A Literature Review on Knowledge Management in Organizations

Colin Ting Si Xue (Corresponding author)
School of Computing and Technology,
Asia Pacific University of Technology and Innovation
Technology Park Malaysia
57000 Kuala Lumpur, Malaysia
Tel: +60389961000 / +60165259291
E-mail: colin9291@gmail.com ; TP032511@mail.apu.edu.my

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Abstract
Knowledge management has become a factor that ensures the success of the organizations and the continuity of their businesses. Especially in today’s 21st century, organizations are competing to stay competitive. They must know how to implement and use knowledge management in effective ways. Knowledge has to be used in the organizational process in order to achieve sustainable competitive advantages. The aim of this paper is to give an overview of knowledge management and its importance in the organizations. The methods used to complete this paper are collecting data from published journals, conferences paper and books. The result shows that knowledge management is the main key for the organizations to stay competitive. Besides, knowledge management also creates innovation and ideas that are unique from others.

Keywords: Competitive Advantages, Explicit Knowledge, Innovation, Knowledge Management, Tacit Knowledge.

1. Introduction
As the globalization has created challenges to the organizations, there are many organizations competing each other in order to defeat the competition and win the customers. The organizations have to face the high risks of competition and the possibilities of losing customers. One of the main reasons which causes this problem is the organizations have difficulties in responding to the rapid changes of market trends. The researchers (Cho & Korte, 2014; Tubigi & Alshawi, 2015) claimed that knowledge has successfully motivated the organizations to move towards the use of knowledge management. Knowledge has been considered as global economy transformation center (Kakabadse et al., 2003). Besides, it is also an important source of wealth and key for the organizations to stay competitive in business environment (Krogh et al., 2001). Knowledge management has become a main key to create customer values. This has led to the consideration of knowledge as strategic source for organizations. In order to implement and make full use of knowledge management, the organizations must have a clear understanding on how knowledge is formed, disseminated and applied within organizations (Ipe, 2003; Hooff & Huysman, 2009). Knowledge management acquires the knowledge from both inside and outside of the organizations, translates them into strategies, applies them within organizations and protects them. The use of knowledge management can also enhance the service quality by providing faster service.
response time (Edvardsson & Oskarsson, 2011; Ha et al., 2015). Sirmon et al. (2007) and Carrion et al (Carrion et al., 2016) stated that it is insufficient for the organizations to stay competitive with only valuable resources, they must know how to manage them effectively. In the beginning of the paper, it gives the explanation on knowledge management. Second, the differences between tacit and explicit knowledge are explained. Finally, it explains the importance of knowledge management in organizations.

2. Knowledge Management

In business world, it has been changing from the era of natural resources to the era of knowledge. The world is moving away from the natural resources to an era of knowledge which based on research and development, skills and education (Friedman, 2005; Gulbranson & Audretsch, 2008). The basic economic resource is no longer capital, natural resources as well as labor but knowledge (Jelenic, 2011; Khan, 2014). Knowledge has been considered as one of the most important and highly valued asset and commodity (Bhojaraju, 2005; Hegazy & Ghorab, 2014). Schultze and Leidner (2002) also stated that knowledge has become the main source in organizations. Besides, knowledge and the capability to create and utilize knowledge are seen as a center to transform the global economic. Knowledge has been emerged as main key source of economic growth of organizations in global economy as it is the basis of innovation (Carneiro, 2000; Kakabadse et al., 2003).

Knowledge can be referred as information possess in the people’s minds or people’s experience and understanding (Marwick, 2001; Alavi et al., 2005). It contains information that is ready and can be used in making decisions and actions (Chang & Lin, 2015). Anand and Walsh (Anand & Walsh, 2016) claimed that knowledge contains information, skills and expertise. The main purpose to share the knowledge is to make the knowledge visible is to show the role of knowledge in organizations and encourage employees to foster behaviors such as knowledge sharing and build the knowledge infrastructure (Merlo, 2016). Notwithstanding, knowledge without a proper management can be obsoleted and useless (Ansari et al., 2012; Karimi & Javanmard, 2014). Thus, organizations need to implement and apply a series of processes for them to manage their knowledge (OuYang, 2014).

