooses the suitable candidates for the vacant positions and thus, they can perform efficiently and effectively. When the internal employees are given the promotion opportunity, this increases their motivation and commitment as they feel their management value their contribution and efforts in the organization. As a result, it leads to better performance in the organization. Compensation practices that offer attractive rewards to the employees who continuously enhance their knowledge and skills lead to high motivation and commitment. Consequently, it makes OLC as learning habit in their daily working process (Bourne et al., 2013; Collins & Smith, 2006). Subsequently, to enhance OLC, the organization has to invest in enhancing their training and development program to assist the employees to improve their knowledge and skills. By doing so, it enables the employees to improve their job performance to meet up with the organization set forth objectives (Raj & Srivastava, 2013). Noticing the potential commitment-based HR practices to influence OLC, the first proposed hypothesis as follows,
***H1:*** *Commitment-based HR practices have a positive influence on organizational learning capability.*

**Commitment-based HR practices and Organizational performance:** In the literature, many past studies have largely proven the significant influence of commitment-based HR practices (CBHRP) on increasing the performance of organizations (Chen & Huang, 2009; Lopez-Cabrales et al., 2005; De Winne & Sels, 2010). CBHRPs aim to implement various HR practices that work together to increase employee motivation and enhance their commitment to the organization (Ghosh & Gurunathan, 2015). When the employees are highly motivated and committed, they usually deliver high-quality performance and enable the organization to perform better. CBHRP consists of selection, compensation and training and development practices. Selection practices emphasize on the internal labor market and identifying the competent employees to fill in the vacant position in the organization (Bourne et al., 2013; Collins & Smith, 2006).

By doing so, it assists to establish stronger employer-employee relationship which in turn increasing their productivity and commitment (Collins & Smith, 2006; Ghosh & Gurunathan, 2015). The employees who are usually committed more productive and thus enhance the productivity of the organizations. Consequently, affects the organizational performance. Compensation practices focus on an incentive package to motivate the employees to utilize their knowledge and skills for better efficiency, increase motivation and commitment. By doing so, the employees can fulfill the organizations set forth objectives as well as goals (Collins & Smith, 2006; Delaney & Huselid, 1996; Jerez-Gomez et al., 2005). Training and development practices emphasis on enhancing the employees' ability to migrate the knowledge and skills into their daily job and thus, increase organizational performance (Collins & Smith, 2006; Lopez et al., 2005). These studies have proven that the organizations need to strengthen their commitment-based HR practices as it results in significant improvement of organizational performance. Following these findings, the proposed hypothesis is:
***H2:*** *There is a positive relationship between commitment-based HR practices and organizational performance.*

**Organizational learning capability and Organizational performance:** Numerous studies in the literature showed that organizational learning capability (OLC) has significantly influenced all members of the organizations of their learning capability. It also serves as essential criteria of enriching the organization resources and capacities to enhance its performance for the long term (Egan et al., 2004; Lopez et al., 2005; Sony & Naik, 2012). OLC given the attention on the process to recruit, create, transform and integrate the

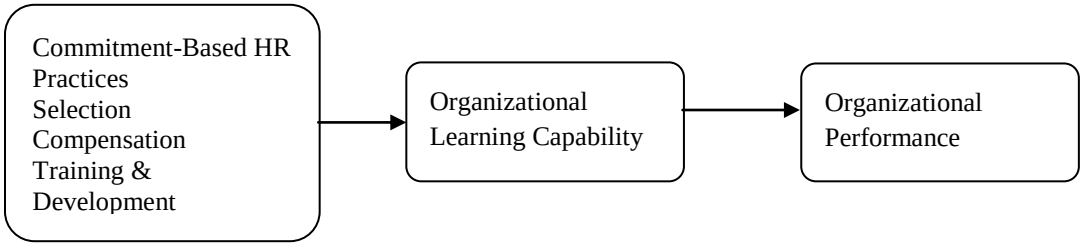
knowledge aimed to achieve greater performance in the organization. When the new insights migrate into an organization, it enables the organization to act quickly than its rivals. Consequently, it creates a strategic advantage in response to the fierce competition in the market (Cavaleri, 2004; Lopez et al., 2005; Weldy & William, 2010). As a result, it strengthens the performance of the organization. To develop stronger OLC, Jerez-Gomez et al. (2005) proposed that OLC must deal with four criteria which are (1) the commitment from the managerial in the organization, (2) all members of the organization must share same perspective, (3) an open mind culture should be practice in the organizations and (4) to be more flexible in adopting new knowledge or ideas and blend into the organization daily practices. Based on these four criteria, many researchers have regarded OLC as a multidimensional construct since it develops a culture that promotes the acquisition, creation and transfer of knowledge as the core values for the organizations (Goh et al., 2012). Hence, organizational learning capability has been regarded as the strong influence factor of the organizational performance with some empirical studies providing evidence of a positive effect between these two variables (Flores et al., 2008; Jones, 2000; Lopez et al., 2006; Spicer & Sadler-Smith, 2006; Wang, 2008). Thus, the third hypothesis is that:
***H3:*** *Organizational learning capability influences the organizational performance.*

