# Empowering Organizations through Customer Knowledge Acquisition: A pilot investigation

*Research-in-Progress*

**Kamla Ali Al-Busaidi**

Information Systems Department, Sultan Qaboos University, Oman

kamlaa@squ.edu.om

**ABSTRACT**

Customers are becoming more powerful, and customer knowledge can empower organizations and improve their performance. Customer knowledge has been classified in three categories: knowledge FOR customers, knowledge ABOUT customers and knowledge FROM customers. The value of knowledge management has been recognized by organizations. However, the value of external customer knowledge has not fully been recognized, and its impacts have not been sufficiently investigated. Consequently, the objective of this study is to empirically assess the impact of acquiring each type of customer knowledge. Based on a preliminary analysis of 13 organizations in the banking industry, this study detected that the acquisition of customer knowledge is significantly associated with business processes, employees, products, customers, market and financial performance.

**Keywords**

Customer Knowledge, Customer Knowledge Acquisition, Customer Knowledge Management; Benefits of Customer Knowledge

**INTRODUCTION**

As customers are becoming more powerful and customer-focused strategy is becoming the strategy that enables competitive advantage, customer knowledge (CK) is also becoming vital for several organizations especially service-based organizations. It enables improvement for business operations and innovativeness and consequently achieves competitive advantage. Knowledge is the only meaningful economic resource (Drucker, 1996), and specifically, CK is the most indispensable asset when pursuing a competitive advantage according to some surveys (Bennet and Gabriel, 1999). An organization's long-term survival depends on its ability to generate new knowledge and continuously learn from the external environment such as customers and competitors (Hoe, 2008).

The literature has categorized CK into three main categories: (1) knowledge for customers, (2) knowledge about customers and (3) knowledge from customers (Gebert et al., 2003). Zanjani et al. (2008) provided more detailed classification of each category. However, acquiring knowledge from external sources, such as customers, may be more challenging than from internal sources, such as employees. Consequently, implementing technologies for customer knowledge management (CKM) may not be easy. In addition, organizations find the implementation of information technology (IT) tools, such as customer relationship management (CRM) systems, are difficult, and most organizations fail to implement them properly (Wu, 2010). Hence, many organizations may feel resistant to establish mechanisms and technologies to acquire CK. Top management support is a major challenge in CKM, along with corporate culture, chief knowledge officer roles and talented humans (Liew, 2008). Supporting CKM can be costly, but it adds value to organizations, as CK is the most valuable knowledge for customer-knowledge focused organizations (Gebert et al., 2003). Recognizing the benefits of CK acquisition will enable organizations to gain the support of top management. Very limited empirical studies examined the specific impact of acquiring each CK type.

This study aims to empirically assess the benefits of CK acquisition. Specifically, this study assesses the impact of each CK type (knowledge for customers, knowledge about customers and knowledge from customers) on business processes,

employees, products, customers, financial performance and market performance of the organizations. An earlier exploratory study examined the effective tools for CKM (Al-Busaidi, 2012). This study further assesses the benefits of acquiring different types of CK. Even though organizations and researchers have recognized the value of knowledge management, they have not generally considered external knowledge such as CK (Tseng, 2009). Thus, this investigation aims to illustrate the importance of each CK type for organizations. Classifying CK into distinct classifications is important because it "can help Businesses identify different aspects of CK, and thus be able to manage them better accordingly" (Zanjani et al., 2008, p. 303), and manage customer relationships (Gebert et al., 2003).

## BACKGROUND

### Customer Knowledge Acquisition

Organizational knowledge can be acquired from internal and external sources (Davenport and Prusak, 1998). One of the valuable external sources of knowledge is customers. Customers create and accumulate knowledge about the company through their personal experience with the company, its markets and its products and services. CK is considered one of the most important assets to achieve competitive advantage (Bennet and Gabriel, 1999), and the most preferred type of knowledge management (KM) activity (Chase, 1997). CK is classified as: (1) knowledge about customers, which includes knowledge about potential customers and customer segments and individual customers, and (2) knowledge possessed by customers about product ranges (Rowley, 2002). On the other hand, Gebert et al. (2003) classified CK into three main categories. The first type is "knowledge for customers," which refers to knowledge about products, markets and suppliers processed to satisfy customers' knowledge needs. The second type is "knowledge about customers," which is created based on the analysis of historical customers' data and information. The third type is "knowledge from customers," which refers to the customers' knowledge of products, suppliers and markets. Furthermore, Zanjani et al. (2008) created a detailed three-level framework of CK based on Gerbert et al.'s (2003) three CK categories. First, they further categorized "knowledge for customers" into a company's products and services information (prospective customers' information needs and current customers' information needs), a company's environment information (competitors' products and services information, government regulations information and market information) and a company's general information (company introducing information and company knowledge information). Second, they further categorized "knowledge about customers" into prospective customers' information (personal and preferences information) and current customers' information (personal and preferences information). Third, they further categorized "knowledge from customers" into company-related information (marketing, sales and support information, and products and services information) and competitor-related information (marketing, sales and support information, and products and services information).

