INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

Vol 13, Issue 4, (2023) E-ISSN: 2222-6990

The Effect of Customer Knowledge Management on Organizational Performance

Ahmad Suffian Mohd Zahari[1], Rosman Mahmood[2], Raja Mariam Raja Baniamin[2]

[1,2]Faculty of Business and Management Universiti Teknologi MARA Terengganu Branch Malaysia, [3]Academy of Language Studies Universiti Teknologi MARA Terengganu Branch Malaysia

Email: ahmadsuf@uitm.edu.my, rosmanma@uitm.edu.my, rmariam@uitm.edu.my

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v13-i4/16515 DOI:10.6007/IJARBSS/v13-i4/16515

Published Date: *10* April 2023

Abstract

Nowadays, the development of knowledge management (KM) does play an important role in the concept of Customer Knowledge Management (CKM). This development shows the rapid change in all areas of life, due to the effects of globalization and the development of highly acclaimed KM. On the other hand, CKM is considered important, because its implementation benefits the field of operations and services, that can improve personal competence, maintain availability knowledge, innovation and product development. Therefore, scholars regard CKM as a strategic resource for businesses to improve innovation, facilitate the detection of new market opportunities, and support long-term customer relationship management (CRM). However, literature suffers from a lack of understanding of customer knowledge's role in improving the performance of organization. Thus, the purpose of the study is to investigate the impact of CKM on organizational performance (OP). This study uses a questionnaire and statistical analytical techniques (Structural Sequential Equation Model) to explore the effect of CKM on OP. The statistical population of this research includes 500 insurance companies in Malaysia. The sample size was estimated 258 people by using Krejcie and Morgan Morgan Table (1970) and stratified sampling method was used. Data collection tool is close ended questionnaire with Likert's five-option scale. Therefore, 516 questionnaires were distributed and 180 returned questionnaires were analyzed. Measurement model was analyzed to determine data validity and the hypotheses were tested using structural model. The findings showed that that CKM dimensions namely; Knowledge for customers (KfC), and Knowledge from Customers (KfrC) had a positive impact on the performance of organization and provides competitive advantages. However, knowledge about customers (KaC), indicated insignificant impact with OP. This study provides clear implications related to the theory and contributions to the literature related to CKM as well as in insurance industry. The study also provides invaluable insightfulness to various stakeholders including policy makers, institutional support and insurance agent about the

importance of knowledge about customers (KaC), Knowledge for customers (KfC), and Knowledge from Customers (KfrC) in determining the performance of insurance industry. Hence, organizations should acquire valuable customer knowledge in order to enhance the relationship with customers, as well as enhance their performance.
Keywords: Knowledge, Knowledge Management, Customer Knowledge Management, Organizational Performance

Introduction

The business world is currently challenged to be able to survive in a business environment which is constantly changing. These challenges require organizations to improve competitiveness in domestic and international markets. In order to be able to survive in the business environment, the organization performs a variety of ways such as product innovation, expanding markets, improving service quality, improving the production process, improving the organization system, and making cost savings. Knowledge is inherent in the organization and in each organization member. Thus, organizations need to view knowledge as a valuable and strategic source in order to remain competitive.

Knowledge management (KM) is an interesting issue since its appearance. Various academics and business practitioners began to develop KM through research and application in business practices. Becerra-Fernandez and Sabherwal (2001) interpret knowledge as a result of one's reflection and experience, so that knowledge is always owned by individuals or groups. There are two critical dimensions that need to understand knowledge in an organizational context, that is, first, knowledge exists in each individual, group or organization; second, knowledge can be seen as something that can be saved, and as a process that is the process of knowing something. Based on two dimensions, knowledge can be divided into tacit and explicit knowledge. Tacit knowledge is knowledge gained from experience, activities done, and hard to define where it is usually shared through discussion, stories. According to Nonaka and Takeuchi (1995), tacit knowledge is interpreted as a knowledge that is personal, specific, and generally difficult to formalize and communicated to other parties. In organizations the process of disseminating / sharing knowledge will help achieve organization goals. Explicit or codified knowledge is defined as knowledge can be transformed in a formal form and systematic language (Nonaka & Takeuchi, 1995). According to them, explicit knowledge is knowledge that has been formulated, usually presented in written form such as regulations, books and literature The biggest challenge faced by organizations is converting tacit knowledge leads to explicit knowledge, or vice versa. Organizations are required to able to translate knowledge that exists in individuals, groups or teams, and organization becomes evident in the form of products and services produced.

