

# PRELIMINARY STUDY OF KNOWLEDGE MANAGEMENT IN A LIBRARY: A CASE STUDY OF THE NATIONAL LIBRARY OF MALAYSIA

By

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## ABSTRACT

*Libraries that have always been recognized as reader's haven should rethink and explore ways to improve their services and become learning organization in which to discover how to capture and share tacit and explicit knowledge within the library. The changing role of librarians as knowledge managers emphasizes the need to constantly update or acquire new skills and knowledge to remain relevant to the today's library environment. Libraries may need to restructure their functions, expand their role and responsibilities to effectively contribute and meet the needs of a large and diverse of community and users. This paper will discuss a preliminary study of Knowledge Management in National Library of Malaysia (NLM). The study process includes a survey of the current status of Knowledge Management in National Library of Malaysia. Determine how the organization goes about creating, disseminating and applying knowledge within the organization. It also discusses whether the working environment supports the implementation of knowledge management in the organization. This is a qualitative research that uses the questionnaire as the main instrument in data gathering.*

**Keyword:** *library, knowledge, knowledge management*

## 1.0 INTRODUCTION

In the present world economy, knowledge 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 vast and largely untapped asset floating around in the organization that is knowledge. This realization not only occurs in worldwide business organizations but also in non-profit organizations such as libraries.

As noted by Verna Allee (1997), knowledge is an intellectual asset, which needs an effective and efficient process of capturing, organizing and distributing it within the organization; the whole process is indeed very challenging. Tangible asset such as copyright, patents and trademark are only a few forms of knowledge assets. This knowledge asset, which is in the form of codified knowledge that is legally owned, is only like the tip of the iceberg. The full knowledge is much larger and floating around the organization. The iceberg takes the form of in-house 'expert', shared stories, working solution web of relation, communities of practice and experiences. This is the real asset of the organization.

The success of libraries depends on their ability to utilize information and knowledge of its staff to better serve the needs of the organization and users. Lee (2000) pointed out that the knowledge and experiences of library staff are the assets of any library and should be valued and shared. Organizations including libraries can create and leverage its knowledge base through initiation appropriate knowledge management practice. "...for organization to compete effectively in the knowledge economy they need to change their values and establish a new focus on creating and using intellectual assets" (TFPL, 1999).

### **1.1 The Evolution of Knowledge Management in Malaysia**

Since the announcement of Vision 2020, the concept of knowledge economy has been prominent across Malaysia. Knowledge management, however really only began to make an impact at the turn of the century. InfoSoc Malaysia 2000, a major conference held in Sarawak, and the Second Global Knowledge Conference, held in Kuala Lumpur 7 – 10th March the same year was said to be the event that were largely responsible for this. At the opening of the Second Global Knowledge Conference, the then Honorable Prime Minister of Malaysia, Dato Seri Dr. Mahathir bin Mohamad noted that, "...in the Information Age which we enter, our society must be information rich...this country must most seriously enhance the production and supply of information, knowledge and wisdom and ensure their accessibility to all our people in every area of work."

Recently, the number of firms experimenting with the disciplines that relate to knowledge management has grown, especially over the past two years. The big multinationals still lead the way, but a number of large corporations in the country are beginning to take their steps down the knowledge management road. Knowledge management is also creeping up the government agenda, affecting both the government's vision for the country as a whole and the way ministerial departments operate on a day-to-day basis. The K-based Economy Master Plan (KEMP) introduced at the end of 2002, proved that the government is very serious in transforming Malaysia from agricultural and industry economy to a K-based economy (K-economy)

From a social perspective, the knowledge management movement in Malaysia has a number of things in its favor. First, Malaysians are becoming more comfortable with information technology. Partially as a consequence of this, e-commerce is also taking off, and people are beginning to feel at home with many of the ways of working associated with knowledge management.

Companies in Malaysia have been aware of the principle of knowledge management for many years, although the majority either do not consciously recognize them or call them by another name. The country as a whole may have relatively late starter in knowledge management terms, but it now faces an excellent opportunity to secure its future and its place on the world economic stage.