Knowledge acquisition is the starting process of KM (Alavi, 2000; Davenport and Prusak, 1998). Knowledge capture and acquisition is essential for the establishment of organizational memory (Davenport and Prusak, 1998; Becerra-Fernandez et al., 2004). CK can be used to support customer services, sales and marketing. The CK acquisition process is the process of obtaining or creating CK: from customers, about customers and for customers. The Customers' knowledge is created based on accumulated experience of the products and services, marketing, sales and support of companies and competitors. According to Xu and Walton (2005), CK acquisition should be a dynamic and continuous process that acquires knowledge not only about existing customers, but also defecting customers, new customers, prospective customers and customers that are loyal to competitors. There are several organizational mechanisms and technologies that can be utilized for CK acquisition as indicated by Becerra-Fernandez et al. (2004), Wu (2010), and Xu and Walton (2005).

### Customer Knowledge Management Benefits

The deployment of organizational knowledge management solutions including CK acquisition may results in several benefits. There are several theoretical classifications of these benefits in the literature. For instance, based on qualitative study, Alavi and Liedner (1999) found that the perceived benefits of KMS can be categorized as process outcomes and organization outcomes. Nevo and Chan's qualitative Delphi study (2007) indicated that the expected benefits of KMS are improved productivity, effectiveness, efficiency, responsiveness, communication innovation and market share. Becerra-Fernandez et al. (2004) comprehensively categorized KM benefits as employee benefits, business processes benefits, product benefits and organizational benefits. Based on CKM, Stefanou et al. (2003) indicated that CRM and customer related knowledge management can result in improved customer satisfaction (in terms of communication, satisfaction, products and service quality, and product quality and organizational performance) and improved relationships between customers and the company in terms of maintaining trust, forming long-term relationships, retaining competitive advantages and assuring accurate transition of information. Customers' satisfaction, retention and loyalty are critical factors for a firm's market competition (Blattberg and Deighton, 1996). Also, effective application of customer support knowledge has helped

organizations improve their efficiency and reduce their costs (Davenport and Klahr, 1998). Likewise, Shi and Yip (2007) empirically found that sharing knowledge results in improvements in products/services and marketing employees' capabilities, which consequently result in customer relationship improvement. Consequently, the benefits of CKM and CKM solutions can be categorized as employee benefits, business process benefits, product benefits, customer benefits and market and financial benefits.

## RESEARCH FRAMEWORK

There are several benefits to the deployment of organizational knowledge management solutions. Likewise, CK is a powerful asset that enables organizations to achieve several benefits. The objective of this study is to assess the impacts of acquiring CK (knowledge for customers, knowledge about customers and knowledge from customers) on business processes, employees, products, customers, organizational market performance and organizational financial performance. Figure 1 illustrates this investigation.
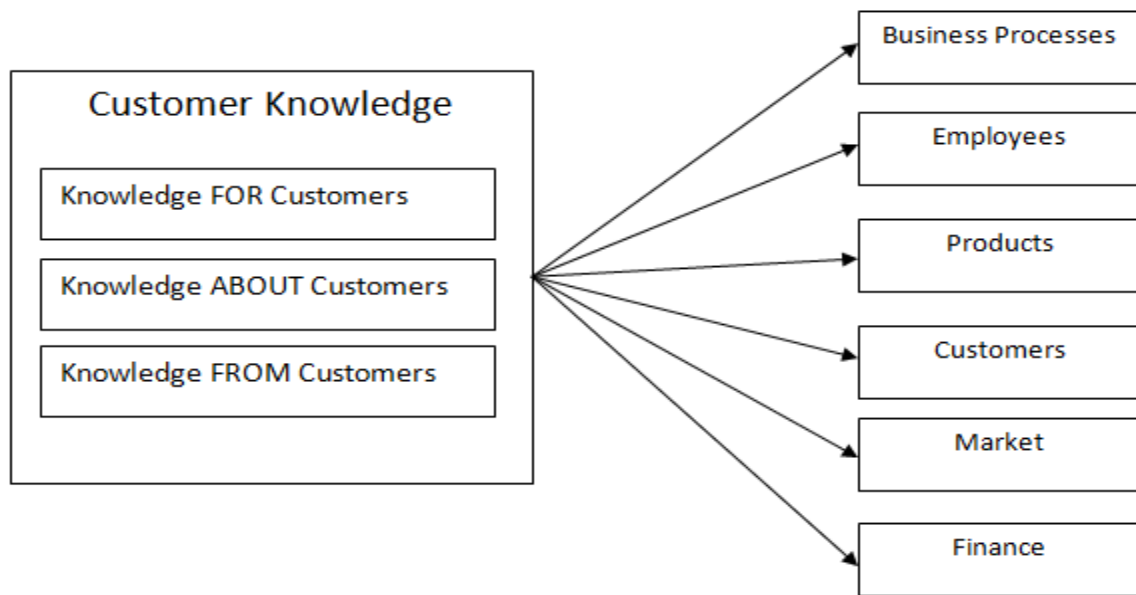