Literature Review

Customer Knowledge Management (CKM)

Nowadays, the development of KM does play an important role in the concept of CKM. This development shows the rapid change in all areas of life, due to the effects of globalization and the development of highly acclaimed KM. As a result, the role of science has become more prominent, because only with knowledge, changes that occur can be addressed appropriately. The evidence indicates that is a potentially powerful competitive tool, contributing to improve both companies and their customers. It is a continuous strategic process by which companies enable their customers to move from passive information sources and recipients of products and service to empowered knowledge partners (Gassmann

& Keupp, 2012). It incorporates principles of KM and customer relationship management (CRM), but moves decisively beyond it to a higher level of mutual value creation and performance (Gibbert et al., 2002).

CKM refers to tools that enable framing strategies that help companies derive valuable insights about customers, not from the information gained from knowledge repositories that lie within the organization but from the customers' thoughts and deeds. Customer knowledge, to be precise, is the "*collection of information and viewpoints that an organization has about its customers*". According to this definition, the role of CKM is to capture and organize customer data to allow it to be shared and discussed across the functional areas of the organization that both directly and indirectly 'touch' customers. But the most critical issue is not managing the information as it is available to an organization at one point of time, the issue in today's competitive world is to understand and predict the future behavior of the customers, which Customer relationship management (CRM) might not be successful in doing. Customer knowledge is not a new concept to many companies. Companies do possess customer knowledge in the form of data within the marketing, sales or customer care processes. But in most cases this is in a fragmented form and therefore there are lot of difficulties in sharing and analyzing this data, which in most cases end up being incomplete. CKM aims at procuring customer data from the past, not just from those who have a direct relationship with customers, but also from those who have an indirect relationship with them. Thus, the information required for CKM stretches through the entire value chain and attempts to procure restore and manage the mission critical information, which could be put to future use. Hence CKM demands systems and processes to gather fundamental information pertaining customers like who they are, what they think and what they do, thus an alignment of KM practices and CRM processes to attain business efficiency. CKM can be called as a strategic process by which companies allow their customers to become strategic partners in their initiative to understand them (customers) better. This is because CKM is not a "one size fits all" approach.

According to Wilde (2011), CKM implementation is expected to fill knowledge gap to the customer. If knowledge is used in the target orientation, this can be needed to be able to be accessed and to share it systematic. By integrating CKM, customers can become active partners for company. The goal is to improve customer orientation and to build relationships customer in the long run. Therefore, transfers between companies and customers are very necessary by implementing CKM. Customers are more integrated than CKM and become partners active knowledge, as a result of knowledge from, to and about customers can used efficiently.

Therefore, CKM can be seen as a systematic process for managing individual's three dimensions of customer knowledge namely; Knowledge about customers (KaC), which can include knowledge of potential customers and customer segments as well as knowledge of individual customers (Ahmad Suffian, 2014). Knowledge about customers is an accumulation to understand the customer's motivation and their address in a personal way. Next is Knowledge for customers (KfC), which can include knowledge for customers about products, markets and suppliers (Ahmad Suffian, 2014).. The third dimensions is Knowledge from customers (KfrC), which include knowledge from customers about their ideas, thoughts, specific product preferences, creativity, or experience of knowledge (Ahmad, 2014). The emergence of customer knowledge can be used by organizations or companies to identify, create, clarify, and distribute knowledge for reuse, discovery, and be learned within the organization.

This study adopted Knowledge-Based View (KBV) as a theory underpin. This is because the importance of the existing knowledge has been given much attention with the introduction of knowledge-based view (KBV) theory. KBV, which comes from the concept of resource-based view focuses on the value of intangible assets and suggests knowledge as critical to a firm's long term success. Therefore, with the implementation of KBV, managers can enhance a firm's capacity to produce and efficiently update knowledge. This study also uses Venkatraman and Ramanujam (!986), theory of organization performance (OP) because there are subjective measurements that can lead to objective measurement. It is a measurement using two dimensions (i.e., non-financial and financial performance). Scholars regard CKM as a strategic resource for businesses to improve innovation, facilitate the detection of new market opportunities, and support long-term customer relationship management. However, literature suffers from a lack of understanding of customer knowledge's role in improving the performance of organization.

