

An Empirical Review: Knowledge Management & Its Implications in the Contemporary Business Context

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ABSTRACT

Knowledge management has become a one of the critical factor that affects the longevity and enormous success of the organization. In order to face dynamic business environment, and to adapt to today's technological advancement organizations must realize the importance of knowledge management and effective implication of knowledge management within the organization. . Knowledge has to be used in the organizational process to win over its rivals, to achieve sustainable competitive advantages and to stand out as a unique industry player.

The major purpose of this paper is to review the notion of Knowledge management and to provide an overview of how knowledge management is important to an organization and its overall performance. This paper was completed by gathering data from published journals, conferences paper and by referring to related articles and books. Accordingly the article shows that knowledge management is the main key or the intangible asset that provides competitive advantage and it is considered as the central dimension of creating innovations for the organizations. Ultimately knowledge management assists organizations to be unique from its competitors and create greater value to their customers as a whole.

Keywords: Knowledge management, Innovation, Competitive Advantage.

INTRODUCTION

In today's highly demanding business world, the knowledge management has become the recent phenomenon prevailing in the management circle. Also it has been widely recognized as the most crucial competitive intangible asset (Palacios and Garrigos, 2006). On the other hand, dynamic and competitive business environment has created numerous challenges to the organizations, many organizations competing with each others to acquire, retain customers and to overthrow competition. In order to defeat the competition and to retain customers' organizations has to come up with innovations and open up to new ideas on a continuous basis. One of resource that can be used to stimulate the innovations within the organization is the effective use of knowledge management. Knowledge management (KM) is a concept that has emerged explosively and turned up to be the major asset of creating customer value. 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). 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. This paper contains the definitions of KM, explanation on types of KM, major elements and processes of KM, and finally it provide an overview of performance measures of KM and importance of knowledge management for organizational performance and long term success.

KNOWLEDGE & KNOWLEDGE MANAGEMENT

Theoretical Background

There are a many number of approaches and definitions to the conception of knowledge and knowledge management. With the technological advancement and globalization, the world is moving away from the natural resources to a knowledge which based on research and development, skills and education (Friedman, 2005; Gulbranson & Audretsch, 2008). 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. Therefore, the basic factors of production or the economic resources are no longer capital, natural (land) resources and labor but knowledge (Jelenic, 2011; Khan, 2014). One of the most accepted definitions about knowledge is that, knowledge is a dynamic human resource of justification of the personal beliefs to obtain the truth (Nonaka, 1994). It can then be stated as; the knowledge is an invisible or intangible asset, in which its acquisition involves complex cognitive processes of perception, learning, communication, association and reasoning (Epetimehin and Ekundayo, 2011). Knowledge is the concept, skill, experience and vision that provide a framework for creating, evaluating and using the information (Soltani and Navimipour, 2016). 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. Besides, 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).

To compete and become successful in today's turbulent market, organizations should learn to manage their intangible asset, "Knowledge" and this practice is generally known as Knowledge Management. Besides, knowledge without a proper management can be obsolete and useless (Ansari et al., 2012; Karimi & Javanmard, 2014). Therefore, organizations need to implement and apply a series of processes to manage their knowledge (OuYang, 2014). The concept of KM has been defined in numerous ways by different researchers. Alavi and Leidner (1999) define KM as 'A systemic and organizationally specified process for acquiring, organizing and communicating both explicit and tacit knowledge for employees so that other employees may make use of it to be more effective and productive at work'. Gold (2001) defines KM as 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. Duffy (1999) describes KM as 'A process capitalizing on organizational intellect and experience to drive innovations'. Lytras et al. (2002) stated that KM is a systematic, explicit application of knowledge that will help the organizations to maximize the organizations' knowledge-related effectiveness and returns from the knowledge assets. American Productivity & Quality Center suggests that KM is the strategy and process of identifying, capturing and leveraging knowledge to help organization compete in market. Thus, 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). Earl (2001) stated that KM can be viewed from seven dimensions with their focuses:

1. System: technology
2. Cartographic: maps
3. Engineering: processes
4. Commercial: income
5. Organizational: networks
6. Spatial: space and
7. Strategic: mindset.