**Figure1. Customer Knowledge Acquisition Benefits**

## Business Processes

The CK acquisition  may enable organizations to improve their traditional business processes of marketing, manufacturing, accounting, engineering and public relations in organizational processes. Improvements in business processes can be linked to several areas: effectiveness, efficiency and innovativeness (Becerra-Fernandez et al., 2004; Nevo and Chan, 2007) and enhanced communications (Alavi and Liedner, 1999). The CK acquisition  may improve the efficiency of business processes by reducing the cost and cycle time. Structuring and organizing knowledge and information makes it easier, faster and consequently more efficient to access and disseminate (Tiwana, 2004). KM empirical studies found that knowledge acquisition significantly improves performance and innovation (Jiang and Lia, 2008). Likewise, effective use of customer support knowledge has helped organizations improve their efficiency and reduce their costs (Davenport and Klahr, 1998). Also, CK acquisition improves business processes effectiveness by improving the quality of the produced outcomes. The integration of organizational knowledge results in improved business processes effectiveness (Alavi and Lidner, 1999; Nevo and Chan, 2007). Besides, the CK acquisition  improves business process innovativeness. A firm's innovativeness results from growing its knowledge base or integrating its existing knowledge into new syntheses (Nonaka and Takeuchi, 1995). Knowledge management also results in improved communication of business processes (Alavi and Liedner, 1999). *Hypothesis 1: The acquisition of customer knowledge is positively linked to business processes' performance.*

**Employees**

The CK acquisition may have some returns on people (employees). Employee benefits can be measured by three dimensions: learning, adaptability and job satisfaction according to Becerra-Fernandez et al (2004). The CK acquisition enables employees to collaborate and interact with individual customers. Collaboration and interactions between individuals promote learning (Teece, 1998). Also, the CK acquisition enables employees to easily adapt to work tasks and respond to changes. KM enables employees to gain sufficient knowledge to be able to adapt to new tasks and circumstances at their work (Becerra-Fernandez et al., 2004). Likewise, innovation is closely related to learning; the higher the learning the greater the innovation (Weerawardena, O'Cass, and Julian, 2006). For instance, Acquiring CK enables marketing managers to create promotional policies (Lin and Hong, 2008). Likewise, Shi and Yip (2007) empirically found that knowledge sharing results in improvements in marketing employees' capabilities; this impact consequently contributes to employee job satisfaction.
*Hypothesis 2: The acquisition of customer knowledge is positively linked to the employees' performance.*

**Products**

The CK acquisition can be linked to product benefits. KM can generate product benefits such as the development of new value-added products or services or new features, and the development of knowledge based products or services (Becerra-Fernandez et al., 2004). CKM results in improvements in product and service quality (Stefanou et al., 2003; Shi and Yip, 2007). To succeed, organizations must ensure that their new or existing products and services are meeting the requirements and needs of their customers. For instance, Boeing Company was in a close interaction with its customers when developing the new Boeing 777 aircraft to improve its compatibility with customers' needs, and Microsoft Corporation's product trials before release, involve customers to increase its success in the marketplace (Tseng, 2009). Thus, acquiring CK enables organizations to have a better understanding of customers' needs and requirements. Knowledge acquisition is essential for the development of new products and its market performance (Murray and Chao, 2005). Acquiring CK also enables organizations to develop unique products in the market. Also, knowledge discovery form databases process can be applied to obtain some useful, implicit and efficient production rules. There is no need to emphasize on the importance of knowledge acquisition for the development of knowledge-based products and services, such as in consulting, advertising, publication and legal services industries and software development, since knowledge is the key ingredient of these products.
*Hypothesis 3: The acquisition of customer knowledge is positively linked to the products' performance.*