Organizational Performances (OP)

Steer (1975) in his study has identified and reviewed 17 models of organizational effectiveness and integrated the contents concerning the measurement of OP. After reviewing ten different types of measurement, he generalized OP into three dimensions namely; financial performance, business performance and organization effectiveness. It was further supported by (Kabiru et al., 2012, Abdul Kadir, 2010) who claim that OP is assessed by the application of financial and non-financial measurement. According to Venkatraman and Ramanujam (1986), financial performance centers on outcome-based indicators assumed to reflect economic goals, inclusive of accounting-based and market-based metrics. Financial performance includes return on investment, return on sales, return on assets and sales growth. Operational performance refers to non-financial dimensions and focuses on operational success factors that might lead to financial performance (Venkatraman & Ramanujam, 1986). Operational performance includes both product–market outcomes (including market share, efficiency, new product introduction, innovation and product/service quality (Venkatraman & Ramanujam, 1986). Measurement of overall effectiveness reflects a wider conceptualization of performance and includes reputation, survival, perceived overall performance, achievement of goals and perceived overall performance relative to competitors (Lewin & Minton, 1986; Venkatraman & Ramanujam, 1986). Meanwhile, Hanvanich et al (2006) measure OP as a combination of overall performance and innovativeness.

According to Shahzad et al (2012); Chenhall (2005), the use of financial and non-financial indicators is generally the most appropriate measurement for the organization in which it is also helpful to enhance protection towards uncontrollable events outside the organizations. Thus, many studies have selected a combination of operational measurement (e.g: non-financial) and financial measures to reflect overall OP (Rhodes et al., 2008). Academicians and practitioners give various measurements for financial and non-financial performance in their research to measure OP. Zack, et al (2009) identified product and service innovation, quality, customer satisfaction, retention and operating to measure OP. In addition, Huang, et al. (2011) used efficiency growth, profitability and organizational innovation to identify OP. The findings of previous studies suggested that mixed measurements have been used by scholars and practitioners in examining OP. However, a large body of previous studies focused on financial and non-financial indicators as measurement of OP which provides a basis for the present study.

CKM (Knowledge from Customers)

The concept of CKM as proposed, first by Gibbert et al (2002) suggested that market opportunities are influenced by knowledge residing in customers. Thus, knowledge from customers is presumed to be a better predictor of CKM. The idea suggested by Gibbert et al (2002) was supported by Gebert et al (2002) who pointed out that the knowledge gained from the interaction with customers can be used to improve customer service and foster the development of new products.

In relation to OP, new product development is one of the dimensions in OP. Gibbert et al (2002) in investigating Old Mutual, the largest insurance companies in South Africa suggested that knowledge from patients is important for a company. Their study found that customer knowledge is being used by Old Mutual Company to develop new medical insurance products. The development of the new product by Old Mutual Company is based on knowledge and demand from the customers. Their study on more than two dozen companies over the last six years in pharmaceutical and insurance industry revealed that by managing knowledge from customers, organizations are more likely to accurately perceive market opportunities.

A study by Salomann, et al (2005) provides further support for the claim that knowledge from customers can improve OP. Salomann et al (2005) have conducted an in-depth case study on CKM dimensions at Siemens and Electronic companies and found that knowledge from customers has led to the product development and innovation which were described as the performance outcome of the company. As a result, he found that CKM has positive effects on OP. To clarify the relationship technically, this study highlights on the following hypothesis:

Hypothesis 1: Knowledge from customers positively influences organizational performance.

CKM (Knowledge for Customers)

Knowledge for customers is transmitted from one direction to support the organization, customers and to make customers better understand the products that the organization offers (Gebert et al., 2002; Smith & McKeen, 2005). This knowledge flow can help organizations to retain their customers by focusing on customer preferences that are constantly changing and improving the products offered that may eventually lead to the purchase of products by customers (Feng & Tian, 2005). As a result, it helps organizations to retain the current customers and subsequently improve their profits.

Zanjani et al (2008) in investigating CKM dimensions of 10 companies in Britain found that knowledge for customers has the highest utilization with 42% as compared to 32% and 26% for knowledge about customers and knowledge from customers respectively. These findings were supported by Smith and McKeen (2005) who found that in order to enhance OP, companies such as Google, e-Bay and Amazon are putting more emphasis on knowledge for customers to make their products and services more intuitive and user friendly. However, Zanjani et al. (2008) stated that there are fewer studies that emphasized on knowledge for customers that can lead to the improvement of OP. To assess the relationship, the following hypothesis is derived:

Hypothesis 2: Knowledge for customers positively influences organizational performance.

