

The Important of Knowledge Management and Customer Knowledge Management in Enhancing Organizational Performance

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Abstract: In this information age, Knowledge Management (KM) and Customer Knowledge Management (CKM) have become the main competitive strategies of the organization to improve the Organizational Performance (OP). This study discusses the role of KM and CKM implementation in improving the OP. Moreover, the study also highlights the concept of KM, CKM and the related issues pertaining to this concept. This study suggests that the successful implementation of CKM is not only supported by the integration of knowledge and KM, but also need supporting from the organization. Based on the discussion, it can be concluded that the implementation of KM and CKM in the organization can play a leading role in improving the OP.

Key words: Knowledge, Knowledge Management (KM), Customer Knowledge Management (CKM), organizational performance, Malaysia

INTRODUCTION

CKM or Customer Knowledge Management is derived from knowledge management (KM) concept which can be applied by organizations to fulfill their customers' desires and wants. Therefore, this is a conceptual study to study the role of KM and CKM in influencing organizational performance. The study reviews literature on the history of knowledge, KM and CKM. Besides, this paper goes on to discuss two concepts that play role in influencing organizational performance; namely KM and CKM. Thus, the objective of this study aims to shed some light on how KM and CKM have become the main strategies in influencing organizational performance.

In the increasing business competition, companies need to know how to utilize valuable assets in order to increase its competitive advantage. According to Abdul (2010), the main objective for any organization now a days is to improve their economic advantage in the business environment. Therefore, one of the valuable assets that reside in the organization is derived from the concept of knowledge. Recently, businesses are overwhelmed with

the terms of knowledge economy, knowledge society and knowledge workers that were emerging in this 21st century. Hence, the importance of knowledge has slightly risen and become the influential asset. It is essential to oversee the knowledge that exists within the organizations including the internal or external environment. As a result, knowledge has been identified as a major mechanism in order to become a successful business these days. Davenport and Prusak (1998) argued that the data are raw materials and facts. However, they claimed that knowledge is not only about a data or information. Instead, information is data that can be converted into useful context information. They further insisted that knowledge is organized information that have a meaning and useful means (Mahdi *et al.*, 2011). Therefore, it defines knowledge as "Knowledge is a combination of contextual information, values and experience. Furthermore, it is a framework for assessing and combining the information and experience. In organizations, it often becomes embedded not only in documents or repositories but also the practices, processes and norms".

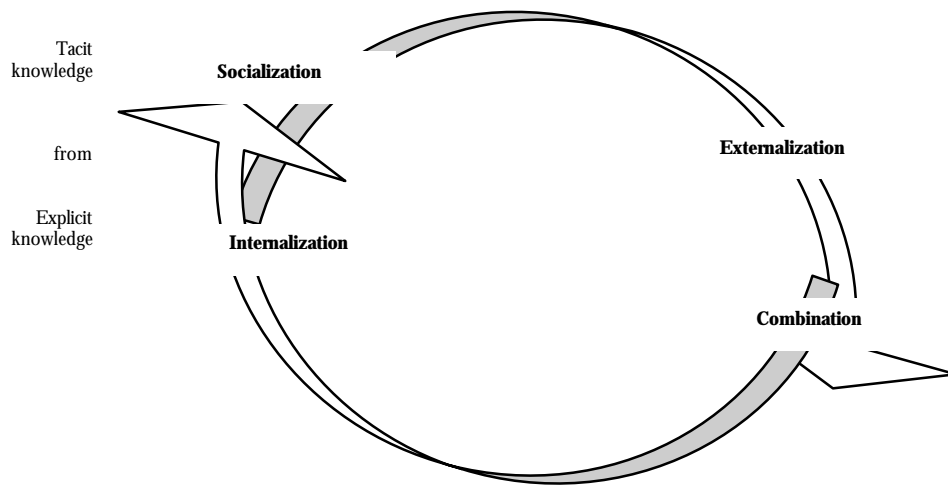


Fig. 1: The knowledge conversion processes (Nonaka and Takeuchi, 1995) Organizational Knowledge Creation SECI Model Tacit Knowledge for Explicit Knowledge

Faucher *et al.* (2008) identified knowledge that consists of data, information, knowledge and wisdom. According to them, this knowledge is known as knowledge hierarchy. Furthermore, wisdom is known as a wider knowledge through significance and intelligence that linked with more actions and undertaking's (Kharabsheh *et al.*, 2012). In relation, knowledge hierarchy tries to apprehend the collective essence of the existing definitions in the Knowledge Management (KM) literature (Anand, 2011). From the above argument, it can be concluded that the distinction between data, information and knowledge is merely on the degree of profundity where knowledge is perceived as approximately more 'profundity' than information.