**Customers**

The CK acquisition can be also linked to customer benefits. It enables organizations to be customer-focused, treat customers according to their needs and requirements and develop services and practices that make customers happy, satisfied and loyal. Examining specifically the CKM literature, CRM and customer related knowledge management can result in improved customer satisfaction and improved relationships between the customers and company in terms of maintaining trust, forming long-term relationships, retaining competitive advantages and assuring accurate transition of information (Stefanou et al., 2003). Likewise, Shi and Yip (2007) empirically found that sharing knowledge results in improvements in customer relationships. The customer acquisition process can be linked directly to customer benefits such as satisfaction and loyalty (Kim and Kim, 2009). CK is the starting point of most improvements of customer value.
*Hypothesis 4: The acquisition of customer knowledge is positively linked to the customers' performance.*

**Organizations' Market**

The CK acquisition can result in improved organizational market performance. In general, KM researchers indicate that KM can be linked to improvement on organizational market performance such as market share (Nevo and Chan, 2007), sustainable competitive advantage and a company's leadership in its industry (Becerra-Fernandez et al., 2004; Davenport and Prusak, 1998). Gaining CK is becoming essential for competitive advantage (Tzokas and Saren, 2002). Acquiring CK enables organizations to move toward a customer-centric strategy and treat each customer uniquely. Customer centric orientation enables organizations to gain a competitive advantage and leadership in its industry (Bose, 2002). The acquisition of knowledge from external sources is critical for an organization to expand its knowledge and recognize the opportunities and threats and grant access to new market and technological capabilities (Narteh, 2008). Consequently, these improvements help an organization to develop its competitive advantage and leadership in the market.
*Hypothesis 5: The acquisition of customer knowledge is positively linked to organizational market performance.*

**Organizations' Financial Performance**

The CK acquisition can result in improved financial performance of organizations. KM generally results in improved financial outcomes including increased sales, decreased cost and improved profitability (Alavi and Liedner, 1999; Becerra-Fernandez et al., 2004). Likewise, Zanjani et al. (2008) emphasized that CKM has a direct and indirect effect on organizational performance. The customer acquisition process can be linked directly to organizational performance (such as ROI) and indirectly to organizational performance through customer benefits (Kim and Kim, 2009). Using CK in designing an electronic catalog enables an organization to improve its sales and profits (Lin and Hong, 2008).
*Hypothesis 6: The acquisition of customer knowledge is positively linked to organizational financial performance.*

**RESEARCH METHODOLOGY**

**Research Collection and Analysis Methodology**

This study is based on the customer service manager's perspective in 13 organizations in the banking industry. For this pilot investigation, a survey was circulated among customer service managers in 50 organizations. About 20 questionnaires were completed but only 13 had full responses. The questionnaire included several questions including the one related to this study's constructs. The questionnaire included demographic questions about the participants and their organizations. The questionnaire included a list of indicators for each CK category (see Table 2) as identified by Zanjani et al. (2008). The evaluation of these indicators for knowledge types was based on a 5-point Likert scale (1-strongly disagree, 2-disagree, 3-neutral, 4-agree and 5-strongly agree). The benefits indicators (see Table 3) were constructed based on the literature and categorized as customer benefits, product benefits, business process benefits, employee benefits, organizational market benefits and organizational financial benefits. The questionnaire included indicators related to the usage of CK acquisition; they were evaluated based on a 4-point scale (0-no use, 1-low use, 2-medium use, and 3-high use).

**Participant and Organization Profile**

The participants were customer service managers (or senior personnel) in 13 organizations in the banking industry. About 69% of them were male, while 31% were female. They have different education levels; about 46% held a diploma, 36% held a Bachelor's degree and 18% a Master's degree. About 46% of them have more than 10 years of work experience, while 54% have about 5 years of experience or below. They all have average or above average computer skills. About 77% of the investigated organizations are classified as large organizations, while 23% are medium size organizations.