Different experts or researchers have defined knowledge management in several ways. Knowledge management is the capability to manage knowledge such as gathering internal or external knowledge of organizations, converting them to new idea or strategy and applying them and protecting them (Gold et al., 2001). Lytras et al. (2002) defined knowledge management as a systematic, explicit and application of knowledge that will help the organizations to maximize the organizations’ knowledge-related effectiveness and returns from the knowledge assets. It also creates new capabilities, encourage innovation and performance as well as increase customer value. In light of this, knowledge management can be defined as a process of capturing, storing, sharing and using knowledge (Leidner et al., 2006; Chang & Lin, 2015). Besides, it can also be defined as a systematic process for gathering, organizing and communicating both tacit and explicit knowledge of employees which can be used in their works (Schultze & Leidner, 2002; Alavi et al., 2005; Massey & Montoya-Weiss, 2006).

Organizations are able to gain, maintain and leverage their knowledge resources by turning to knowledge management initiatives and technologies (Kankanahalli et al., 2005; Greiner et al., 2007). Thus, the main goal of knowledge management is to enable the organizations to be aware of their knowledge and shape the knowledge, so that they can effectively and efficiently use of knowledge (Newell et al., 2004; Alavi et al., 2005). Griffith et al (Griffith et al., 2003) and Pawlowski and Bick (2012) claimed that the scientific understanding of
knowledge in organizations is still in beginning stage. There are four main elements and processes in knowledge management (Kayworth & Leidner, 2003; Zaim, 2006; Fong & Choi, 2009; Turner et al., 2012):

1. Knowledge Creation or Knowledge Acquisition: This process involves new implementation of knowledge or replacing the current content within the organization’s explicit and tacit knowledge. It requires the organizations to search for new knowledge and information, both inside and outside of the organizations (Chen & Edgington, 2005; Carrion et al., 2012). The organizations can acquire new knowledge through imitation, benchmarking, replication or outsourcing (Abou-Zeid, 2002). This process has been considered as important role as it generates new knowledge within organization and this can be switched to key success factor and continuous innovation (Bhatt, 2000; Malhotra, 2000). Knowledge is able to be created, shared and enlarge through collaborative processes within organizations (Norman, 2004; Ajmal & Koskinen, 2008).

2. Knowledge Storage: Both explicit and tacit knowledge obtained by individuals within organizations should be stored. The organizations should arrange and manage the knowledge thus it can be accessed easier (Massey & Montoya-Weiss, 2006; Heisig, 2009; Ling et al., 2009). When the knowledge is integrated, it helps to reduce the redundancy thus enhance efficiency (Alavi et al., 2005). Nemati (2002) also stated that knowledge storage is not only vital for effectiveness of usage but also vital for reusing the knowledge.

3. Knowledge Dissemination or Knowledge Transfer: This process involves sharing and exchanging knowledge among individuals or network of individuals, a group of people to the organizations and individual to explicit sources (Alavi et al., 2005; Carrion et al., 2016). During the process, the organizations must ensure that the knowledge is transformed from tacit knowledge to explicit knowledge to prevent the loss of tacit knowledge (Ko et al., 2005; Massey & Montoya-Weiss, 2006; Eskerod & Skriver, 2007; Ajmal & Koskinen, 2008; Pirkkalainen & Pawlowski, 2013).

4. Knowledge Application: This process involves the usage of knowledge in adjusting the strategic direction, solving the problems, making decision, improving the efficiency and reducing costs (Markus et al., 2002; Orlikowski, 2002). The individual can make use of the knowledge possessed by other individuals without actually learning that knowledge (Hegazy & Ghorab, 2014). However, according to Ipe (Ipe, 2003) and Landroguez (Landroguez et al., 2011), if the organizations want to capitalize the knowledge, they should know how the knowledge is created, disseminated and used as these processes are the basic for an effective organizational knowledge management.