**Commitment-based HR practices, Organizational learning capability and Organizational performance:** The positive relationship between commitment-based HR practices (CBHRP) and organizational learning capability (OLC) on the organization's productivity and performance have been reported in numerous studies (e.g. Batt, 2002; Lopez-Cabrales et al. 2011; Camps & Luna-Arocas, 2010; Garavan et al., 2002; Jaw & Liu, 2003; Lopez et al., 2005; Raj &Srivastava, 2013; Theriou & Chatzoglou 2008). Basically when OLC exists in the organization, it enables the employees to learn when they have the knowledge and abilities that the organization requires (Gupta & Govindarajan, 2000; Rhodes et al., 2008) and CBHRP may influence the organizational learning capability by enhancing the organization competencies which may assist the organizations to achieve its best performance (Goh et al., 2012; Lopez et al., 2006). This is to say that the management needs to implement specific HR practices such as commitment-based HR practices to give support to the organizational learning capability process inside the organization. Collins and Smith (2006) cited that to ensure OLC well operating, the management must gather stronger commitment from their employees. They further added that CBHRP (selection, compensation and training and development) are able to support OLC either individual or organization levels. CBHRP focuses on long-term exchange and mutual relationship for all members in the organizations. Furthermore, CBHRP has its own capability to attract the employees' due to its specific practices that aim to encourage the employees to display positive behaviors and attitudes. Additionally, it also increases the motivation of the employees to work as one identity for benefit of altogether (Arthur, 1992; Collins & Smith, 2006).

Furthermore, the literature has suggested that CBHRP have the high ability to shape the employees attitudes and behavior, and thus it plays a pivotal role towards the success of OLC (Collins & Smith, 2006; Shipton et al., 2002). This can be achieved in several ways. For an example, CBHRP that an organization may encourage the learning process to begin from the selection practices. Through the selection process, the organization can select the candidate internally who possess the right knowledge and skills accustomed with strong desired to enhance their personal and organizational learning capability (Jerez-Gomez et al., 2005; Hooi & Ngui, 2014). To encourage both types of learning process, the organizations have to invest in their training and development program for the purpose to enhance employees' capabilities as well as performance for strengthening the organizational productivity and performance (Jerez-Gomez et al., 2005; Raj & Srivastava, 2013; Shipton et al., 2002). Compensation practices which inclusive of intensive will enhance employee's attitudes and thus, lead a cooperative behavior and motivate them to look for new knowledge and skills. When the employees are motivated to upgrade themselves, it enhances the OLC process in the organizations (Jerez-Gomez et al., 2005; Kang et al., 2007). Therefore, this present study, CBHRP is regarded as key role in strengthening OLC in the organization. The organization that achieved high OLC enable to withstand the volatile business environment and sustain its performance. By having high OLC, employees are able to enhance their abilities to support the organizations to face any challenge derived from internal and external factor. Consequently, it increases the organizational performance (Lopez et al., 2005). Hence, the next hypothesis is proposed
***H4:*** *The relationship between commitment-based HR practices and organizational performance mediates by organizational learning capability.*

Following the discussion of the literature as above and the hypotheses set forth in this study, the research model as shown in the figure 1.

**Figure 1: Research Model**




## 3. Methodology

**Data collection and sample:** This study used a survey questionnaire method for data collection to test the hypotheses. The questionnaires are divided into two parts whereas first part is for background information while second part consists of the variables such as commitment-based HR practices (CBHRP), organizational learning capability (OLC) and organizational performance. The independent and mediation variables used seven-point Likert style ranged from 'strongly disagree to 'strong agree' while dependent variable used five-point Likert style also ranged from 'strongly disagree' to 'strongly agree.' This study examined a sample of 150 multi-national organizations in Malaysia. A representative of the organizations (e.g. HRM managers) who has the sufficient capacity has been chosen to complete the questionnaires. Of the 150 completed questionnaires, seven are incomplete. As a result, it is only 143 valid completed questionnaires to be used for the next statistical analysis.