## **2.0 KNOWLEDGE MANAGEMENT AND LIBRARIES**

Though not many libraries has known to undertake the knowledge management initiatives, the keen interest of the International Federation of Library Association (IFLA) community in Knowledge Management (KM) over the past few years has led to the transformation of the Knowledge Management Discussion Group into a full-fledged IFLA Section. Established in December 2003, the new KM section is situated within Division IV (Bibliographic Control). Since its inception in 2001, the activities of the Knowledge Management Discussion Group received considerable attention among conference delegates. Information professionals from all parts of the world participated in the KM meetings, expressing their interest in learning more about this important development in organizational management. LIS (Library and Information Science) professionals have shown great interest in the implementation of Knowledge Management in the libraries and information environment and expressed a need for a deeper understanding of its many dimensions and relevance to their work (Wormell, 2004).

The objective of knowledge management in libraries is to promote knowledge innovation. As bases for collection, processing, storage and distribution of knowledge and information, libraries represent an indispensable link in the scientific system chain, an important link in the knowledge innovation. Secondly, libraries take part in scientific research process directly. The library work is a component of knowledge innovation. Thirdly, libraries must pay attention to diffusion and conversion of knowledge. They act as bridges for turning the results of knowledge innovation into realistic productive forces. Knowledge management in libraries is to promote relationship in and between libraries, between library and user, to strengthen knowledge internetworking and to quicken knowledge flow. In the knowledge economy era, libraries will carry out researches on development and application of information resources, construction of virtual libraries, protection of intellectual property rights in the electronic era etc., thus founding the base for knowledge innovation (Cao, 1999).

### **2.1. National Library of Malaysia (NLM)**

The history of National Library of Malaysia goes back as far as 1966 when it was first established as a unit within the National Archives with the modest primary functions of implementing the Preservation of Books Act 1966 and the publication of the Malaysian National Bibliography.

It then functions as a department after the establishment of the National Library Act 1972. A series of catalytic events in the following years accelerated the growth of the National Library. The Preservation Books Act 1966 was repealed and replaced by much more effective Deposit of Library Material Act 1986. This act requires all publishers in Malaysia to deposit 5 copies of printed material with the National Library. This ensures published materials to be recorded and to be available for references now and in the future.

Today the NLM is a department under the Ministry of Education. It is responsible for the building and maintenance of the national collection from various library resources, providing facilities for their use as well as providing leadership in library matters. The National Library also plays an important role in planning and development of the library infrastructure throughout the country. This role is in line with the aspirations of the government to inculcate a culture of knowledge in the development of the country and to foster a reading culture among Malaysians.

### **3.0 LITERATURE REVIEW**

There is a plethora of literature on the topic of knowledge management published yearly. The fundamentals of knowledge management theories can be traced back to very early philosophical studies during the time of famous philosophers like Aristotle and Plato. Within business organizational contexts, managing knowledge has always been part of general management activities, even though some of the practices are not labeled as knowledge management. Some literature tracts the origin of widespread interest in knowledge management as early as 1939, as Robert S. Lynd wrote, “People need to rebuild their organizations so that knowledge flows freely to create opportunities and solve problems”. Later, Peter Drucker was said to be the first to refer to knowledge society and knowledge worker and also the first to identify the new language of the knowledge economy when he pointed out, “the U.S. has shifted from an economy of manufactured goods to a ‘knowledge economy’...In the new economy, the basic economic resource is no longer capital, but knowledge”.

This research will explore contemporary issues associated with implementing a knowledge management framework in a library environment. Knowledge management in libraries has not been extensively studied but significant body of literature, deals with knowledge management in business environment has been helpful to frame the study.

#### **3.1 Models and frameworks used by previous research**

Knowledge management is a complex area, and one that spans boundaries – learning and development, information technology, human resources etc. Having a model that describes the scope of activity that knowledge management efforts cover can be a powerful way to both monitor and communicate what the approach encompasses. A few models and approaches that have been used by previous researchers are listed below.

