

# Dimensions of Knowledge Management Maturity: Top Management Support and Leadership, People, and Information Technology

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## ABSTRACT

Knowledge management (KM) has been applied in many organizations such as government agencies, construction companies, universities and libraries. Assessing the KM maturity in organization is important to identify the current status of KM and areas of KM could be improved. Very little evidence exists regarding KM maturity specifically in academic libraries. In view of this gap, the main purpose of this paper is to explore the dimensions of KM maturity in academic libraries namely top management support and leadership, people and information technology. Further research is required to establish the relationship between KM maturity and organizational performance in academic libraries.

**Keywords:** Top management support and leadership, People, Information technology, Knowledge management maturity, Knowledge management, Academic library

## 1.0 INTRODUCTION

During the last two decades, intangible resource like knowledge is not the main attention in the organization but more focusing on the tangible resources like land, labor, capital and machine. In the 21st century, knowledge is recognized as a key resource and critical factor in the organization to sustain its competitive edge (Drucker, 1992; Alavi & Ledner, 2001), therefore, knowledge must be managed effectively (Jasimuddin, 2007). Knowledge resides in best practices, lesson learned, and procedures, that makes knowledge the most valuable organization's resources (Renzel, 2008). The knowledge management (KM) theory started when Drucker (1992) coined the term "knowledge worker". There is no commonly accepted definitions of KM in the literatures, Petrash (1996) define KM as the right knowledge given to the right people at the right time to ensure them to make excellent decision. KM is about constructing organizational intelligence and facilitating individual to capture, share, and fully utilize the knowledge. A body of literature reveals that KM has been applied in many organizations including government agencies, construction companies (Mohamad Nizam & Abu Hasan, 2012), telecommunication companies (Kassim & Azmee, 2014), research and development organizations (Kuriakose et al., 2011; Perez & Mesias, 2015), universities (Rabiah Eladwiah, 2009), and libraries (Md Roknuzaman & Umemoto, 2009).

According to Khalili et al., (2012), the maturity of KM is "the level of capabilities that exist in an organization with their different dimensions influencing the KM process". Jumo (2011) defines KM maturity as the stages of maturity that an organization can expect to pass through in its road to improve its knowledge practices and knowledge process. Assessing maturity of KM in organization is essential in organizations where they can identify the current position of overall KM and identifying obstructing barriers which need to be overcome (Ping, Binsha & Chinho, 2009; Oliva, 2014). In addition, Kosilov (2011) pointed out that organizations can understand the existing KM strengths and areas of KM to be developed. Pee and Kankanhalli (2009) mentioned that many

organizations have difficulties to assess their KM maturity because of lack of guidelines in illustrating clear path of KM.

## **2. KNOWLEDGE AND KNOWLEDGE MANAGEMENT IN ACADEMIC LIBRARIES**

The most vital source recognized to sustain competitive advantage in an organization is knowledge. Davenport, De Long and Beers (1998) describe knowledge as information combined with experience, context, interpretation, and reflection and knowledge production that bring value addition to information. As other organizations, academic libraries also hold knowledge resides within people for instance, the employees' skills, expertise and working processes (Husain & Nazim, 2013).

According to Wiig (2002) knowledge management encompasses all activities and perspectives required to gain an overview of, deal with and benefit from the corporation knowledge assets and their condition. KM received popular recognition in the business world during the last decade of the 20th century. Corral (1998) described KM as the process of planning and monitoring knowledge, and associating tacit and explicit knowledge. KM brings benefits to non-profit organization such as academic libraries where communication among staff and top management can be improved thus stimulate knowledge sharing culture (Teng and Al-Hawamdeh, 2002). In addition, Shanhong (2000) asserted that KM in libraries are purposely to exchange knowledge, encourage innovation and promote learning activities among library staffs. KM is important to help the library staff to store, organize and exploit the knowledge (Raja Abdullah, Adnan & Kamaruzaman, 2010) to live in a competitive environment (Che Rusuli, Tasmin & Takala, 2012).

Libraries no longer act as a custodian of books, whereas, the libraries serve as the learning and knowledge center that provide accessibility of knowledge that are needed and facilitate learning opportunities to all members (Kassim, 2010; Rajurkar, 2011). Literature shows that KM practices have been developed in the libraries such as knowledge creation (Asogwa, 2012), knowledge acquisition (Shanhong, 2000), knowledge networking (Asogwa, 2012) and knowledge sharing (Che Rusuli, Tasmin & Takala, 2012).