**DATA ANALYSIS & RESULTS**

**Customer Knowledge Acquisition Technologies**

Examining the CK acquisition tools (Figure 2), organizations used richer non-IT KM tools than IT tools for CK acquisition. The highest tool used for CK acquisition is field visit (average use = 2.54 out of 3), followed by call centers (average use = 2.31) and meetings/brainstorming retreats (average use = 2.23). The order of IT tool usage for CK acquisition is electronic databases (average use = 2.15), website (1.77), email (1.62), data mining tools (1.38), electronic discussions (1.23) and videoconferencing (1.00). This high usage of non-IT tools for CK acquisition may indicate that organizations are interested in keeping the social aspect when dealing with customers and utilize the tools that enrich the CK acquisition process. Information delivered through information systems are less rich than information delivered through face-to-face or phone conversations.
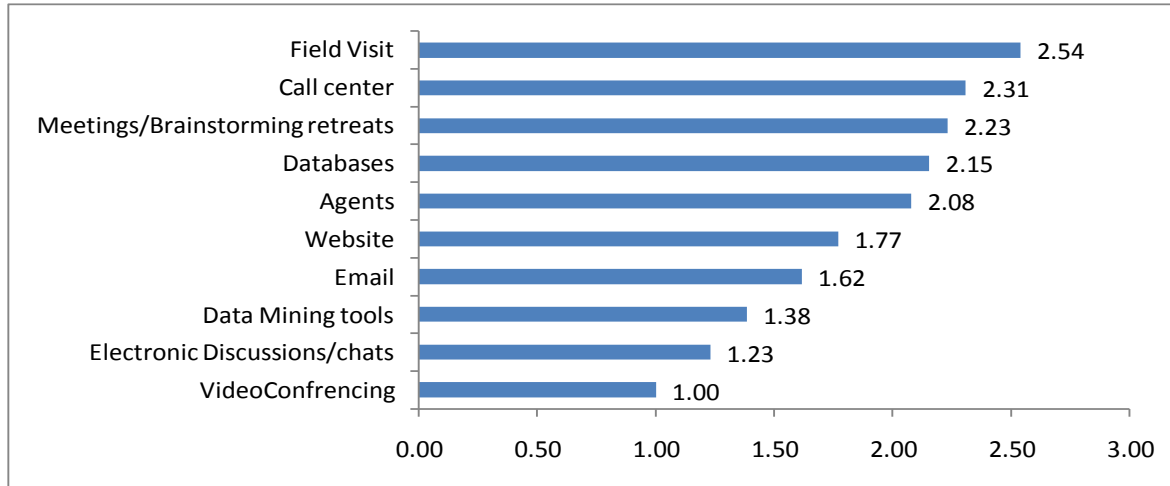
Field Visit — 2.54
Call center — 2.31
Meetings/Brainstorming retreats — 2.23
Databases — 2.15
Agents — 2.08
Website — 1.77
Email — 1.62
Data Mining tools — 1.38
Electronic Discussions/chats — 1.23
VideoConfrencing — 1.00

**Figure 2. Customer Knowledge Acquisition Tools**

**Constructs' Validity and Reliability**

| Construct | Total items | Reliability | AVE |
|---|---|---|---|
| Knowledge FROM Customer Acquisition | 4 | 0.889 | 0.668 |
| Knowledge ABOUT Customer Acquisition | 4 | 0.879 | 0.656 |
| Knowledge FOR Customer Acquisition | 6 | 0.855 | 0.503 |
| Business Processes Benefits | 4 | 0.871 | 0.644 |
| Employees Benefits | 3 | 0.892 | 0.737 |
| Products Benefits | 3 | 0.952 | 0.869 |
| Customers Benefits | 2 | 1.000 | 1.000 |
| Market Benefits | 3 | 0.844 | 0.646 |
| Financial Benefits | 3 | 0.813 | 0.609 |

**Table 1: Constructs' Validity & Reliability.**

Data was analyzed by PLS-Graph 3.0 software. PLS (partial least square) is a variance-based structural equation model (SEM) technique that allows path analysis of models with latent variables. With PLS, the reliability of the measurements was evaluated by internal consistency, and the validity was measured by the average variance extracted (AVE), which refers to the amount of variance in a latent variable captured from its indicators. The recommended level for internal consistency reliability is at least 0.70, while for AVE, is at least 0.50. Table 1 show that the study constructs' reliability and AVE are above the recommended levels. The factor loadings from the confirmatory factor analysis provide evidence for convergent

validity as all included an item load sufficiently high on the corresponding constructs. They all exceed the threshold value of 0.50 as illustrated in Table 2 and Table 3.