## 4. Findings

**Reliability**: Cronbach alpha (α) method is used to check the reliability of the measurements in the survey as well as to gauge the internal consistency of the questionnaires items. According to Sekaran (2000) the minimum recommended level of 0.60 or higher can be regarded as the criterion of internally consistent established factors. The commitment-based HRM practices consists of selection 4 items (α = 0.753), compensation 4 items (α = 0.885) and training and development 8 items (α = 0.764). The organizational learning capability factor consists of ten items (α = 0.774). The organizational performance factor consists of ten items (α = 0.760).

**Means, Standard Deviations and Correlations:** This study intends to investigate the relationships between commitment-based HR practices, organizational learning capability and organizational performance. Table 1 illustrated the means, standard deviations and correlations result of all variables.

**Table 1: Means, standard deviations and correlations**

| Constructs | Mean | S.D. | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|---|
| 1. Sel | 3.93 | 0.78 | 1.00 | | | | |
| 2. Com | 3.86 | 0.76 | 0.54** | 1.00 | | | |
| 3. T&D | 3.83 | 0.73 | 0.58** | 0.64** | 1.00 | | |
| 4. OLC | 4.02 | 0.83 | 0.77** | 0.67** | 0.53** | 1.00 | |
| 5. OP | 3.68 | 0.89 | 0.44** | 0.58** | 0.59** | 0.69** | 1.00 |

Note: Significant at: *p < 0.05 and **p < 0.01
Sel=Selection; Com= Compensation; T&D=Training & Development; OLC=Organizational learning capability; OP=Organizational Performance.

As depicted in Table 1 above, the findings of correlation analysis has shown positive relationships between commitment-based HR practices (selection, compensation and training and development) with organizational learning capability. This result showed that commitment-based HR practices leads to higher learning capability in the organization. The analysis also stated significant influence commitment-based HR

practices with organizational performance. In addition, organizational learning capability also positive influences the organizational performance. Having a strong organizational learning capability enable the organization to sustain its competitiveness and directly affects organizational performance. Finally, the correlation between commitment-based HR practices and organizational learning capability on organizational performance also on the higher side, indicating that commitment-based HR practices and organizational learning capability are the essential tools to achieve greater organizational performance.

**Correlation Analysis:** The objective of the correlation analysis is to ensure the variables are tending to vary together or not. Table 2 illustrated the results of the correlation analysis and it showed the significant correlation (at the $p<0.01$ level) between commitment-based HR practices and organizational learning capability. Therefore, the results support hypothesis *H1*. Next, hypothesis *H2* was tested between commitment-based HR practices and organizational performance. This result showed that organization is able to increase its performance if they have well developed the commitment-base HR practices. Therefore, *H2* is accepted. Additionally, to test hypothesis *H3,* a correlation test was run between organizational learning capability and organizational performance and the relationship was found moderately support *H3*. Thus, *H3* is accepted. Finally, Hypothesis *H4* is to test the mediation effect of organizational learning on the relationship between commitment-based HR practices and organizational performance. This result suggested that organizational learning capability has mediated the relationship. Therefore, hypothesis *H4* is acceptable.

**Table 2: Correlation analysis results**

| | | **Organizational Learning Capability** | **Organizational Performance** |
|---|---|---|---|
| *Commitment-based HR practices* & Selection | Pearson Correlation | 0.25** | |
| Compensation | | 0.27** | |
| Training & Development | | 0.24** | |
| *Commitment-based HR practices* & Selection | Pearson Correlation | | 0.31** |
| Compensation | | | 0.40** |
| Training & Development | | | 0.33** |
| Organizational Learning Capability | Pearson Correlation | | 0.35** |
| *Commitment-based HRM practices* & Selection | Pearson Correlation | Organizational learning capability (mediator) | 0.151* |
| Compensation | | | 0.40** |
| Training & Development | | | 0.28** |

Note: Significant at: *p < 0.05 and **p < 0.01 (two-tailed test)

**Regression Analysis:** The purpose of the regression analysis was investigated whether the constructed model is significant or not. Subsequently, this test is also to calculate the total explained variance of the model of this study and also what percent of the organizational performance can be explained by commitment-based HR practices and organizational learning capability. Therefore, from the model summary table 3 below indicates the statistical relationship between dependent variable (organizational performance) and independent variables (commitment-based HR practices and organizational learning capability). The results have showed the sufficient evidence that the research questions fit the measurement of the variables therefore it leads to the investigation of the model. The ANOVA result as per table 3 showed the model is significant (at the level of $p<0.001$) and the commitment-based HR practices and organizational learning can explain 77% of the total variance of organizational performance.