CKM (Knowledge about Customers)

Knowledge about customers is a firm's understanding on the background of clients, needs and preferences for product features (Chen & Su, 2006; Feng & Tian, 2005; Gibbert, et al.,

2002). Customers interact with organizations through a variety of channels such as email and Facebook. Based on the type of channels they interact, organizations can segment their customers and also determine their relationship with them. The use of customer database is very important to keep and update all knowledge about customers. Moreover, this can be done through knowledge derived from the statistical information concerning customers' interaction with the company.

This statement is further strengthened by Gebert et al (2002), who found that knowledge about customers, markets and other factors can be regarded as opportunities to enable faster and more flexible reactions to threats. Research by Bueren, et al (2004) pointed out that if organizations have systems and good database, knowledge about customers can improve the service levels of the organizations and increase OP. From the findings, they emphasized that knowledge about customers is more important as compared to knowledge for customers and knowledge from customers. According to them, without knowledge about customers, an organization could suffer competency shortages with a negative impact on OP.

Smith and McKeen (2005) in their study found that with the use of a customer service workbench, a technology-based solution in the organization, it has created customer knowledge database about customers. The company was able to increase 100% its customer base and 50% increase in its sales force. Hence, it is assumed that *Knowledge about customers* influences OP as proposed in the hypothesis below:

Hypothesis 3: Knowledge about customers positively influences organizational performance.

Research Methodology

This study utilized survey research. The questionnaires were used to collect data. A corresponding 5 Likert scale was deployed (1 for "Strongly Disagree"; 2 for "Disagree"; 3 for for Neither Agree "NeitherAgreenor Disagree"; 4 for "Agree" and 5 for "Strongly Agree"). Prior to pilot testing and main data collection, the questionnaires were pre-tested with several experts in the field and also several insurance companies who could become the prospective respondents. The questionnaires were pilot tested with 81 insurance companies. Using the SmartPLS, the responses of these 30 companies were analyzed for assessing the reliability of the measurements. The recorded Cronbach Alpha for all variables employing multi-items estimated range from 0.65 – 0.88 which suggests that the questionnaires were reliable (Kline, 2011). The populations of the study were 500 Malaysian insurance companies listed in the Bank Negara database. There were 182 companies responded. However, only 180 questionnaires were valid for the data analysis. The remaining 180 were analyzed using Partial Least Square (SmartPLS version 3). This study will first develop and assess the measurement model and followed by the development and assessment of the structural model. Previous studies have indicated a sample threshold of as little as 100 samples for PLS-SEM (Reinartz, Haenlein, and Henseler 2009). Alternatively, one can revert to the more restrictive minimum sample size recommended based on statistical power (Hair, Hult, Ringle & Sarstedt, 2014). We used G*Power to calculate the sample size based on statistical power (Faul et al., 2009), suggesting that we needed a sample size of 129 for a statistical power of 0.95 for model testing. Since, our sample size exceeded 129, the power value in this study also exceeded 0.95. Moreover, the minimum power required in social and behavioural science research is typically 0.8. Therefore, in both cases, we can conclude that our sample size was acceptable for the purposes of this study.

The respondents of the study were 180 Malaysian insurance companies, the categories of company consisted of 45 life insurance (25 %), 92 general insurance (51.11%), 33 life takaful (18.33%), 9 general takaful (5%) and 1 others (0.56%). In terms of company size, the majority of respondents have employees less than 25 (88 companies, 48.89%), 26-25 employees (15 companies, 8.33%), 51-75 employees (6 companies, 3.33%), 76-100 (13 companies, 7.22%) and more than 100 (58 companies, 32.23%). With regards to company's annual revenue, 145 insurance companies had annual revenue more than USD 12.23 million, 16 companies earned revenue of USD 5 – 10 million and 19 companies whose revenues were less than USD 5 million.

Population and Sample Size

The population of this study consists of Malaysian insurance companies listed and registered with Bank Negara Malaysia. The type and category of insurance can be divided into Life and General Business Insurance, Life Business Only Insurance, General Business Only Insurance, Takaful Operators Insurance and International Takaful Operator Insurance. Then, all listed insurance companies involving 500 companies serve as the population of the study. At this point, the sample selection was based on the stratified sampling method, using type and category of insurance as the basis for stratification.