| CK BENFITS | *MEAN* | *STDV* | *LOAD* |
|---|---|---|---|
| *Customers Benefits* | | | |
| Increase our customers' satisfaction. | 4.92 | 0.27 | -0.25 |
| Improve our customer services. | 4.85 | 0.37 | 1.00 |
| Improve communications between my company and its customers. | 4.85 | 0.37 | 1.00 |
| Enhance our customers' loyalty. | 5.00 | 0 | 0.00 |
| *Products Benefits* | | | |
| Help my company's offer new value-added products/services. | 4.85 | 0.37 | 0.89 |
| Help my company's offer new value-added features to our products/services. | 4.85 | 0.37 | 0.03 |
| Help my company's produce knowledge-based products/services. | 4.62 | 0.85 | 0.98 |
| *Business Processes Benefits* | | | |
| Improve our products/services quality. | 4.85 | 0.54 | 0.93 |
| Improve the effectiveness (quality) of my work. | 4.85 | 0.37 | 0.87 |
| Improve the efficiency (quicker and lower cost) of my work. | 4.91 | 0.49 | 0.50 |
| Improve the creativity of my work. | 4.91 | 0.64 | 0.93 |
| Improve communications at work. | 5.00 | 0.76 | 0.88 |
| *Employees Benefits* | | | |
| Improve my learning process. | 4.69 | 0.47 | 0.91 |
| Help me adapt quickly to new job demands. | 4.69 | 0.61 | 0.73 |
| Make me more satisfied with my job. | 4.38 | 0.94 | 0.92 |
| *Financial Benefits* | | | |
| Increase my company's sales. | 4.54 | 0.64 | 0.47 |
| Decrease my company's cost. | 3.92 | 0.93 | 0.87 |
| Improve my company's profitability and ROI. | 4.54 | 0.76 | 0.93 |
| *Market Benefits* | | | |
| Increase the company's new customers. | 4.77 | 0.43 | 0.79 |
| Improve my company's competitive advantage. | 4.85 | 0.37 | 0.71 |
| Improve my company's leadership in its industry. | 4.69 | 0.61 | 0.89 |

*Note: Indicators in grey are dropped because of low loading*

**Table 2. CK Benefits Indicators**

| CUSTOMER KNOWLEDGE TYPES | MEAN | STDV | LOAD |
|---|---|---|---|
| *Knowledge FROM Customer Acquisition* | | | |
| Company's Marketing , sales & support | 4.54 | 0.51 | 0.84 |
| Company's Products & services | 4.23 | 0.71 | 0.82 |
| Competitors' Marketing , sales & support | 4.31 | 0.61 | 0.77 |
| Competitors' Products & services | 4.15 | 0.87 | 0.85 |
| *Knowledge ABOUT Customer Acquisition* | | | |
| Current Customers'  Requirements  information | 3.92 | 0.93 | 0.97 |
| Current Customers' Historical  information | 3.69 | 1.00 | 0.94 |
| Prospective Customers' Personal information | 4.23 | 0.58 | 0.74 |
| Prospective Customers' Preferences information | 4.23 | 0.81 | 0.51 |
| *Knowledge FOR Customer Acquisition* | | | |
| Current customers' info. need | 4.31 | 0.61 | 0.55 |
| Prospective customers' info. need | 4.31 | 0.61 | 0.40 |
| Competitors' products & services | 4.08 | 0.48 | 0.58 |
| Government regulations | 4.08 | 0.62 | 0.64 |
| Market | 3.77 | 0.90 | 0.71 |
| Company's introducing information | 4.00 | 0.56 | 0.87 |
| Company's knowledge products | 4.15 | 0.54 | 0.84 |

**Table 3. Types of Acquired Customer Knowledge**

**Model Evaluation and Paths Analysis**

With PLS, R-square values are used to evaluate the predictive relevance of a structural model for the dependent latent variables, and the paths coefficients are used to assess the effects of the independent variables. The significance of the model paths were tested by t-values. A bootstrapping technique was utilized with a re-sampling of 200 to test the significance of the PLS estimates of path coefficients. Based on the PLS-Graph user's guide, this resample size provides reasonable standard error estimates. The model testing was conducted three times for each CK type model: (1) knowledge FOR customers; (2) knowledge ABOUT customers and (3) knowledge FROM customers. According to Chin and Newsted's (1999) recommendations of sample size, the sample size of 13 is sufficient to independently assess each knowledge type association with each benefit.

Table 4 shows the model testing for the benefits of the acquisition of knowledge FROM customers. As indicated in Table 4, the acquisition of knowledge FROM customers is positively related to—in order—employee benefits ($\beta = 0.820$), process benefits ($\beta = 0.775$), financial performance ($\beta = 0.743$), market benefits ($\beta = 0.742$), and product benefits ($\beta = 0.637$), but not customer benefits ($\beta = 0.254$).

| Constructs ($R^2$) | Processes (0.601) | Employees (0.672) | Products (0.406) | Customers (0.065) | Market (0.550) | Financial (0.553) |
|---|---|---|---|---|---|---|
| Knowledge FROM Customers | 0.775 <0.0005 | 0.820 <0.0005 | 0.637 <0.001 | 0.254 n.s. | 0.742 <0.0005 | 0.743 <0.0005 |