Organizations are able to gain, maintain and leverage their knowledge resources by turning to knowledge management initiatives and technologies (Kankanhalli 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). Managing knowledge well can develop new opportunities, creating value for customers, obtaining competitive advantages or improving performance (Lloria, 2008).

Types of Knowledge

New knowledge is created when the employees within the organizations share their own Knowledge, it could be 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). Basically knowledge can be classified in to two; tacit knowledge and explicit knowledge. There are many definitions of these two types of knowledge. Based on those definitions we can differentiate between tacit and explicit knowledge. Polanyi encapsulates the essence of tacit knowledge in the phrase “we know more than we can tell”, and provides further clarification in such commonplace examples as the ability to recognize faces, ride a bicycle or ski, without the slightest idea to explain how these things are done (Polanyi, 1966, p. 4). Tacit knowledge is something personal, 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). Kikoski and Kikoski cite two philosophers (H.-G. Gadamer; H. Lipps) who refer to tacit knowledge as personal knowledge that each individual possesses that is unique and once unlocked can be a creative contribution in an organization. Moordian (2006) and Grant (2007) stated that, tacit knowledge concept is at the centre of knowledge management. 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, explicit knowledge can be conceptualized, stored in databases and it is transferable in formal form while tacit knowledge is embedded in organizational culture and collective understanding. 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; Mahroeiian & Forozia, 2012; Borges, 2013). According to Nonaka (Nonaka et al., 2000) 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.

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).

Elements and Processes of Knowledge Management

Knowledge Management can be viewed as a process, where many activities are organized to carry out key elements of an organization's KM strategy and operations. On the other hand knowledge can be transferred and shared among the members of the organization using both human and technical factors. Through this transfer, organizational members can implement the new knowledge to business tasks/work activities. To implement a KM strategy successfully, the creation, organization, leveraging (sharing) and application of knowledge must be taken into account. Omotayo(2015). According to Kayworth & Leider, can identify four main elements and processes in knowledge management (Kayworth & Leidner, 2003; Zaim, 2006; Fong & Choi, 2009; Turner et al., 2012)

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 enlarged through collaborative processes within organizations (Norman, 2004; Ajmal & Koskinen, 2008).

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 there dundancy 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.

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).

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, Ipe (Ipe,2003) and Landroquez (Landroquez et al., 2011) stated that, 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.

Performance Measures of Knowledge Management

Performance measurement is a crucial part in KM (Wang et al., 2015). By using performance measures, can assess the effectiveness of KM practices and identify whether the current knowledge process can meet the needs and whether it can provide feedback of information on KM to carry out continuous improvement on KM. KM performance evaluation includes the design of KM performance evaluation criteria and the selection of the evaluation methods (Wang and Zheng, 2010). This process consists of both qualitative analysis and quantitative analysis. The common qualitative approaches for KM evaluation include open-ended questionnaires (Changchit et al., 2001), expert interviews (Booker et al.,2008), case studies and

surveys (Darroch and McNaughton, 2002). While, the quantitative analysis is always used to measure the explicit knowledge with a series of financial and non-financial indicators (Chen and Chen, 2005). Wang et al. (2016) proposed an index system of KM, which includes four components: the KM process, the organizational knowledge structure, the economic benefits and the efficiency. Wang et al. (2015) categorized the performance measures into three categories: knowledge resources, KM processes, and the factors that affect KM. Wu et al. (2009) developed an evaluation method of KM performance based on the principal component analysis. And the measure index consists of knowledge stocks, maturity degree of the learning organizations, information management and marketing capability. Zhang (2010) applied the Balanced Scorecard into the performance assessment of KM on the basis of the analysis of the Balanced Scorecard and KM and carried out the detailed analysis to measure the performance of KM tools from four aspects – financial, customer, internal processes and learning and growth. Wang and Zheng (2010) proposed a KM performance evaluation method that includes knowledge system, structure capital, human capital, mental capital and market capital. Tseng (2008) proposed a categorization matrix that classifies the performance indicators for potential use in KM performance measurements. And the evaluation criteria of this method include process, human and IT.