Polanyi has suggested that knowledge has an essential value and can be divided into explicit and tacit (Polanyi, 1962). Furthermore, Nonaka (1995) model as shown in Fig. 1 have exhibited the dissimilarities between explicit and tacit knowledge. They expressed that tacit knowledge rests in the human mind, thus difficult to verbalize. Therefore, tacit knowledge is difficult to communicate or deliver. They also recommended that tacit knowledge as an individual's feelings, body language, instinct and physical experience. On the other hand, (Rollins and Halinen, 2005; Rowley, 2002a) justified that explicit knowledge should be organized and transferred in an effective way. In other words, explicit knowledge should be presented in a formalized manner that can be understood by the people.

MATERIALS AND METHODS

The importance of knowledge: According to Baharom *et al.* (2007), knowledge is explicitly managed and

manipulated as a source of competitive advantage. Thus, in this knowledge society, the concern of the Prime Minister, Datuk Seri Najib Tun Razak in developing the country within the knowledge economy has suited very perceptible. According to Syed and Rowland (2004), the public and private sectors in Malaysia have been advised to foster a more knowledgeable organization, especially in terms of managing knowledge and improving services to the public.

At the official opening of a K-Economy Conference on 17 October 2000, the former Prime Minister of Malaysia, Tun Dr Mahathir Mohamed emphasized that knowledge is real and the productivity growth is doubled in knowledge-rich economies. Therefore, it is important to share the knowledge because it can give the benefit to people and improved Organizational Performance (OP). Various organizations begin to comprehend that creating, maintaining and keeping data and information is not plentiful to sustain competitive advantage in the business environment. Consequently, knowledge as an organizational property must be managed, shared and distributed by the organization in order to become effective. According to Marr and Schiuma, organizations should aware that knowledge resources are very important to improve organizational effectiveness. Thus, to achieve effectiveness they should be able to manage and combine the organizations resource's effectively.

According to Allameh *et al.* (2012), scholars and practitioners have advocated that knowledge is important as an organization's resources for many years. Furthermore, Alhawari and Al-Jarrah (2012) emphasized that knowledge is crucial assets for organizations to

enhance its business advantage, which is the significance of OP. However, Danish *et al.* (2012) emphasized that knowledge is valuable when it is practically applied. Otherwise, it is worthless if the data are not organized and structured. In line with this, Raja *et al.* (2010) claimed that most organizations failed to address the methods and strategies to exploit the knowledge assets, although the value of knowledge as an important asset was acknowledged. Besides, if the knowledge were not accessible and applied in an organization, knowledge exists within the organization becomes useless (Boljanovic and Stankovic, 2012).

Drucker (1993) argued that nowadays the basic economic resource is and will be knowledge, thus we need to utilize this resource in the knowledge based society. Furthermore, knowledge is crucial to the long-standing success and sustainability of organizations (Nonaka and Takeuchi, 1995). It was supported by Lin (2007) who argued that knowledge can be considered as a core competence and performance driver of the firms. Thus, many organizations have realized that the creation, transfer and management of knowledge are critical for organizational success in today's business environment (Anantatmula, 2007). Furthermore, there has been increasing acknowledgement in the business atmosphere in beholding knowledge as crucial resource.

According to Huang and Lai (2010), knowledge resources are more important than traditional ones such as land and capital. Hence, knowledge has turned into noteworthy resources for the organization to invent endlessly (Andrawina, 2009), and thus contribute to the OP (Goh, 2004). In relation, Kiessling *et al.* (2009) emphasized that various organizations have appropriately strategized to govern their knowledge efficiently in the process of attaining or fostering new knowledge. This is important due to the overabundance of inbound information and outward knowledge.

Knowledge management defined: Emadzade *et al.* (2012), Wu and Lin (2009), Bontis and Serenko (2009) have emphasized that, the past decade has seen widespread research on KM. They argued that KM has steadily developed into an academic field and thus, most of the academicians' have begun to explore the concept of KM. Besides, KM has begun being taught in the fields of business administration, management and information systems as well as library and information sciences (Talet, 2012; Raja *et al.*, 2010; Alavi and Leidner, 1999; Zack *et al.*, 2009).