**Table 4. Model Evaluation & Paths Analysis – Knowledge FROM Customers**

Table 5 shows the model testing for the benefits of knowledge ABOUT customers. As indicated in Table 5, the acquisition of knowledge ABOUT customers is positively related to—in order—market benefits ($\beta = 0.624$), financial benefits ($\beta = 0.570$), process benefits ($\beta = 0.496$) and product benefits ($\beta = 0.491$), but not employee benefits ($\beta = 0.570$) or customer benefits ($\beta = 0.383$).

| Constructs ($R^2$) | Processes (0.246) | Employees (0.164) | Products (0.241) | Customers (0.147) | Market (0.390) | Financial (0.325) |
|---|---|---|---|---|---|---|
| Knowledge ABOUT Customers | 0.496 <0.1 | 0.405 n.s. | 0.491 <0.1 | 0.383 n.s. | 0.624 <0.025 | 0.570 0.025 |

**Table 5 Model Evaluation & Paths Analysis – Knowledge ABOUT Customers**

Table 6 shows the model testing for the benefits of knowledge FOR customers. As indicated in Table 6, the acquisition of knowledge FOR customers is positively related to—in order—business process benefits ($\beta = 0.841$), customer benefits ($\beta = 0.818$), product benefits ($\beta = 0.806$), market benefits ($\beta = 0.800$), employee benefits ($\beta = 0.746$) and financial benefits ($\beta = 0.651$).

| Constructs ($R^2$) | Processes (0.707) | Employees (0.557) | Products (0.650) | Customers (0.669) | Market (0.640) | Financial (0.424) |
|---|---|---|---|---|---|---|
| Knowledge FOR Customers | 0.841 <0.0005 | 0.746 <0.0005 | 0.806 <0.0005 | 0.818 <0.0005 | 0.800 <0.0005 | 0.651 <0.01 |

**Table 6:  Model Evaluation & Paths Analysis _ Knowledge FOR Customers**

## CONCLUSION & FUTURE DIRECTION

CK is a significant knowledge for organizations if not the most valuable knowledge. It empowers organizations (their business processes, employees, products, customers, market and financial performance). This preliminary study provided empirical evidence on the importance of CK acquisition on an organization's performance. The study assessed the

significance of three types of CK (knowledge FROM customers, knowledge ABOUT customers and knowledge FOR customers). Based on organizations from the banking industry, the study found that the acquisition of each CK type has a significant positive association with business process performance, employee performance, product performance, customer performance, market performance and financial performance.

Based on the model evaluation (R2, paths coefficients and p-value), the study indicated that knowledge FOR customers and knowledge FROM customers are the most beneficial CK types compared to knowledge ABOUT customers. Theoretically speaking, this finding makes sense. Knowledge FOR customers is acquired to meet direct customer knowledge needs and requirements; hence its impact on customers should be greater than other types of knowledge. Knowledge FROM customers is acquired to directly assist employees and organizations overall to understand their customers; hence its impact on employees' performance, specifically, should be greater than other types of CK. Knowledge ABOUT customers is acquired to understand customers' motivation and expectations; hence its direct link to the organizations, employees and customers may be the least significant.

These findings provided significant preliminary insights for practitioners and researchers. The study showed to practitioners the importance of CK and its integration for an organization's operational and innovative performance. This will help practitioners gain support from top managers on the deployment of knowledge management solutions that enable an effective and efficient CK acquisition and management. The study provided measures for practitioners and researchers to assess these benefits. The study also revealed some tools that can be utilized for CK acquisition. The study illustrated that for the CK acquisition, non-IT tools are more utilized than IT tools. This illustrates the importance of keeping the social aspect to enrich CK acquisition. Future research should investigate the most effective technology to acquire each CK type.

However, there is no study without limitations. First, the sample size in this preliminary study is only 13. Even though it is sufficient to detect some associations between each CK type and benefits independently, a larger sample size is needed to conduct multivariate analysis. Second, the findings of this study were based on banks. Therefore, future studies should gain empirical evidence from other types of organizations. The impact of CK acquisition may be different on different types of organizations (e.g. manufacturing vs. service based organization). Third, this study utilized a questionnaire, which is subjective in nature; future studies may combine field study for better evaluation. Finally, this study generally categorized the benefits to business processes, employees, products, etc., thus, future studies should also assess the specific impacts of CK on each of these categories.