##### **3.1.1 Knowledge Management Building Blocks (Wiig, 1999)**

Wiig (1999) introduced a complicated but well-structured model of how to introduce and sustain knowledge management practice in an organization. The model represents a systematic consultant’s perspective on knowledge management, and it is particularly interesting because it points out the variety in what practicing consultants include in knowledge management. He suggested that the organization builds a system of blocks, interconnected activities for knowledge management that support each other in a functional manner. Moreover, he points out that the organization may focus on a limited number of blocks and expands step by step, moving from implementation to administration. The model proposed by Wiig (1999) and reproduced in Figure 1 is one of the most highly developed in the knowledge management literature, as it covers both strategic and operative aspects in some detail.



knowledge, the information technology infrastructure must be designed to provide the tools for assessing internal and external information at the right time, the mutual consultation and sharing of information, collaboration and storage of information.

### **3.1.3 KAFRA (Kontext aware FRamework) (Okunoye, 2003)**

KAFRA is a framework that encompasses all the organization aspects of knowledge management and the context-aware framework of knowledge management that could support organizations in developing countries and guide their transition to a knowledge economy.

This framework enables organizations to pay attention to the environmental context and how this affects the assumptions about each component, the method and the research approach used to arrive at the actual users.

The framework could be used by any organization, irrespective of size, location and economic background. The only prerequisite is the willingness of the organization to be competitive and to participate in the knowledge economy. Any consultant with adequate background training could also adapt the framework in providing knowledge management solution to their client. Firstly, this framework could guide organizations in their knowledge management initiatives, in order to analyze their environmental factors, and determine what organizational and technological factors need to be addressed. Secondly, a chief knowledge officer, or other knowledge role person, could use the framework to establish a knowledge management project team and justify the decision to the organizations leaderships. Thirdly, the framework could be used to support the argument that knowledge management is neither a technological nor organizational issue; rather it is a holistic approach that requires interaction of both. All these could make knowledge management appealing to organizations and assist them to reap the accomplished benefits. They could also save resources, by doing the right thing at the right time.

### **3.1.3 The Organizational Infoarchitecture (Vegas, 2004)**

This is an integral model for information and knowledge organization in the context of knowledge management strategy. Knowledge management is conceived from a systematic perspective: organizational reality is thought of as a complex unit of linked relationships. The working definition of knowledge management strategy refers to the deliberate effort of an organization to create, develop, keep and use its intellectual capital to achieve the organizational strategic objectives.

The intellectual capital – and the intangible knowledge assets – becomes the most important assets of the organization and its single most important competitive advantage. The new resource for value creation is intellectual capital. In this perspective, intellectual capital constitutes the key concept of knowledge management and encompasses three components: relational capital (or customer capital), structural capital and human capital.

From this knowledge management conceptual perspective, intellectual capital with its three components is conceived as a triangular model to denote their interdependence. The basis of the alignment with its strategic intention is the axis of the organization, always in accordance with continuous improvement, innovation, new models and business expansion objectives.

Vegas (2004) defined Organizational Infoarchitecture as a knowledge environment. Thus, the Organizational Infoarchitecture is based on technological platforms and network systems (digital platforms, development in collaborative working environments, data retrieval and

information storage system, hypermedia, artificial intelligence system, simulation system, and others) making communication and information exchange between individuals and teams possible to pursue a wide range of activities (participation in communities of knowledge, virtual forums, database queries, information analysis, preparation of technical reports, research and development, etc.) associated to knowledge processes in organizational context of a knowledge management strategy. In summary regardless of the size of complexity of organizations and their technological capacity, learning and knowledge processes are deliberately created by organization when it creates a learning and knowledge environment.

The literature review and previous study presented the model of how to introduce and sustain knowledge management practice in organization. The successful of the model requires human attention, innovation and creativity. It encompasses all the organization aspects of knowledge management and this could support organization in developing countries and guide the transition to a knowledge economy. Intellectual capital components include human capital, structural capital and relational capital are the most important asset and competitive advantage. By referring to those previous study and literature review, it gives a clear picture of knowledge management and contributes ideas for survey and research finding.

## **4.0 RESEARCH OBJECTIVES AND METHODOLOGY**

The study in this paper is a part of a larger research project aimed at investigating the perception and understanding of various aspect of Knowledge Management by respondents in a library in Malaysia. To obtain comprehensive and in-depth data on how librarians and their staff manage knowledge in their organization it was decided to use National Library of Malaysia as a case study. This preliminary study is categorized under qualitative research and it used a survey method.