KM has become an emerging discipline at the end of the 1990s due to companies' requirements to manage their knowledge resources more effectively (Raja *et al.*, 2010;

Ma and Yu, 2010; Akhavan and Heidari, 2008). This is due to the progress of KM theory and practices that was instituted in 1991 (Talet, 2012; Nonaka, 1991). Furthermore, the credit should be given to Ikujiro Nonaka, Peter Drucker, Paul Strassman and Peter Senge who have impacted to the emergence of KM (Raja *et al.*, 2010).

There was no mutual agreement to define the term KM (Alaei *et al.*, 2012). Scholars and practitioners have defined it in different concept (Mahdi *et al.*, 2011). Therefore, many scholars have the same opinion that there are no united definitions of KM (Boljanovic and Stankovic, 2012; Alaei *et al.*, 2012). However, management approach and the process approach which has been argued by Bhatt (2001), Moballeghi and Moghaddam (2011) as the two methods to define KM. From the perspective of management approach, some academicians refer KM as an incorporated approach to managing knowledge for organization's long term interest (Darroach and McNaughton 2002; Scarbrough, 2003) and harness technology. However, Davenport and Prusak (1998) argued that KM is related to managing the organization's knowledge through a specified process for obtaining, managing, maintaining, operating, sharing and rejuvenating the knowledge of employees to create value in order to enhance OP.

Based on the above argument, it can be understood that KM is about how an organization develops and manage the knowledge to achieve its vision and mission. Lately, other fields have started contributing to KM study in the area of banking (Ajlouni, 2013), pharmaceutical (Kharabsheh *et al.*, 2012), insurance, public health, computer sciences, public policy, information and media (Talet, 2012). Davenport and Prusak (1998) argued that the topics of KM have begun to enlarge and grow deeper with the increase in research by both practitioners and academicians. Furthermore, KM has created an important essence of knowledge in terms of theory and practice. Besides, Liao and Chuang (2006), Claycomb *et al.* (2001), Staples *et al.* (2001), Drucker, (1999), Davenport and Prusak, (1998), and Davenport *et al.* (1996) had stated that KM has been viewed as being crucial for easy and successful operation of organizations. It is supported by Mau (2005) and Mahdi *et al.* (2011) who said that KM assist the organization maintain its learning capacity to remain innovative and competitive as well as improved OP (Alhawari and Al-Jarrah, 2012; Talet, 2012). Parlbly has demonstrated that the benefits of implementing KM include:

- Reducing the percentage employees leaves the organizations since they have the intellectual knowledge that can contribute to the organization
- Organizations can utilize knowledge resides in employees that can improve job performance

- Provide a better decision making; and
- Can improve the quality of current product and as well as creating new product

In relation, Wiig and Jooste argued that KM can bring vital outcomes to organizations and improving their competitive positions by promoting firm productivity. Other academicians have asserted further benefits of KM such as boosting OP (Roy *et al.*, 2012; Zaied *et al.*, 2012; Choudhary *et al.*, 2011; Moballeghi and Moghaddam, 2011; Alhawari *et al.*, 2010; Karadsheh *et al.*, 2009; Liao and Chuang, 2006; Kiessling *et al.*, 2009; Darroch, 2005), enhancing innovation (Alavi and Leidner, 2001), improving operational effectiveness (Drucker, 1993; Islam *et al.*, 2011) generating shareholder value (Bock *et al.*, 2005) boosting customer loyalty (Aghaie, 2009), augmenting financial performance (Zack *et al.*, 2009), increasing customer knowledge and reducing complaints (Alhawari *et al.*, 2010), maximizing intellectual assets (Teece, 2004) providing better product and services quality (Anantamula, 2007), heightening organization capability (Salina and Wan, 2011; Juntarung, 2008) and intensifying strategic competence (Alhawari and Al-Jarrah, 2012).

It was proven that with the implementation of KM, the organizations can enhance the market competitiveness and improves OP. Previous researches have shown that organizations which established a good KM concept have successfully gained benefit from it.