## REFERENCES

1. Alavi, M. (2000) Managing organizational knowledge, in R. Zmud (Ed.), *Framing the Domains of IT Management,* Cincinnati, OH, USA, Pinnaflex, 29-50.
2. Alavi, M., and Leidner, D. (1999) Knowledge Management Systems: Issues, Challenges, and Benefits, *Communication of the AIS*, 1,7, 1-37.
3. Al-Busaidi, K.A. (2012) Effective tools for customer knowledge management, in Al-Shammari, M. (Eds.), *Customer-Centric Knowledge Management: Concepts and applications,* USA, IGI Global, 102-123.
4. Becerra-Fernandez, I., Gonzalez, A. and Sabherwal, R. (2004) Knowledge management: Challenges, solutions and technologies, Pearson Education Inc., Upper Saddle River, New Jersey, USA.
5. Bennet, R. and Gabriel, H.I. (1999) Organizational factors and knowledge management within large marketing departments: An empirical study, *Journal of Knowledge Management*, 3, 3, 212-225.
6. Bose, R. (2002) Customer relationship management: Key components for IT success, *Industrial Management & Data Systems*, 102, 2, 89-97.
7. Chase, R.L. (1997) The knowledge-based organization: An international survey, *Journal of Knowledge Management*, 1, 1, 38-49.
8. Chin, W., and Newsted, P. (1999) Structural equation modeling analysis with small samples using partial least squares, in Rick Hoyle (Ed.), *Statistical Strategies for Small Sample Research*, Beverly Hills, CA, USA, Sage Publications, 307-341.
9. Davenport, T. and Klahr, P. (1998) Managing customer knowledge, *California Management Review*, 40, 3, 195-208.
10. Davenport, T. and Prusak, L. (1998) Working knowledge, Harvard Business School Press, Boston, MA, USA.
11. Drucker, P. (1996). The information executives truly need, *Harvard Business Review*, 73, 1, 54-62.
12. Gebert, H., Geib, M., Kolbe, L. and Brenner, W. (2003) Knowledge-enabled customer relationship management: integrating customer relationship management and knowledge concepts, *Journal of Knowledge Management*, 7, 5, 107-123.
13. Hoe, S. (2008) Benefiting from customer and competitor knowledge: A market-based approach to organizational learning, *Learning Organization*, 15, 3, 240 – 250.

14. Kim, H. and Kim, Y. (2009) ACRM performance measurement framework: Its development process and application, *Industrial Marketing Management*, 38, 477–489.

15. Liew, C. (2008) Strategic integration of knowledge management and customer relationship management, *Journal of Knowledge Management,* 12, 4, 131-146.

16. Lin, C. and Hong, C. (2008) Using customer knowledge in designing electronic catalog, *Expert Systems with Applications*, 34,1 ,119–127

17. Murray, J. and Chao, M. (2005) A cross-team framework of international knowledge acquisition on new product development capabilities and new product market performance, *Journal of International Marketing*, 13, 3, 54–78.

18. Narteh, B. (2008) Knowledge transfer in developed-developing country inter firm collaborations: a conceptual framework, *Journal of Knowledge Management*, 12,1, 78-91.

19. Nevo, D. and Chan Y.E. (2007) A Delphi study of knowledge management systems: Scope and requirements, *Information & Management*, 44,6, 583–597.

20. Nonaka, I.A (1994) Dynamic theory of organizational knowledge creation, *Organization Science*, 5,1, 14-37.

21. Rowley, J. (2002) Eight questions for customer knowledge management in e-business, *Journal of Knowledge Management*, 6,5, 500 -511.

22. Shi, J. and Yip, L. (2007) Driving innovation and improving employee capability: The effects of customer knowledge sharing on CRM, *The Business Review*, 7,1, 107-112.

23. Stefanou, C, Sarmaniotis, C. and Stafyla, A. (2003) CRM and customer-centric knowledge management: An empirical research, *Business Process Management Journal*, 9,5, 617-634.

24. Tseng, S. (2009) A study on customer, supplier, and competitor knowledge using the knowledge chain model, *International Journal of Information Management*, 29,6 , 488–496

25. Tzokas, N. and Saren, M. (2002) Competitive advantage, knowledge and relationship marketing: where, what and how?, *Journal of Business & Industrial Marketing*, 19,2 124-35.

26. Weerawardena, J., O'Cass, A. and Julian, C. (2006) Does industry matter? Examining the role of industry structure and organizational learning in innovation and brand performance, *Journal of Business Research*, 59,1, 37-45.

27. Wu, Y. (2010) Applying the Strategic Approach to Assess Customer Relationship Management, *The International Journal of Organizational Innovation*, 2,3, 186-205.

28. Xu, M, and Walton, J. (2005) Gaining customer knowledge through analytical CRM, *Industrial Management & Data Systems*, 105, 7, 955 -971.

29. Zanjani, M, Rouzbehani, R and Dabbagh, H. (2008) Proposing a conceptual model for customer knowledge management: A study of CKM tools in British dotcoms, *International Journal of Human and Social Sciences,* 3,5, 363-367.