3. Explicit and Tacit Knowledge

Knowledge is made up of experiences, information, values and systematic attitudes that provides a proper framework for evaluation of new information and experience. New knowledge is created when the employees within the organizations share their own knowledge, either tacit or explicit (Hooff & Hendrix, 2004). This process can be called as knowledge sharing. Knowledge sharing can enhance the organizations’ performance despite that the effectiveness of sharing activities is difficult to measure (Epple et al., 1996; Argote & Ingram, 2000; Eze et al., 2013). Individual knowledge sharing is important in organizations as it drives the knowledge-creating organization (Hooff & Ridder, 2004) as well as competitiveness (Verbeke et al., 2011). Knowledge can be divided and group into two forms: tacit and explicit. There is an interaction among tacit and explicit knowledge to create new
ideas. Although knowledge can be classified as individual or group, internal or external, hard or soft, practical or theoretical, however tacit and explicit is the most common and practical one (Nonaka, 1994; Pathirage et al., 2007). Joia and Lemos (2010) stated that the dimension of these two types of knowledge is one of the mostly discussed issues within the knowledge management field. According to Moordian (2006) and Grant (2007), tacit knowledge concept is at the centre of knowledge management. Tacit knowledge is something personal, an ability, skill to do something, which is partly based on people owns experience. This type of knowledge is less familiar, usually in unconventional form and conscious-less (Alwis & Hartmann, 2008). Tacit knowledge is different from explicit knowledge as it is usually uttered and shared in drawings or writing. Compared to explicit knowledge, it usually comes in the form of books, journals, papers, documents, databases etc. (Herschel & Jones, 2005; Nonaka & Krogh, 2009). From organizational view, tacit knowledge is embedded in organizational culture and collective understanding while explicit knowledge can be conceptualized, stored in databases and it is transferable in formal form. It can be achieved through the experience, reflection or internalization but it cannot be taught and managed (Hall & Andriani, 2002). Tacit knowledge is made up of values, beliefs, perceptions, assumptions and is only stored in human beings while explicit knowledge can be stored in technological ways (Smith, 2001; Mahroeian & Forozia, 2012; Borges, 2013). Explicit knowledge can be codified into systematic, formal and structured form. It can be achieved, collected, transformed, shared, communicated with ease and be accessible to people. This kind of knowledge is typically more prevalent in organizations (Joia & Lemos, 2010; Huang et al., 2011). Nonaka (Nonaka et al., 2000) said knowledge is formed through the interactions of tacit and explicit knowledge. Sanchez (Sánchez et al., 2012) agreed with Nonaka by concluding tacit knowledge is meaningless without explicit knowledge, thus, both types knowledge is complementary and essential for knowledge creation. Sabri (2014) and Szmodics (2015) summarized tacit and explicit knowledge as follows:

<table>
<thead>
<tr>
<th>Tacit Knowledge</th>
<th>Explicit Knowledge</th>
</tr>
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<tbody>
<tr>
<td>Can be documented, codified, shared</td>
<td>What people think in their mind</td>
</tr>
<tr>
<td>Can be stored in technological ways and digital systems</td>
<td>Difficult to be accessed and evaluated</td>
</tr>
<tr>
<td>Transferable</td>
<td>Not transferable</td>
</tr>
</tbody>
</table>

### 4. Knowledge Management in Organizations

As knowledge has been defined and considered as one of the most valuable sources in the processes, it is important to manage this source. Knowledge management helps to create and propagate information and knowledge. It also provides a sufficient, effective and efficient use of knowledge in order to provide a strategic competitive advantages for organizations (Marqués & Simón, 2006; Rahimli, 2012; Nawaz et al., 2014; Loureiro et al., 2015). Researchers (Lee & Lan, 2011; Liu & Deng, 2015) also said that knowledge is an important success factor that helps the organizations to gain a sustainable competitive advantage. The development of competencies and knowledge within the organizations has been increasingly recognized as the key to achieve sustainable competitive advantages (Fierro et al., 2011; Suresh, 2012). Knowledge management can be one of the main organizational strategies as it helps to create new business processes to enhance the organizations’ performance (Wu & Chen, 2014).