RESULTS AND DISCUSSION

Customer knowledge management defined: Recently, most organizations are focusing on the implementation of KM. However, it is insufficient due to its relevance. In today's competitive business environment, the implementation of KM should be extended to the concept of Customer Knowledge Management (CKM). Despite the fact that CKM is a more recent concept, it has become an important branch of KM. Furthermore, many academicians agreed that CKM concept is originally derived from the concept of KM (Allameh *et al.*, 2012; Mukherji, 2012; Sanayei and Sadidi, 2011; Belkahla and Triki, 2011; Nejatian *et al.*, 2011; Peng *et al.*, 2009; Bogue and Sorenson, 2009; Zanjani *et al.*, 2009; Zanjani *et al.*, 2009; Akhavan and Heidari, 2008; Liyun *et al.*, 2008; Kong and Cai, 2008; Lopez-Nicolas and Molina-Castillo, 2008; Chen and Su, 2006; Feng and Tian, 2005; Rollins and Halinen, 2005; Salomann *et al.*, 2005; Ho *et al.*, 2004; Bueren *et al.*, 2004; Garcia-Murillo and Annabi, 2002; Rowley, 2002b; Davenport *et al.*, 2001).

There are two groups of scholars who significantly explore the concept of CKM and have been referring to by most of the CKM researches. Gibbert *et al.* (2002) have

defined that CKM is the strategic process on how the organizations build better relationship with the customers and later on empower them as knowledge partners.

Gibbert *et al.* (2002) have emphasized that, CKM is about acquiring, sharing and increasing the knowledge exist in customers to both customer and organization benefits. According to them, CKM is in the form of prosumerism, mutual revolution, team-based co-learning, communities of practice and joint Intellectual Property (IP) management. Besides, CKM reflects the management of knowledge residing in the customer, in contrast to knowledge about customers which is the classic knowledge used in Customer Relationship Management (CRM) systems (Gibbert *et al.*, 2002). They added that both KM and CRM focused on obtaining knowledge about customers, but managing customer knowledge is focused towards obtaining knowledge directly from customers. From the organization's perspective, KM encourages employees within the organizations to share their knowledge with their colleagues. Whereby, CKM management emancipates customers from passive recipients of products to become effective co-initiators of value.

Gebert *et al.* (2002) was the second scholars who develop their CKM concept through the combination between CRM and KM. Indeed, Gebert *et al.* (2002) claimed that CKM is not a separate concept, but rather the whole CKM is seen from the customer perspectives. According to them, a CKM lies at the center of the KM concept with the combination of KM and CRM. They have classified three main dimensions of CKM in their concepts namely knowledge of customers, knowledge to customers and knowledge about customers.

Knowledge for customers involves knowledge or about goods, marketplaces and suppliers (Garcia-Murillo and Annabi, 2002). Besides, knowledge for customers is created from organizations to customers and suppliers. For instance, the organization will offer knowledge about merchandise, market and suppliers to customers in order to inform them the recent matters in the market.

Knowledge about customers can be obtained through a survey of the customer's needs and wants, service to customers and complaints from customers. Salomann *et al.* (2005) define this knowledge as knowledge about the customer that encompasses the customers' present needs and requirements, future desires, connections, purchasing activity and financial capability. Knowledge about customers can be captured through customer surveys, service management and customer complaints. It is accumulated to understand motivations and to address customers in a personalized way.

According to Garcia-Murillo and Annabi (2002), knowledge resides from consumers is obtained from the interaction between customers and suppliers. Through

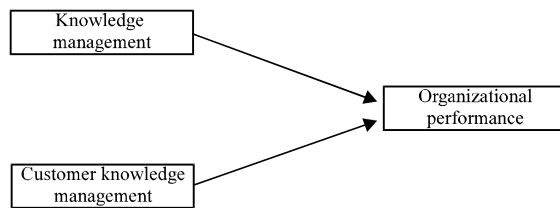


Fig. 2: The relationship between KM, CKM and OP

the communication with the clients, this knowledge can be drawn together for continuous advancement such as enhancements or creating new product. From the feedback from the customers, organizations can improve the current product as well create a new product. Therefore, organizations can create collaborations with customers to generate new products and services that can enrich OP.

These three types of knowledge flows provide important short and long term advantages. Knowledge that is acquired through interactions with customers will generally proceed to advancements in organizations' products and services. Therefore, it helps the organizations to enhanced the wishes of customers and permit them to better realize the customers' expressed needs. Besides, getting in touch with customers may help in tackling some of the customers' concerns and desires. However, these three flows of customer knowledge must be consistently shared within the organizations in order to achieve organizational success.

In this study, the term OP or effectiveness was based on Venkatraman and Ramanujam's research that refers this concept to business performance. According to them, the conceptualization of business performance would include an emphasis on measures of operational performance in which consists of those key parameters that may lead to an improvement in financial performance. They argued that operational performance can be measured through market-share, new product introduction, product quality, marketing effectiveness, manufacturing value-added within the domain of business performance. Therefore, the relationship between KM, CKM and OP is illustrated in the model proposed in Fig. 2.