Krejcie and Morgan (1970) suggested a table for determining sample size for a given population for reference. Based on Krejcie and Morgan's (1970) table for determining sample size, for a given population of 787, a sample size of 258 would be needed to represent the population. There are several reasons to justify the selection of insurance companies as the population for the study. First, there has been a growing interest worldwide in the efficiency literature about the insurance industry (Rai, 1996; Fukuyama, 1997). Second, Norma et al (2011) emphasized that while there have been numerous international studies on the performance of other financial service industries, only a few are related to the insurance industry. Third, a study on the performance of the insurance industry is crucial since the said industry is currently facing many challenges, including increased competition, consolidation, solvency risks, and a changing regulatory environment (Norma & Edzlina, 2011). Fourth, there are a few researches, as to date, on CKM and OP especially in the insurance industry (Salamonn et al., 2005). Thus, they suggested that researchers must establish further evidence on the relationship between CKM dimensions and OP especially in the insurance industry.

The stratified sampling design is a commonly used probability method that is superior to the simple random sampling design as suggested by (Noorzan, 2010). This is because each of the important segments of the population is represented and is more valuable and differentiated information can be obtained with respect to each group (Sekaran & Bougie, 2010) and sampling error will be reduced (Noorzan, 2010). In ensuring better responses and minimizing the responses' risk, the researcher decided to send 300 sets of questionnaires as better results can be derived from a large sample and the results can be generalized (Hair et al., 2010).

Operationalization and Measurement of Variables

The independent variable for this study is CKM, while the dependent variable is OP. These variables were all measured using item scales developed by previous scholars drawn from existing literature. Some modifications were made where necessary to suit the study context. Traditionally, there are three knowledge flows; namely, knowledge for customers, knowledge about customers and knowledge from customers (Gebert et al., 2002, Ahmad, 2014). These

knowledge flows are measured by thirty nine items using five self-rating items on a five point Likert scale, in which thirteen items reflect knowledge for customers, thirteen items measure knowledge about customers and another thirteen items gauge knowledge from customers. These questions items were adapted from (Belkahla et al., 2011). The next component is the dependent variable, namely, OP. This study adopted Venkatraman and Ramanujam's (1986) model based on several justifications. First, there is a unified combination of measurement for performance that consists of financial and non-financial items. For the purpose of this study, OP consists of perceptions of financial outcomes such as sales growth, company return on investment (ROI), company return on assets (ROA), and perceptions of non-financial measurement such as market share, new product introduction and product quality.

Data Analysis and Findings

Quantitative data were recorded, checked, and cleaned using AMOS software version 21™ to yield composite scores of each scale and were used for statistical analysis. As this study used face-to-face administered questionnaire, hardly any missing value was observed at all. Descriptive analyses were run using SPSS, while the hypotheses were tested using Structural Equation Modeling (SEM) with the aid of AMOS software version 21™.

Assessment of Measurement Model

To examine the research model Partial Least Square (PLS) analysis technique was employed by using the SmartPLS 3 software version 3.2.8 (Ringle et al., 2015). In an effort to refine all structural equation models two stage analytical procedure was employed, where researchers tested the measurement model and structural model recommended by (Hair, et al., 2014). Prior to structural modelling, the study has to assess the measurement model of latent construct for their dimensionality, validity, and reliability. Cronbach's (α) and composite reliability were also tested as recommended by (Henseler et al., 2015).

The measurement model used in this study included five constructs: knowledge for customer (KfC), knowledge about customer (KaC), knowledge from customer (KfrC), and organizational performance (OP). In assessing a model's reliability, the loading of each indicator on its associated latent variable must be calculated and compared to a threshold. Generally, the loading should be higher than 0.7 for indicator reliability to be considered acceptable (Hair et al., 2014). Table 1 indicates that most of the indicator loadings on their corresponding latent variables for the respondents were higher than 0.7.

Validity Assessment

Validity was assessed in terms of convergent validity and discriminant validity. Convergent validity is the extent to which the scale correlates positively with other measures of the same constructs (Malhotra, 2002). Convergent validity of measurement model is usually ascertained by examining the factor loading, average variance extracted (AVE) and composite reliability (CR) (Hair et al., 2010). All the values were above 0.6, shows the convergent validity of the model. Convergent validity can be evaluated by examining the loading (≥ 0.6), AVE ≥ 0.5, and CR ≥ 0.7 (Kim, 2010). Each item's coefficients on its underlying construct were observed. A test of each item's coefficient was used to assess convergent validity. All values fulfill the required standard, indicating high convergence validity. Table 1 shows the results of factor loadings threshold level of 0.7 as recommended by (Hair et al., 2010).