KNOWLEDGE MANAGEMENT AND ITS EFFECTS ON THE ORGANIZATIONAL PERFORMANCE

In order to sustain in today's economy, organizations believe that knowledge is the key economic resource and the crucial drive to obtain competitive advantage over its rivals. In other words, organizations must have the suitable knowledge in the required form and content for the purpose of achieving both short and long term success (Anantatmula, 2007). According to Ibrahim and Reid (2009), knowledge management is also important for the organizations to create a sustainable competitive advantage 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. Thus, Knowledge management

assists 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 advantage for organizations (Marqués & Simón, 2006; Rahimli, 2012; Nawaz et al., 2014; Loureiro et al., 2015). One of the key benefits of introducing KM practices in organizations is its positive effect on organizational performance, 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. Besides, 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 identified as one of the main organizational strategy which assists to create new business processes to enhance the organizations' performance (Wu & Chen, 2014). Kiessling (Kiessling et al., 2009) done a research study and concluded that knowledge management will bring a effective outcomes of the organizations' innovation, product improvement as well as employee improvement. 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). According to Zaied et al. (2012), 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 better, the organizational performance improves significantly. The organizations that are rich in knowledge are able to enhance their creativity and efficiency it helps them to reach a new quality level (Chou et al., 2015; Dickel & Moura, 2016). Liao and Wu (Liao & Wu, 2009) stated that, 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 in a position to provide marketing offerings to cater customers' diversifies needs. Knowledge management provides the opportunities for the organizations to explore tacit and explicit knowledge of individuals, groups and organizations and convert this knowledge into organizational

assets which can be effectively used in decision making process. Thus, Knowledge management enhances the operational activities of the organization. According to Rodriguez and Edwards (2010) and Jelenic (2011) analysis, this can be achieved by reducing the lead time, product-to-market time, design cycle time while improving overall product quality. Customer services quality and performance of the organizations can be improved with the implementation of knowledge management. With the help of knowledge management, the organizations are able to store the data and information in a proper manner. Therefore, employees are able to find the required information requested by the customers without any delay. Ultimately this leads to increases the overall service quality which resulting increase in competitiveness (Bueren et al., 2005; Guchait et al., 2011; Pension et al., 2013). Competitiveness does not only depend on performance quality, products quality and technical efficiency of organizations, but largely depend on organization's ability to find new ways to overcome the obstacles within the organizations through the efficient production and effective application of knowledge. In today's world Innovation management has become central dimension in organizations success, so by using acquired knowledge organizations are able to create innovative products and through this innovations organizations can face the completion and they can stabilize their positions against their competitors in the competitive market. (Canongia et al., 2004; Dickel & Moura, 2016). Thus, organizations are able to solve the problems through innovative solutions which rely on knowledge shared among individuals (Storck & Hill, 2000; Jones & Linderman, 2014). In order to stay in the game and to survive in the market place it is essential to create value within the organizations. With the help of innovations and effective use of KM organizations can create value while improving overall organizational performance by following creative process. Thus organizations can strongly face the competition, business risks and win over rivals and stabilize their position in the market place with long term success

CONCLUSION

In today's dynamic and competitive business world, the concept "knowledge management" has become one of the crucial determinants of competitiveness. Knowledge has encouraged

organizations to incorporate knowledge management in developing organizational process, strategies and decision making. Thus, knowledge creation, transfer and sharing have become important for organizations to stay competitive and updated. Knowledge is economically and strategically valuable resource that enables organizations to create greater value and to gain sustainable competitive advantage. But Knowledge itself is not enough for organization, organization should be aware of how to use and manage this valuable resource in order to improve organizational performance and achieve long term success.

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