KNOWLEDGE RECORD AND KNOWLEDGE PRESERVATION: A CONCEPTUAL FRAMEWORK OF KNOWLEDGE MANAGEMENT PRACTICE AT MALAYSIAN UNIVERSITY LIBRARIES

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Abstract: Today, an evolving set of Knowledge Management Practices (KMP) in libraries has grown tremendously in research and publication. By exploring and expanding from the previous research that has found to have a significant impact and gaps in KMP, this Paper intends to propose a conceptual framework of KMP at Malaysian university libraries. This paper emphasizes the core of knowledge processes such as Knowledge Create (KCr), Knowledge Acquisition (KAc), Knowledge Capture (KCa), and Knowledge Sharing (KSh). However, Knowledge Record (KRe) and Knowledge Preserving (KPr) are the new processes and gaps, as identified in literature survey, are expected to have a positive relation to KMP and as borne out in this research. As emphasized in this study, filling these ‘knowledge gaps’, it is hoped, would not only add to the existing knowledge but also provide a new direction for future research.

Keywords: Knowledge management practice, Malaysia, Knowledge record, Knowledge preserving, University libraries.

INTRODUCTION

In the present world, knowledge and information has become a key resource and is very vital for the survival of the organization in the future. Faced with competition and increasingly dynamic environments, organizations are beginning to realize that there is a vast and largely untapped asset floating around the organizations. This realization not only occurs in worldwide business organizations but also in non-profit organization such as university libraries. Recently, the conventional function of university libraries are to collect, process, disseminate, store and utilize information to provide service to the university community. However, the environment in which academic libraries operate today is changing.

Whatever effects universities activity also affects academic libraries. Foo (2002) states the role of academic library is changing to provide the competitive advantage for the university to both staff and students. The successful of Knowledge management in libraries also depends on their ability to utilize information and knowledge of its staff to better serve of the organization needs.

Knowledge Management (KM) is defined as a "process or practice of creating, acquiring, capturing, sharing, and using knowledge, wherever it resides, to enhance learning and performance in organizations” (Skyrme and Amodin, 1997). Brendan (1999) broadly defined KM as the acquisition, sharing and use of knowledge within
organizations, including learning processes and management information systems (MIS) or, more specifically, the explicit and systematic management of vital knowledge associated with processes of creating, gathering, organizing, diffusion, use and exploitation. On a similar note, White (2004) defines the KM as “a process of creating, storing, sharing and re-using organizational knowledge to enable an organization to achieve its goals and objectives”. Knowledge management is a dynamic and cyclical process that involves the whole organizational processes, trying to map the existent learning, linking the essential processes and their strategy, in search of better organizational performance, development of the products and services, quality and client’s management among others (Conklin, 1996; Wiig, 1997; Davenport and Prusak, 2002). This requires systems for the creation and maintenance of knowledge repositories, whereby it cultivates and facilitates the sharing of knowledge within organizational learning. Townley (2001) discusses four KM processes which are created knowledge repository, improve knowledge access, enhanced knowledge environment and manage knowledge as an asset and he maintains, “Knowledge Management is based on assumptions of strategic planning”. Zack, et al., (2009) and White (2004) hold similar opinions and view knowledge as a strategic resource. Organizations that succeed in knowledge management are likely to view knowledge as an asset and to develop organizational norms and values, which support the creation and sharing of knowledge (Rowley, 1999).

It is strategic and action oriented. In the context of this study, academic libraries refer to only university libraries. Wen (2005) state that to prove their relevance and value, academic libraries must strive to provide the right amount of information to the right client at the right time with a right expense of financial and human resources. With a stagnant or dwindling library budget, academic libraries have to increase their operational efficiency in order to meet the challenge. One management tool that can help in this regard is Knowledge Management (KM). In this scenario, KM defines as a process of creating, acquiring, capturing, sharing, recording and preserving all knowledge activities in academic library. These processes need to be continuous from time to time to make sure that all knowledge in the library can be used and not obsolete. Therefore, to implement Knowledge Management in academic libraries are mainly driven by its mission rather than by the competition from Internet-based reference services or electronic books. From the above definitions, it is obvious that KM does not consist of only tacit knowledge as indicated in some KM literature. It comprises both tacit and explicit knowledge, which are complementary. Jain (2007) found that KM can be characterized as below:

- KM core process of several activities; creating, acquiring, capturing, sharing, using and re-using it;
- It includes both explicit and tacit knowledge;
- It is an ongoing activity;
- Information is the building block of KM;
- It is action oriented or application based; and,
- The main drive behind KM is to improve organizational performance.