Table 1
Factor loading, composite reliability (CR) and average variance extracted (AVE)

Variables	Loading	C.R.	AVE
KaC	0.811	0.875	0.636
KfC	0.808	0.871	0.629
KfrC	0.890	0.914	0.603
OP	0.807	0.864	0.561

Besides assessing the convergent validity, the study also evaluated the discriminant validity. Discriminant validity can be evaluated by examining Fornell-Larcker Criterion (Fornell & Larcker, 1981). Fornell and Larcker (1981) have suggested examining whether the square root of the AVE for each construct is greater than the correlation between the constructs. Tables 2 shows the results of the discriminant validity assessment of the measurement model using the Fornell–Larcker criterion indicate that the models possess acceptable discriminant validity.

Table 2
Discriminant validity (Fornell and Larcker)

Constructs	KaC	KfC	KfrC	OP
KaC	0.798			
KfC	0.781	0.793		
KfrC	0.667	0.705	0.777	
OP	0.624	0.703	0.607	0.749

Assessment of Structural Model

We performed bootstraping involved 500 samples whislt our actual sample stood at 180. The SEM results are presented in Table 3. It can be observed that R^2 values for OP is 0.30, suggesting that 30% of the variance in OP is explained by the knowledge for customer (KfC), knoweldge about customer (KaC) and knowledge from customer (KfrC). Table 3 shows that all beta path coefficients were positive and in the expected direction and were statistically significant except the beta path coefficient between knoweldge about customer (KaC) in which *t* value is less than 1.645. To elaborate the significant effect of knoweldge for customer (KfC) ($\beta = 0.464$, $p < 0.05$) and knowledge from customer (KfrC) ($\beta = 0.190$, $p < 0.05$) were found on OP. Thus H2 and H3 are supported but H1 is not supported. The result reveals that both knoweldge for customer (KfC)and knoweldge from customer (kfrC) are equally important predictors of organization performance (OP) compared to knoweldge about customer (KaC). We evaluated for multicollinearity among the variables in our model, and did not find any cause for concern using the criteria of variance inflation factor (VIF), which were all below the suggested value of 5.00 (Hair et al., 2014).

Table 3
Structural Model (Hypotheses Testing)

Hypotheses	Beta	S.D.	T Values	Decision
KaC -> OP	0.135	0.111	1.222	Not Supported
KfC -> OP	0.464	0.116	4.009	Supported
KfrC -> OP	0.190	0.094	2.013	Supported

Note: significant levels: ** p < 0.01, * p < 0.05

Conclusion

The objective of this study is to investigate the impact of CKM on OP. From multiple regression analysis on 180 samples, major findings shows that CKM dimensions namely; 1) *knowledge for customers and 2) knowledge from customers* has a significant positive effect on the performance of insurance companies. However, the findings show that 3) knowledge about customer did not have significant effect on OP. This finding arguably links well with the Knowledge Based View (KBV) which postulates that when knowledge is effectively managed, it creates unique capabilities which contribute to improved business performance through innovation (Grant, 1996; Leal-Rodríguez et al., 2013). The results indicate that organizational performance as measured by sales growth, ROI, ROA, market share, product quality and new product development is influenced more by knowledge from customers rather than knowledge for customers and knowledge about customers. These findings are consistent with previous studies that found knowledge from customers about insurance was clearly prominent in CKM dimensions (Gibbert et al., 2002; Garcia-Murillo & Annabi, 2002; Paquette, 2006; Ho, 2009; Rowley, 2002). It is possible to say that knowledge from customers is important to keep the knowledge required and to expand the knowledge residing in customers for customers and corporate benefits. Knowledge from customers can be used to facilitate new product development as well as catering for customers' needs and wants. This implies that insurance companies collect knowledge from their customers, disseminate this knowledge inter-functionally and inter-departmentally and respond to customers' needs based on this knowledge; the process will affect this organization in terms of high organizational performance.

One possible reason to support this finding is the awareness of Malaysian citizens nowadays to buy insurance policies such as life insurance and family insurance. For example, the increasing demand for insurance policies such as conventional and Islamic takaful by Malaysian citizens have caused the insurance companies to market their products and services intensively in order to increase their number of potential customers. The insurance companies have conducted successful campaigns in providing knowledge for customers about their current products.