All organizations should aware that an effective implementation of KM and CKM can generate economic value to an organization. Besides, it should be regarded as valuable resources for them to improve OP. Each organization needs to know the number of their customers, who they are, the potential customer and the benefits they will bring to the organization. Managers should be able to use knowledge of their customers effectively which will enable them to understand the behavior of customers and their needs. This use of existing knowledge of their customer will enable

organizations to improve business operations. Though the concept of CKM is rather new in the field of KM, it still continues to develop since more organizations continually embrace the idea and put it into practice. Organizations can make use of KM and CKM concept over internal and external boundaries, and apply this concept towards improving OP. Furthermore, it can be used to strengthen a firm's effectiveness.

CONCLUSION

This study discusses the concept of KM and CKM that can contribute to the improvement of OP. This knowledge can be used by organizations as they seek to lead the market with a well-designed products and services. Managing KM and CKM can also lead to better use of resources and as a result can increase the organization profits. Nevertheless, the benefits of facilitating three knowledge flows in CKM can have a real impact on the performance of the organization. In this global economy, to remain competitive, companies have to know coordinate and use what they know, regardless of the size of the company.

It is not an easy task to implement the concept of KM and CKM within an organization. They need to focus on managing interaction between themselves and their customers. Furthermore, organizations should create and maintain two ways flow of knowledge. By doing this, an organization can have a new source of knowledge which can improve its effectiveness in the business environment.

In discovering the suitable combination of KM and CKM, organizations can produce a manageable competitive improvement through the introduction of new products and services that can satisfy customer requirements. Furthermore, this will boost the development of its practices ahead of its organizational boundary. Thus, it will contribute to improved abilities to identify, select, organize, disseminate and use knowledge that an organization requires to be successful. It is strongly believed that the future development of KM and CKM are positive and promising. To achieve the vision 2020, the organization should further increase its performance. To do this, it needs to practice the KM and CKM more effectively.

This conceptual study shows the possibilities and the potential of KM and CKM in enhancing OP. In addition, the literature study confirmed that KM and CKM are despite some similarities in many ways different from its application. This is where KM concerned about managing knowledge within organizations and CKM is concerned about managing knowledge from a customer perspective. The study also proposes a framework to link

between KM, CKM and OP. Thus, future empirical research needs to test the proposed model and explore the research issues addressed in the context of service organizations in order to further understand the relationship between KM, CKM and OP. Furthermore, there is a need to conduct a cross sectional research study on the research to determine the effects of KM, CKM and OP in a broader scope that can add valuable contribution to the study.