Rasula et al (Rasula et al., 2012) and Ahmed et al (Ahmed et al., 2015) stated that one of the main purposes to introduce knowledge management in organizations is knowledge management brings positive impact and outcomes on organizational performance. Kiessling (Kiessling et al., 2009) done a research and suggested that knowledge management will bring
a positive outcomes of the organizations’ innovation, product improvement as well as employee improvement. In the past, the organizations can usually compete each other by offering a lower price and better quality of products. But now, most of the organizations learn new knowledge as it provides sustainable competitive advantages. Meanwhile, the organizations that are rich in knowledge are able to enhance their creativity and efficiency as well as reach a new quality level (Chou et al., 2015; Dickel & Moura, 2016). According to Liao and Wu (Liao & Wu, 2009), they said an effective knowledge management through capabilities of development will be an advantage to organizational performance. When the organizations have a better development of capabilities, they are able to provide marketing offerings to meet customers’ needs.

Knowledge management provides the opportunities for the organizations to explore tacit and explicit knowledge of individuals, groups and organizations and convert these knowledges into organizational assets for the use of decision makings. Knowledge management also helps to enhance the effectiveness and efficiency of organization’s manpower (Bhatti & Qureshi, 2007; Dahiya et al., 2012; Byukusenge et al., 2016). Zaied et al. (2012) done the research and showed that there is a relationship between knowledge management and performance improvement measures. The quality organizational knowledge can be used in decision makings. It can be concluded as if the organizational knowledge quality is good, the organizational performance improves significantly.

Research done by Ibrahim and Reid (2009) stated that knowledge management is also important for the organizations to create a sustainable competitive advantages and improve business processes. The business processes can be improved by reducing the processing time as the individuals can share their best practices. Besides, during the conversations and discussion among individuals, it can generate valuable knowledge which can be shared among each other. Knowledge management can also enhance the organizations’ operational activities. Rodriguez and Edwards (2010) and Jelenic (2011) agreed the statement and analyzed that this can be achieved by reducing the lead time, product-to-market time, design cycle time as well as improving the product quality. Customer services performance of the organizations are improved with knowledge management. With the help of knowledge management, the organizations are able to store the data and information properly. The employees are able to find the required information requested from customers at a particular time. This also increases competitiveness as they can provide better services than others (Bueren et al., 2005; Guchait et al., 2011; Pension et al., 2013).

Competitiveness does not only refer to the performance quality, products quality and technical efficiency of organizations in today’s business environment, but it also refers to the ability to find new ways to overcome the obstacles within the organizations through the production and application of knowledge. Innovation management has become important in organizations so that the organizations are able to create an innovative products and services by using the knowledge acquired (Canongia et al., 2004; Dickel & Moura, 2016). Innovation refers to the abilities to the unique combination of new idea, thought and concept (Manhart & Thalmann, 2015). Besides, Porter (2009) and Hitt et al. (2011) claimed that innovative strategies to be applied within the organizations become critical. To ensure the organizations to be survived, it is necessary for the organizations to create business value within the organizations and also in competitive environment. With the help of innovation, it enables the organizations to perform business processes in more creative ways which improves effectiveness, efficiency and at least marketability. The organizations are able to solve the problems through innovative solutions which rely on knowledge shared among individuals (Storck & Hill, 2000; Jones & Linderman, 2014).
5. Conclusion

In conclusion, knowledge management has been considered as one of the main conditions for competitiveness of organizations in today’s business environment. The knowledge creation has become important for organizations to stay competitive. Besides, knowledge has also encouraged the organizations to implement knowledge management in developing their business strategies. Knowledge has been a strategic valuable resource that enables the organizations to gain sustainable competitive advantages and enhance the performance. In future of the use knowledge management in organizations, they need to understand the consequences of knowledge management before applying.

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