Moreover, insurance companies have introduced many types of insurance such as family takaful, general takaful, life and general insurance as well as car and home insurance. The introduction of various new insurance products can thus attract new customers and as a result can improve the organization sales growth. It seems that, by using the customer data or profile, insurance companies can make follow-up persuasion in attracting current customers to buy another insurance policy

Suggestion and Future Research

Notwithstanding the contributions, there are three main limitations identified and these provide opportunities for future research. First, the sample of this study is limited to insurance industry in Malaysia. Future study could consider other types of business involved in Malaysia, in order to unveil better prediction for the dissimilarity in OP. Second, the sample of only the managers in organizations limits the generalization of the results. In future, studies could incorporate the data from other position in organizations to provide richer interpretation and generalization of the findings. Third, this study only considered some internal factors such as knowledge for customers, knowledge from customers and knowledge about customers. Future research could include other factors mainly related to external forces such as economic development, government support, growth potential, business networking,

involvement and competition The inclusion of these factors could enhance the understanding on the contributing factors that affect the performance of organizations.

References

Becerra-Fernandez, I., & Sabherwal, R. (2001). Organizational Knowledge Management: A Contingency Perspective. *Journal of Management Information Systems*, 18, 23-55.

Belkahla, W., & Triki, A. (2011). Customer knowledge enabled innovation capability: proposing a measurement scale. *Journal of Knowledge Management,* 15(4), 648-674.

Bueren, A., Schierholz, R., Kolbe, M., & Brenner, W. (2005). Improving performance of customer-processes with knowledge management. *Business Process Management Journal*, 11(5), 573-588.

Chen, Y. H., & Su, C. T. (2006). A Kano-CKM model for customer knowledge discovery. *Total Quality Management & Business Excellence*, 17(5), 589-608.

Chenhall, R. (2005). Integrative strategic performance measurement systems, strategic alignment of manufacturing, learning and strategic outcomes: An exploratory study. *Accounting, Organizations and Society,* 30, 395-422.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009), Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods.* 41(4), 1149–1160.

Feng, T. X., & Tian, J. X. (2005). CKM and condition analysis of successful CKM implementation. *Proceedings of the 4th International Conference on Machine Learning and Cybernetics,* Guangzhou, (pp. 2239-2244).

Garcia-Murillo, M., & Annabi, H. (2002). Customer knowledge management. *Journal of the Operational Research Society*, 53(8), 875-884.

Gassmann, O., & Keupp, M. M. (2007). The competitive advantage of early and rapidly internationalizing SMEs in the biotechnology industry: A knowledge-based view. *Journal of World Business,* 42(3), 350-366.

Gebert, H., Gelb, M., Kolbe, L., & Brenner, W. (2002). Knowledge-enabled customer relationship management: Integrating customer relationship management and knowledge management concepts. *Journal of Knowledge Management*, 7(5), 107-123.

Gibbert, M., Leibold, M., & Probst, G. (2002). Five styles of customer knowledge management, and how smart companies use them to create value. *European Management Journal*, 20(5), 459-469.

Hair, J. F. Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective*. (5th ed.). New York, Prentice-Hall International.

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Los Angeles, CA, Sage.

Hair, Jr. F, Sarstedt, J., Hopkins, M. & Kuppelwieser, V. (2014), Partial Least Squares Structural Equation Modeling (PLS-SEM) an emerging tool in business research. *European Business Review,* 26, 106-121.

Hanvanich, S., Sivakumar, K., & Hult, G. T. M. (2006). The relationship of learning and memory with organizational performance: The moderating role of turbulence. *Journal of the Academy of Marketing Science,* 34(4), 600-612.

Ho, C. T. (2009). The relationship between knowledge management enablers and performance. *Industrial Management & Data Systems,* 109(1), 74-97.

Huang, C. M., Hsu, P. Y., & Chiau, W. L. (2011). Perceptions of the impact of chief executive

leadership style on organizational performance through successful enterprise resource planning. *Social Behavior and Personality: An International Journal,* 39(7), 865-878.

Kline, R. B. (2011), *Principles and Practices of Structural Equation Modelling* (2nd ed.). New York, NY: Guilford.

Kim, D. Y. (2010), *The Impacts of Quality Management Practices on Innovation* (Doctoral dissertation). Retrieved from ProQuest Dissertation & Thesis Global. (Accession No. 816192017).