## **3. KNOWLEDGE MANAGEMENT MATURITY DIMENSIONS**

There is no universal accepted on the dimensions of KM maturity. In this paper, three dimensions of KM maturity were identified and adopted from the previous literature review.

### **3.1 Top Management Support and Leadership**

Support and involvement from top management can greatly influence the success of KM in the organization. Continuous support from top management will benefit the organization for long-term competitiveness (Choi & Lee, 2003). Top management support refers to "the degree to which top management understand the importance of KM and the extent to which top management is involved in KM practices" (Lin, 2011). Davenport, De Long and Beers (1998) suggested that top management hold responsibility to clearly establish their organizational goals, create knowledge based culture and support the changes. In addition, leadership also played a vital role in ensuring KM is performing effectively in organizations. Rosenbach and Taylor (1993) and Ricketts (2003) described leadership as the ability to move or influence and getting people to work together toward achieving individual group goals. Drucker, the guru of management described that leadership is not about list of attributes as no two leaders will exhibit the same list, nor is it about charisma or some king-like quality (Winston-Churchill Leadership, 2007). Kassim (2010) suggested that strong leadership is one of requirement to enhance and create learning culture among the staffs in libraries.

### **3.2 People**

A study by Kuan (2005) and Goh (2006) emphasized that human capital or people are heart of KM. Ehms and Langen (2002) in their article on KM maturity, proposed an element of people in evaluating KM maturity in organizations. Library staffs hold a wealth of knowledge and expertise that act as library's greatest asset (Maponya, 2004). Apostolou (2000) in his report on dissemination of innovation and KM techniques, stated that organization can gain a competitive advantage and innovative if the organization is able to tap the strengths of their employees, therefore prevent knowledge from walking out of the door (Khalili et al., 2012). Motivation and reward system are also aspects related to human capital (Bagheri et al., 2013).

### **3.3 Information Technology**

Information technology (IT) has been known as one of a key contributor for KM (Andersson, 2000; Davenport & Prusak, 2000; Desouza & Awazu, 2003, Kharabsheh, 2007; Ragab & Arisha, 2013). IT brings significant impact on KM success. Adoption of IT in KM acts as important role to manage, share, and utilize knowledge effectively, thus lead to maturity of KM in organizations (Hsieh, Lin & Lin, 2009). Fathian et al. (2008) emphasized that the usage of IT may facilitate the KM process. Some of the tools such as knowledge portals, groupware, and communities of practice allow the employees to access, share, and contribute knowledge without the need of travelling or moving to other place (Desouza & Awazu, 2003; Kharabsheh, 2007; Ragab & Arisha, 2013). Shanhong (2000) suggested IT as a tool for KM in libraries where knowledge can be acquired and exchanged among library staffs with minimal cost. IT infrastructure such as availability of computers, networking and the Internet (Mohd Bakhari & Zawiyah, 2011) allows the process of creating, transferring and sharing knowledge (Kazimi, Dasgupta & Natarajan, 2004; Syed Omar Sharifuddin & Rowland, 2004).

## **4. DISCUSSION AND CONCLUSION**

In viewing of the dimensions namely top management support and leadership, people and information technology, these dimensions are the most critical factors to the success of KM implementation in the organizations. In academic libraries, top management support and leadership plays an importance roles in formulating and coordinating KM strategies and all related activities (Debowski, 2006), providing adequate KM infrastructures and resources (Jain, 2015) and fostering and promoting KM agenda in the organizations (Kok, 2003; Jain, 2015). Top management should be examples in showing the willingness to share and support others to seek new knowledge and ideas. Holsapple and Joshi (2000) assert by doing so, they naturally encouraging other employees to participate in KM. Leadership is a trait required at all levels of management in an organization. Leadership is necessary requirement for the success of KM (Davenport, De Long & Beers, 1998) where the leaders may create a shared vision. As described by Edwards (2009), KM is consisting of people, process and technology, where an organization needs people to implement KM initiative. Wealth of knowledge and experience of employees represent a significant resource for an academic library. In this knowledge economy (k-economy era, adoption of KM is seemed well suited and relevant to the academic libraries environment. KM in academic libraries brings benefits such as increase staff efficiency and improve library performance. This paper significantly contributes to the body of knowledge with regards to KM maturity. Assessing the maturity of KM in academic libraries is very crucial whereas the libraries are able to recognize the overall KM stages and what to be improved with their KM practices. This paper described three dimensions of KM maturity namely top management support and leadership, human capital and information technology (IT). For further research, we aim to work with other dimensions such as KM process and knowledge. Therefore, we suggest a further development of maturity scales to enable assessing KM maturity in academic library towards organizational performance.

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