In addition, the objective of this study is to emphasize the types of processes involved in KM practice in the libraries, and secondly, to compare a significant relation process found, which are Knowledge Record (KRe) and Knowledge Preserving (KPr) in KM practice at Malaysian university libraries. However, a lot has been written and researched on KM practices in academic libraries in last two decades. Yet, still there is insufficient of KM literature in Malaysia, and this will make a move towards bridging out the knowledge gap.

**PURPOSE**

As the practice of Knowledge Management (KM) across the world, issues concerning knowledge processes in the library have moved to the forefront. The purpose of this paper is to develop and improved knowledge gaps namely as Knowledge Record (KRe) and Knowledge Preserving (KPr) in the current theoretical framework exists. This study believes that these considerations of new gaps are critical to the positive reputation of any libraries in the world especially at Malaysian university libraries. Therefore, theoretical framework of Knowledge Record (KRe) and Knowledge Preserving (KPr) could contribute to a body of knowledge especially in Library and Information Sciences (LIS) environment.
PROBLEMS RELATED TO KM PROCESS

Nowadays, the role of knowledge management practice in libraries becoming more important. How to manage knowledge will become an important subject facing libraries in the near future. Knowledge management in libraries should be focused on effective research and development of knowledge, creation of knowledge bases, exchange and sharing of knowledge between library staffs (including its users), training of library staff, speeding up explicit processing of the implicit knowledge and realizing of its sharing (Shanhong, 2002). However, Kumar (2010) state that management of information has long been regarded as the domain of librarians and libraries. Librarians and information professionals are trained to be experts in information searching, selecting, acquiring, organizing, recording, preserving, repackaging, disseminating and serving. It is genuine to state that a library’s status recently is no longer defined by the collection it housed. In such, it is extended to include online and seamless access to information resources. The right amount of information at the right time has long since been an important factor for all kinds of libraries. Therefore, the library needs to have a proper knowledge process to organize the information and knowledge inside. Blair (2002) found that successful KM requires both the ability to access stored information and the knowledge among workers to “evaluate the validity and reliability of information obtained from unfamiliar sources”. Therefore, this may be an opportunity for Library and Information Science (LIS) professionals to implement their expertise. With this regards, library management should equipped library facilities such as Information and Communication Technologies (ICTs) to facilitate the capture, analysis, organization, storage and sharing of internal and external information resources for effective knowledge exchange among users, resource persons (faculty, researchers, subject experts, etc.), publishers, government agencies, business and industries and other organizations via multiple channels (Hashim & Mokhtar, 2005; A. Kumar, 2010). This means that, there is considerable an opportunity for librarians to use their traditional skills to assume a new function and/or process of managing knowledge within the library (P. Kumar, 2004). Furthermore, Hashim and Mokhtal (2005) stress that librarians should not feel threatened by computers and technical developments. However, they should move forward with the new technology and take a pivotal role within organizations. In a nutshell, libraries preserve knowledge so that none is lost, organize knowledge so that none is wasted, and make knowledge available so that no one need be deprived in this information age.

As discusses in literature, Information and knowledge is not the same thing at all. With transformation of knowledge management practice at university libraries, several significant issues or problems arise that must be addressed (Aharony, 2011; Gold, Malhotra, & Segars, 2001; Ipe, 2003; Meng & Fei, 2003; Nonaka, Byosiere, Borucki, & Konno, 1994; Nonaka & Takeuchi, 1991; Townley, 2001).

KNOWLEDGE CREATION (KCr)

The first issue need to be attempt is knowledge creation. Nonaka, et al. (1994) has points out a review of the literature reveals that there is a scarcity of research on knowledge creation, the variables that comprise this construct, and how the process of knowledge creation can be managed to help organizations achieve and sustain competitive advantage. Meng and Fei (2003) states that knowledge creation is also not synonym of knowledge management. Nonaka and Takeuchi (1991) insisted knowledge could be “managed” but “led”. Townley (2001) points out knowledge loss becomes epidemic. Increases in organizational information and change have created a great need to manage knowledge to ensure effectiveness. In higher education, librarians can play a key role in the knowledge management process. However, libraries have done little to use organizational information to create knowledge that can be used to improve the functionality of library and higher education processes. Libraries have excelld at creating scholarly information and intelligence from data, but they have tended not to create knowledge from intelligence. Moreover, they have not been as successful in generating organizational knowledge to achieve library goals. Having reviewed the problems in KCr, this lead to our proposition:

P1. Knowledge Create (KCr) is positively related
to KM practice.