Krejcie, R. V., & *Morgan*, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.

Lewin, A. Y., & Minton, J. W. (1986). Determining organizational effectiveness: Another look, and an agenda for research. *Management Science,* 32(5), 514-538.

Malhotra, N. K. (2002). *Basic Marketing Research: Applications to Contemporary***,** New Jersey, Prentice Hall International.

Nandakumar, M. K., Ghobadian, A., & O'Regan, N. (2010). Business-level strategy and performance: The moderating effects of environment and structure. *Management Decision,* 48(6), 907-939.

Nejatian, H., Sentosa, I., Piaralal, S. K., & Bohari, A. M. (2011). The influence of customer knowledge on CRM performance of Malaysian ICT companies: A structural equation modeling approach. *International Journal of Business and Management*, 6(7), 181-198.

Nonaka, I., & Takeuchi, H. (1995). *The Knowledge Creating Company: How Japanese Companies Create the Dynamics of Innovation.* New York, Oxford University Press.

Noor, N. M. (2010). *Writing research & thesis proposal: guidelines & examples*. Shah Alam, University Publication Centre (UPENA).

Saad, N. M., & Idris, N. E. (2011). Efficiency of life insurance companies in Malaysia and Brunei: A comparative analysis. *International Journal of Humanities and Social Science,* 1(3), 111-122.

Nunnally, J. C. (1978). *Psychometric Theory*. (2nd ed.). New York, NY: McGraw-Hill. Retrieved on December, 2, 2012 from http://www. *core.ecu.edu/psyc/wuenschk/stathelp/Reliab-Nunnally.doc*

Paquette, S. (2006). Customer knowledge management, *Encyclopedia of Knowledge Management*: Idea Group Inc. Retrieved November 3, 2012 from, http://www.fis.utoronto.ca/phd/paquette/Documents/Paquette%20%20Customer%20Kno wledge%20Management.pdf.

Rai, A. (1996). Cost efficiency of international insurance firms. *Journal of Financial Services Research*, 10, 213-233.

Reinartz, W., Haenlein, M. & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of Research in Marketing*, 26(4), 332–344.

Ringle, C. M., Wende, S., & Becker, J. M. (2015). *SmartPLS 3*, Boenningstedt, Smart PLS GmbH.

Rhodes, J., Hung, R., Lok, P., Lien, B. Y. H., & Wu, C. M. (2008). Factors influencing organizational knowledge transfer: implication for corporate performance. *Journal of Knowledge Management, 12*(3), 84-100.

Rowley, J. E. (2002a). Reflections on customer knowledge management in e-business. *Qualitative Market Research: An International Journal*, 5(4), 268-280.

Salomann, H., Dous, M., Kolbe, L., & Brenner, W. (2005). Rejuvenating customer management: How to make knowledge for, from and about customer's work. *European Management Journal*, 23(4), 392-403.

Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill-building approach.* (5th ed.). New Delhi: John Wiley and Sons.

Shahzad, F., Luqman, R. A., Khan, A. R., & Shabbir, L. (2012). Impact of organizational culture on organizational performance: An overview. *Interdisciplinary Journal of Contemporary Research in Business*, 3(9), 975-985.

Smith, H. A., & McKeen, J. D. (2005). Developments in practice: customer knowledge management: Adding value for our customers. *Communications of the Association for Information Systems*, 16, 744-755.

Steer, R. M. (1975). Problems in the measurement of organizational effectiveness. *Administrative Science Quarterly*, 20(4), 546-558.

Venkatraman, N., & Ramanujam, V. (1986). Measurement of business performance in strategy research: A comparison of approaches. *Academy of Management Review,* 11*,* 801-814*.*

Wilde, S. (2011). *Customer Knowledge Management-Improving Customer Relationship through Knowledge Application.* Springer-Verlag Berlin Heidelberg, pp. 45-56.

Zack, M. H., McKeen, J., & Singh, S. (2009). Knowledge management and organizational performance: An exploratory analysis. *Journal of Knowledge Management,* 13(6), 392-409.

Zanjani, M. S., Sakhaee, N., & Shahbaznezhad, H. (2009). Mechanisms of customer knowledge management in e-commerce websites. *Resource Journal of Information Technology,* 1(2), 86-93.

Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2010). *Business research methods*. (8th ed.). Canada, South Western Publishing.