REFERENCES

- Abdul, K.O., 2010. The influence of emotional intelligence on job performance in service businesses. Ph.D. thesis, Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA, Selangor, Malaysia.
- Aghaie, A., 2009. Measuring and predicting customer lifetime value in customer loyalty analysis: A knowledge management perspective (a case study on an e-retailer). *Intl. J. Ind. Eng. Prod. Res.*, 20: 21-30.
- Ajlouni, M.D.I.A., 2013. The Relationship between Knowledge Management and Empowerment of Administrative on Organizational Trust. *Eur. J. Bus. Manage.*, 5: 230-237.
- Akhavan, P. and S. Heidari, 2008. CKM: Where knowledge and customer meet. *KM. Rev.*, 11: 24-29.
- Alaei, A., J. Shafae, A. Ariana and T.S. Maghvan, 2012. The role of knowledge management in created organizational innovation. *J. Basic Appl. Sci. Res.*, 2: 1136-1141.
- Alavi, M. and D.E. Leidner, 1999. Knowledge management systems: Issues, challenges, and benefits. *Commun. AIS.*, Vol. 1,
- Alavi, M. and D.E. Leidner, 2001. Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Q.*, 25: 107-136.
- Alhawari, S. and M. Al-Jarrah, 2012. The impact of knowledge management processes on the improve of strategic competence: An empirical study in Jordanian insurance companies. *Intl. J. Trade Econ. Finance*, 3: 39-45.
- Alhawari, S., E. Mansour, A.N. Talet, F. Thabtah and H. Alryalat, 2010. Improving performance of customer knowledge expansion with knowledge management process. *J. Organizational Knowl. Manage.*, 2010: 1-8.
- Allameh, S.M., A. Shahin and B. Tabanifar, 2012. Analysis of relationship between knowledge management and customer relationship management with customer knowledge management (Case Study At Azaran Valve Co.), *Intl. J. Acad. Res. Bus. Soc. Sci.*, 2: 65-77.
- Anand, A., 2011. Understanding knowledge management: A literature review. *Int. J. Eng. Sci. Technol.*, 2: 926-939.
- Anantatmula, V.S., 2007. Linking KM effectiveness attributes to organizational performance. *Vine*, 37: 133-149.
- Andrawina, L., 2009. Relationship between knowledge sharing and absorptive capacity moderated by organizational and technology factors: A conceptual model. *Proceedings of the 2009 IEEE International Conference on Industrial Engineering and Engineering Management*, December 8-11, 2009, IEEE, Hong Kong, ISBN: 978-1-4244-4869-2, pp: 865-1869.
- Baharom, A.R., M.S. Norizan and H.M. Sabri, 2007. Avoiding the knowledge management pitfalls: A review and suggestions. *Proceedings of the 3rd International Conference of Asian Academy of Applied Business*, June 14-16, 2007, Hadyai, Thailand, pp: 1-15.
- Belkahla, W. and A. Triki, 2011. Customer knowledge enabled innovation capability: proposing a measurement scale. *J. Knowl. Manage.*, 15: 648-674.
- Bhatt, G.D., 2001. Knowledge management in organizations: Examining the interaction between technologies, techniques, and people. *J. Knowl. Manage.*, 5: 68-75.
- Bock, G.W., R.W. Zmud, Y.G. Kim and J.N. Lee, 2005. Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, Social-psychological forces and organizational climate. *MIS Q.*, 29: 87-111.
- Bogue, J. and D. Sorenson, 2009. Managing customer knowledge during the concept development stage of the new food product development process. *J. Intl. Food Agribusiness Marketing*, 21: 149-165.
- Boljanovic, J.D. and J. Stankovic, 2012. The role of knowledge management in building client relationships. *Singidunum J.*, 9: 16-28.
- Bontis, N. and A. Serenko, 2009. A follow-up ranking of academic journals. *J. Knowl. Manage.*, 13: 16-26.
- Bueren, A., R. Schierholz, L. Kolbe and W. Brenner, 2004. Customer knowledge management-improving performance of customer relationship management with knowledge management. *Proceedings of the 37th International Conference on System Sciences*, Jan. 05-08, IEEE Computer Society, pp: 1-10.
- Chen, Y.H. and C.T. Su, 2006. A Kano-CKM model for customer knowledge discovery. *Total Qual. Manage. Bus. Excellence*, 17: 589-608.
- Choudhary, A.I., S.Z. Akhtar, M.A. Ansari and K.U. Rehman, 2011. Enhancing financial performance by applying knowledge management practices. *Proceedings of the 3rd South Asian International Conference on Management, Business Ethics and Economics*, December 28-29, 2011, Lahore, Pakistan, pp: 1-10.