KNOWLEDGE ACQUISITION (KAc)

In an age of abundance of information, Gold, et al. (2001) stress that acquisition-oriented knowledge management processes are those oriented toward obtaining knowledge. Tandale, et al. (2011) states that libraries have a restricted limited funding, technology, staff, and space. Therefore, libraries must carefully analyze the needs of their users and seek to develop cooperative acquisition plans to meet these needs (Van Reenen, 2001). Hence, as a learning organization, libraries should allocate annual or yearly funding to provide continuing education and staff training to all staff members. Knowledge must be renewed and expanded to prevent it from becoming stagnant. However, information which exists in the organization has upped until now always been treated in discrete sections, or 'silos' rather than as a whole. For example, librarians have focused on the acquisition or distribution of information acquired externally to the organization, while record managers focus on documents internal or integral to its management. In such a scenario, no one group appears to have an understanding of overall information needs. This lead to our next proposition:

P2. Knowledge Create (KAc) is positively related to KM practice.

KNOWLEDGE CAPTURING (KCa)

In knowledge capturing issue, Jantz (2001) have stressed in many library settings, there is no systematic approach to organizing the knowledge of the enterprise and making it available to other librarians and staff in order to improve the operation of the library. Daneshgar and Bosanquet (2010) states that it is being captured to facilitate knowledge management activities such as evaluating, sharing, and storing of the customer knowledge within the ‘library’. In their points of view, library expects that knowledge management activities will build a greater understanding of customers and their requirements and hopefully lead to the delivery of more appropriate and timely services. Mavodza (2010) state that library could play a major part in the knowledge capture processes, whereby library staff have the capabilities to organize and manage the knowledge. Therefore, perception of users is that the library was the most central department to initiate knowledge capture and storage from lost. The evidence for this trend is presented here with reference to various papers on knowledge capture (Martin, Hazeri, & Sarrafszadeh, 2006; Parirokh, Daneshgar, & Fattahi, 2008). This lead to our P3:

P3. Knowledge Create (KCa) is positively related to KM practice.

KNOWLEDGE SHARING (KSh)

Many researchers, however, have claimed that knowledge sharing is the most critical hurdle for knowledge management. Aharony (2011) states that it is thus crucial to encourage knowledge sharing among workers to ensure knowledge management success. Knowledge sharing is a new culture in Malaysian organizations. Ipe (2003) stress that knowledge sharing is important because it provides a link between the individual and the organization by moving knowledge that resides with individuals to the organizational level, where it is converted into economic and competitive value for the organization. Some staff may have difficulty in expression and communication. However, some staff may not want to share their knowledge for free, as there are free riders who take others knowledge for granted but never share their own (Susarla, Liu and Whinston, 2003; Yaacob, Jamaluddin, and Jusoff, 2011). However, this problem can be leading to the unsuccessful knowledge management practices in university libraries. Pan and Scarbrough (1999) have points out that knowledge sharing activities are the most difficult aspect to achieve. In this point of views, Librarians are used to sharing information to their respective communities. They are competent in disseminating of information, especially in terms of reprocessing materials and minimizing information overload of their clients. Therefore, this problem of Knowledge Sharing (KSh) leads to our P4:

P4. Knowledge Sharing (KSh) is positively related to KM practice.
This model depicts in Figure 1 clearly indicates the factor/variable associated with KM practice and Library Users’ Satisfaction. The model selected (Gold, et al., 2001; Lee and Lee, 2007) have to mixed up using Structural Equation Modeling (SEM) based on preceding models and systematic review in Knowledge Management Practice (KMP).

KNOWLEDGE RECORD (KRe) AND KNOWLEDGE PRESERVING (KPr) AS A NEW PROCESSES

Nevertheless, there are two new variables which have to be considered in this study. Considering the importance of Knowledge Record (KRe) and Knowledge Preserving (KPr) in knowledge process, could be an important variable, which not much discussed in literature. This new variables hope may help to predict why people choose to record and preserve knowledge in some contexts especially in academic library.