**Table 3: Regression analysis results**

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | 0.820 [a] | 0.767 | 0.766 | 0.5781 |

a Predictors: (Constant), Commitment-Based HR Practices and Organizational Learning Capability

ANOVA[b]

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 190.731 | 2 | 95.3655 | 0.575 | 0.000 [a] |
| | Residual | 48.360 | 145 | 0.123 | | |
| | Total | 239.091 | 147 | | | |

[b]Dependent Variable: Organizational Performance

**Discussion:** This main purpose of this study is to examine the outcome of the relationship between commitment-based HR practices and organizational performance with organizational learning capability as a mediator. The findings indicated that the commitment-based HR practices emphasize on increasing employee commitment and influence on organizational learning capability, which is important for organizational performance. However, in the HRM literature, there is lack of strong evident linking HRM and organizational performance (Batt, 2002, Collins & Clark, 2003; Hooi & Ngui, 2014). This can be due to HRM practices do not affect the performance of organization either direct or indirect through other mediating variables and result affect organizational performance directly (Becker & Huselid, 2006; Fleetwood & Hesketh, 2006; Hooi & Ngui, 2014). For example, Bourne et al. (2013) asserted performance measurement and HRM practices affect organizational performance while Gong et al. (2009) has investigated the relationship between performance-oriented HR subsystems and organizational performance by adding the managerial affective commitment as a mediator variable.

In this present study, organizational learning capability acts as the mediator in the relationship between committed-based HR practices and organizational performance. The rationale for choosing organizational learning capability is because 1) commitment-based HR practices aim to strengthen the employer-employees relationship, motivate employees and increase the commitment. The stronger commitment by the employees, the better it is for the organization to mobilize its knowledge and skill resources to achieve greater performance (Batt, 2002; Lopez-Cabrales et al., 2011; Camps & Luna-Arocas, 2010; Garavan et al., 2002; Jaw & Liu, 2003; Lopez et al., 2005; Raj & Srivastava, 2013; Theriou & Chatzoglou, 2008) and 2) organizational learning capability creates new competitive advantage in response to unpredictable business environment (Cavaleri, 2004; Lopez et al., 2005; Weldy & William, 2010). As a result, it strengthens the organizational performance. Hence, results presented above supported the argument that the relationship between commitment-based HR practices, organizational learning capability and organizational performance is positive and organizational learning capability mediated the relationship between commitment-based HR practices and organizational performance. In a conclusion, the commitment-based HR practices and organizational learning capability play an important role towards improving the organizational performance.

**Implications:** The analysis result of this study has offered potential of implications for the organizations to consider for future management strategies to utilize it human resources for better organizational performance. Accordingly, it is suggested that the organizations should enhance its commitment-based HR practices and organizational learning capability into the organization day-to-day operations. The commitment-based HR practices are critical for human resource development as they enable the employer and employees establish a solid relationship and create a sense of belonging environment. In turn, it creates a positive attitude and thus establishes greater commitment and motivation levels. Having the sense of belonging, it encourages the employees to work even closely to achieve organization objectives and goals. A study by Delery and Doty (1996), Collins and Smith (2006), Huselid (1995) and Nazlina et al. (2011) proven that the commitment-based HR practices and organizational learning capability which well formulated by the

organization may promote employees' motivation and commitment to pursue high organizational performance. From the findings, employees perceived the active efforts from the management to keep a good relationship between them tend to feel their contribution is worthwhile. Contrary to that, it allows employees to liberate their creativity and talents to the fullest and in turn, enhance the productivity.

## 5. Conclusion

In conclusion, it has indicated that the organizations are encouraged to utilize the HR practices for the reasons of 1) motivate and influence the employees attitude towards learning process, 2) to increase the desired of acquire new knowledge and skills, 3) accustomed with the desired to increase organizational learning capability and 4) to improve organizational performance. It is, therefore, important that organizations continuously deploy strategies that enhance the learning capability that connecting with the organizational objectives and goals. The findings are also important for practitioners and academics. This study has shed some lights of the importance of continuous improvement of commitment-based HR practices and organizational learning capability to achieve better organizational performance for the long term. Therefore, practitioners can use this result as a guideline to develop strategies to strengthen the organizational capability. Academics on another hand may use this result to understand deeper the roles of commitment-based HR practices and organizational learning capability and its impact on organizational performance.

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