- Claycomb, C., C. Droge and R. Germain, 2001. Applied process knowledge and market performance: The moderating effect of environmental uncertainty. *J. Know. Manage.*, 5: 264-278.
- Danish, R.Q., M.M. Nawaz and Y. Munir, 2012. Impact of knowledge management practices on organizational performance: An evidence from Pakistan. *Int. J. Sc. Eng. Res.*, 3: 1-6.
- Darroch, J. and R. McNaughton, 2002. Examining the link between knowledge management practice and types of innovation. *J. Intellect. Cap.*, 3: 210-222.
- Darroch, J., 2005. Knowledge management, innovation and firm performance. *J. Knowl. Manage.*, 9: 101-115.
- Davenport, T.H. and L. Prusak, 1998. *Working Knowledge: How Organizations Manage What They Know*. Harvard Business Press, Boston, MA., USA., ISBN-13: 9780875846552, Pages: 199.
- Davenport, T.H., J.G. Harris and A.K. Kohli, 2001. How do they know their customers so well?. Massachusetts Institute of Tech. *Sloan Manage. Rev.*, 42: 63-73.
- Davenport, T.H., S.L. Jarvenpaa and M. Beers, 1996. Improving knowledge work processes. *Sloan Manage. Rev.*, 37: 53-66.
- Drucker, P.F., 1993. *Post-Capitalist Society*. Harper Business, New York.
- Drucker, P.F., 1999. Knowledge worker productivity. *California Manage. Rev.*, 41: 79-94.
- Emadzade, M., B. Mashayekhi and E. Abdar, 2012. Knowledge management capabilities and organizational performance. *Int. J. Contem. Res. Bus.*, 3: 781-790.
- Faucher, J.B.P., A.M. Everatt and R. Lawson, 2008. Reconstituting knowledge management. *J. Know. Manage.*, 12: 3-16.
- Feng, T.X. and J.X. Tian, 2005. Customer knowledge management and condition analysis of successful CKM implementation. *Proceedings of the 4th International Conference on Machine Learning and Cybernetics*, August 18-21, 2005, Guangzhou, China, pp: 2239-2244.
- Garcia-Murillo, M. and H. Annabi, 2002. Customer knowledge management. *J. Operat. Res. Soc.*, 53: 875-884.
- Gebert, H., M. Gelb, L. Kolbe and W. Brenner, 2002. Knowledge-enabled customer relationship management: Integrating customer relationship management and knowledge management concepts. *J. Know. Manage.*, 7: 107-123.
- Gibbert, M., M. Leibold and G. Probst, 2002. Five styles of customer knowledge management and how smart companies use them to create value. *Eur. Manage. J.*, 20: 459-469.
- Goh, A., 2004. Enhancing organizational performance through knowledge innovation: A proposed strategic management framework. *J. Know. Manage. Prac.*, 5: 111-123.
- Ho, Y.C., H.P. Fu, C.F. Niu and P.H. Chien, 2004. Customer knowledge management. A case study of Taiwan plastic industry. *Asian J. Qual.*, 5: 107-121.
- Huang, L.S. and C.P. Lai, 2010. Applying knowledge management in the life insurance industry: Evidence from Taiwan. *Int. Res. J. Fin. Econ.*, 48: 115-127.
- Islam, Z.M., I. Hasan, S.U. Ahmed and S.M. Ahmed, 2011. Organizational culture and knowledge sharing: Empirical evidence from service organizations. *Afr. J. Bus. Manage.*, 5: 5900-5909.
- Juntarung, N., 2008. Knowledge management capability, market intelligence and performance: An empirical investigation of electronic businesses in Thailand. *J. Bus. Res. Source*, 8: 69-80.
- Karadsheh, L., E. Mansour, S. Alhawari, G. Azar and N. El-Bathy, 2009. A theoretical framework for knowledge management process: Towards improving knowledge performance. *Commun. Int. Bus. Inform. Manage. Assoc.*, 7: 67-79.
- Kharabsheh, R., I. Magableh and S. Sawadha, 2012. Knowledge management practices (KMPs) and its impact on organizational performance in pharmaceutical firms. *Eur. J. Eco. Fin. Admin. Sci.*, 48: 6-15.
- Kiessling, T.S., R.G. Richey, J. Meng and M. Dabic, 2009. Exploring knowledge management to organizational performance outcomes in a transitional economy. *J. World Bus.*, 44: 421-433.
- Kong, F. and L. Cai, 2008. Customer knowledge management and research in e-commerce environment. *Proceedings of the International Symposium on Knowledge Acquisition and Modelling*, December 21-22, 2008, Wuhan, China, pp: 231-235.
- Liao, C. and S. Chuang, 2006. Exploring the role of knowledge management for enhancing firm's innovation and performance. *Proceedings of the 39th Hawaii International Annual Conference on System Sciences*, January 4-7, 2006, Big Island, Hawaii, USA., pp: 1-10.
- Lin, H., 2007. Effects of extrinsic and intrinsic motivation on employee knowledge sharing intentions. *J. Info. Sci.*, 33: 135-149.
- Liyun, Q., W. Keyi, W. Xiaoshu and Z. Fangfang, 2008. Research on the relationship among market orientation, customer relationship management, customer knowledge management and business performance. *Manage. Sci. Eng.*, 2: 31-37.