KNOWLEDGE RECORD (KRe)

Gandhi (2004) found that numerous employees’ in organizations were asked to record their tacit knowledge and explicit knowledge (Nonaka and Takeuchi, 1995; Dougherty, 1999; Davenport, et al., 1998), whereby they have to write down step-by-step for everything they did. But, the main issue to be considered is that do they (i.e. individual or employee) really care to record their tacit and explicit knowledge?. Several employees were forced by organization themselves to record knowledge (Fryer, 1999; Smiraglia, 2002) they had internalized as experience or memory. Knowledge of how records are used is therefore also important to be able to develop and design (Yeo, 2005; Borglund and Öberg, 2008). In such, successful KM initiatives could help organizations to establish their internal benchmarks, identify and record best practices, and create an environment of continuous learning. KM systems implemented in libraries so far have not achieved these goals. Richardson (1995) agree that librarians need to learn from the process and avoid repeating mistakes, it is vital to record what worked, what did not work, which steps in the process were useful, and what would they do differently next time. According to Al-Hawamdeh (2002), not all types of knowledge can be recorded and codified as information. Branin (2003) and Hawkins et al. (1998) agree that librarians need to extend their expertise in creating, acquisition, dissemination selecting, organizing, record, preserving, etc. (Anjanappa, et al., 2009; Cho, et al., 2009; Delsaerdt, 2008) whereby they must willing to get outside the routines and the walls of the traditional library and work more directly with technologists, faculty, and students. Therefore, when discusses about knowledge management practice, it is clearly dealing with a set of complex issues that are interrelated and cannot be segmented (Al-Hawamdeh, 2002). Moreover, this leads to our P5:

P5. Knowledge Record (KRe) is positively related to KM practice

KNOWLEDGE PRESERVING (KPr)

However, it is important to state that knowledge preservation also has a significant
relation with knowledge management practice in the knowledge process. Haahr (2002) states that the preservation of knowledge, in the form of libraries allowed such communities to ‘exist’ despite the temporal separation of some of the members. To preserving the knowledge in the library (Dougherty, 1999), there has to be a voluntary action on behalf of the individual. Anderson (1996) found that university (i.e. Academic library) could contribute to the operational of the service through purchasing and operating a portion of the hardware and software required for the service and/or via financial support towards the preservation of key material, such as certain books and journals, much like the collections now found in physical form in university libraries are built via the purchase of selected books and journals. The process of knowledge capture, sharing, record and preserving approach is technology-dominated (Hildreth & Kimble, 2002). With the increased interest in knowledge preservation that cannot be captured and recorded, a number of researchers (e.g. Coffman, 2010; Igbeka and Ola, 2010; M. Saufi, et al., 2012; Tasmin and Woods, 2008) have begun to realize that library management has poses significant challenges and the existing approaches to KM are not adequate. Hence, the significance of new processes leads, therefore need to be tested, whether it is positively related or not to KM practice in the library. This leads to our P6:

**P6.** Knowledge Preserving (KPr) is positively related to KM practice

![Diagram](image-url)

Figure 2. Knowledge Record (KRe) and Knowledge Preserving (KPr)

In the circumstances, the framework mentioned above expressed as shown in Figure 2. This conceptual framework of KM process is through combining and applying the tactics of personal knowledge embedded in the universities. This framework was improved according to the previous conceptual framework introduced by M Saufi, et al. (2012) illustrated in Figure 1. Therefore, two processes have been taken a place namely as Knowledge Record (KRe) and Knowledge Preserving (KPr) seems shown significantly related to KM practice. In nature, a library has to keep the records and preserve regularly to make sure that information and knowledge can be used and not obsolete. As there exists a rich personal tacit knowledge in
university, these activities aiming to these two processes as a valuable sources. Therefore, it could become an innovation and evolving process in the library. More importantly, these two knowledge processes are leveraged as a current process to integrate with KM practice towards library users’ satisfaction at Malaysian university libraries.

CONCLUSIONS AND DIRECTION FOR FUTURE RESEARCH

This research proposes for assertion of the new KM process (i.e. Knowledge Record and Knowledge Preserving) which are applied. Unfortunately, there are beings paid with little attention KM practice at Malaysian context. However, university libraries initiate that Knowledge Record (KRe) and Knowledge Preserving (KPPr) are suitable to associate these two new processes as positive influences in order to provide appropriate KM practice within the library. Nevertheless, different KM researchers and practitioners use different terms, methods and views to distinguish between the types of knowledge processes into KM practice. Almost, all of these views tend to see knowledge as a dichotomy (Conklin, 1999; Hildreth and Kimble, 2002). The conceptual framework presented in this study has allowed researchers to think and contributed a new factor/variable to improve the KM framework from time to time.

The future research suggests that the new factor/variable found in the theoretical framework need to be tested in order to see whether it is positively related with Knowledge Management Practice (KMP) at Malaysian university libraries against Library Users’ Satisfaction. For those who want to explore the KM processes in the context of LIS and leverage it, it is recommended to seek and identify what others current or updated knowledge exist in the library. The overestimate of the role KM activities can make KM the latest trend in management hype. Indeed, it is hope that all the KM process in the library will be answered, and that is of course, what comes after this.

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