- Lopez-Nicolas, C. and F.J. Molina-Castillo, 2008. Customer knowledge management and e-commerce: The role of customer perceived risk. *Int. J. Inform. Manage.*, 28: 102-113.
- Ma, Z. and K.H. Yu, 2010. Research paradigms of contemporary knowledge management studies. *J. Know. Manage.*, 14: 175-189.
- Mahdi, O.R., M.K. Almsafir and L. Yao, 2011. The role of Knowledge and Knowledge management in sustaining competitive advantage within organizations: A review. *Afr. J. Bus. Manage.*, 5: 9912-9931.
- Mau, M., 2005. Action research: Connecting knowledge in the Australian public sector organization. *ActKM Online J. Know. Manage.*, 2: 58-69.
- Moballegghi, M. and G.G. Moghaddam, 2011. Knowledge management and measuring its impact on organizational performance. *Proceedings of the International Conference on Financial Management and Economics*, July 2-3, 2011, Hong Kong, pp: 315-319.
- Mukherji, S., 2012. A framework for managing customer knowledge in retail industry. *Indian Inst. Manage. Bangalore Manage. Rev.*, 24: 95-103.
- Nejatian, H., I. Sentosa, S.K. Piaralal and A.M. Bohari, 2011. The influence of customer knowledge on CRM performance of Malaysian ICT companies: A structural equation modeling approach. *Int. J. Bus. Manage.*, 6: 181-198.
- Nonaka, I. and H. Takeuchi, 1995. *The Knowledge Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York, ISBN: 0195092694, Pages: 284.
- Nonaka, I., 1991. The knowledge creating company. *Harvard Bus. Rev.*, 69: 96-104.
- Peng, J., A. Lawrence and T. Koo, 2009. Customer knowledge management in international project: A case study. *J. Tech. Manage.*, 4: 145-157.
- Polanyi, M., 1962. *Personal Knowledge: Towards a Post-Critical Philosophy*. The University of Chicago Press, Chicago, IL., USA., ISBN-13: 9780226672885, Pages: 428.
- Raja Abdullah, Y., J. Adnan and J. Kamaruzaman, 2010. Knowledge management and challenging roles of academic librarians. *Manage. Sc. Eng.*, 4: 14-23.
- Rollins, M. and A. Halinen, 2005. Customer knowledge management competence: Towards a theoretical framework. *Proceedings of the 38th Hawaii International Conference on System Sciences*, January 3-6, 2005, IEEE Computer Society Washington, DC, USA, pp: 240-240.
- Rowley, J.E., 2002a. Reflections on customer knowledge management in e-business. *Qual. Market Res: Int. J.*, 5: 268-280.
- Rowley, J.E., 2002b. Eight questions for customer knowledge management in e-business. *J. Know. Manage.*, 6: 500-511.
- Roy, M., T. Chatterjee and L. Linnanen, 2012. Exploring effective knowledge management to improve organizational performance in globalized environment: An empirical study. *Advances in Management and Applied Economics*, 2: 205-213.
- Salina, D. and Y. Wan Fadzillah, 2011. How intellectual capital mediates the relationship between knowledge management processes and organizational performance?. *African J. Bus. Manage.*, 5: 2607-2617.
- Salomann, H., M. Dous, L. Kolbe and W. Brenner, 2005. Rejuvenating customer management: How to make knowledge for, from and about customers work. *Euro. Manage. J.*, 23: 392-403.
- Sanayei, A. and M. Sadidi, 2011. Investigation of customer knowledge management (CKM) dimensions: A survey research. *Int. J. Bus. Manage.*, 6: 234-239.
- Scarbrough, H., 2003. Knowledge management, HRM and the innovation process. *Int. J. Manpower*, 24: 501-516.
- Staples, D.S., K. Greenaway and J.D. McKeen, 2001. Opportunities for research about managing the knowledge-based enterprise. *Int. J. Manage. Rev.*, 3: 1-20.
- Syed Omar, S.I. and F. Rowland, 2004. Benchmarking knowledge management in a public organization in Malaysia. *Benchmarking: Int. J.*, 11: 238-266.
- Talet, A.N., 2012. KM process and CRM to manage customer knowledge relationship management. *Proceedings of the 2nd International Conference on Economics, Business and Marketing Management*, February 26-28, 2012, Singapore, pp: 60-67.
- Teece, D.J., 2004. Knowledge and Competence as Strategic Assets. In: *Handbooks on Knowledge Management*. Holsapple, C.W. (Ed.). Springer-Verlag BerlinHeidelberg, German, ISBN: 978-3-540-24746-3, pp: 129-152.
- Zack, M., J. McKeen and S. Singh, 2009. Knowledge management and organizational performance: An exploratory analysis. *J. Knowledge Manage.*, 13: 392-409.
- Zaied, A.N.H., G.S. Hussein and M.M. Hassan, 2012. The role of knowledge management in enhancing organizational performance. *Int. J. Info. Eng. Electron. Bus.*, 5: 27-35.
- Zanjani, M.S., N. Sakhaee and H. Shahbaznezhad, 2009. Mechanisms of customer knowledge management in E-commerce websites. *Res. J. Inform. Technol.*, 1: 86-93.