### **4.1 Research Questions**

In order to examine the purpose of this study, relevant data were sought to answer the following questions:

- What is the level of understanding of knowledge management among the staff of National Library of Malaysia?
- Does the working environment support the implementation of knowledge management?
- Does knowledge sharing practices occurs in the organization?
- What are the systems used in National Library of Malaysia to capture the knowledge created?

### **4.2 Significant of the study**

This study should be able to provide the NLM with some indication on the working environment of its staff as to whether they will support the application of knowledge management in the organization. The report will produce useful data for other libraries in Malaysia to perceive and be aware of the constraints and benefits if they were to manage knowledge in their organization.

### 4.3 Limitation of the study

The study will only focus on the organization of NLM: its staff, their working procedures etc. Therefore the findings cannot be used to generalize the same situation that would happen if the study is to be carried out at other libraries in Malaysia.

### 4.4 Assumption

It is assumed that when this study is carried out the National Library of Malaysia has not started the practice of knowledge management in its organization. There might be some isolated cases whereby the staff having some practices of knowledge management in certain division or unit but not in a holistic approach.

### 4.5 Data Gathering

In gathering information pertaining to the above study, a questionnaire was used as the main instrument for data collection. The survey was carried out between February 2<sup>nd</sup> and February 21<sup>st</sup>, 2005 where printed questionnaires were distributed to the respondents randomly.

*To ensure full coverage of potential respondents, a current list of divisions and the numbers of manpower in the all divisions were obtained from the Human Resource Management and Services Division. It was then used as a guide when distributing the questionnaires. This is to ensure that the correct numbers of respondents in the organization are covered in the study. A total of 200 questionnaires were distributed to various divisions, and 135 (67.5%) questionnaires were duly filled and returned.*

### 4.6 Study Findings

*For the purpose of this paper, a total of 60 questionnaires were tabulated using the Statistical Package for Social Sciences (SPSS) to see the responses on the perception and understanding of Knowledge Management in the organization.*

**Demographic profile of the respondents:** The first section of the questionnaire is dedicated to obtain the demographics profile of the respondents and the divisions that they are attached to as shown in table 1. This section includes the number of years of employment, the education level and their present post.

Table 1: Shows number of respondents from various divisions

Division	No. of respondents
Management and Human Resource Services	3
Human Resource Development	4
Information Technology	6
Planning and Corporate Communication	3
Knowledge and Information Structure	4
National Collection Development and Documentation	11
Malaysian Services	15
General Services	13
<b>Total</b>	<b>60</b>

Table 2: Shows the position level of the respondents

<b>Position</b>	<i>Frequency</i>	<b>Percent</b>
S48 and Above	8	13.3
S41 - 44	14	23.3
S27 - 32	11	18.3
S17 - 22	18	30
Others	9	15
<b>Total</b>	<b>60</b>	<b>100</b>

**Position level:** Table 2 above, shows that 8 (13.3%) of the respondents who participated in this study were from Grade S48 and above indicating that they were Directors or Deputy Directors of the Divisions, 14 (23.3%) were Assistant Director from Grade S41 – S44 who are middle management of the organization, 11 (18.3%) were Grade S27 – S32 who are the Assistant Library Officers and 18(30%) were Library Assistants and 15% from other categories are those who are involved in the IT services and some from the clerical staff.

**Years of services:** Table 3 below, categories the respondents into number of years of services and 37% of the respondents have 1- 5 years of working experience followed by 20% of those who have been working for 6 – 10 years and 13% have a working experience of 16 – 20 years. The maximum number of years of services is 34 years. The item in this section is very crucial because experience workers are usually considered very knowledgeable and this will certainly have impact on how they work and solve work problems etc.

Table 3: Shows the number of respondent's categories into years of service.

<b>Years of services</b>	<b>Frequency</b>	<b>Percent</b>
1 - 5 years	22	36.7
6 - 10 years	12	20
11 - 15 years	4	6.7
16 - 20 years	8	13.3
21 - 25 years	6	10
26 - 30 years	6	10
More than 30 years	2	3.3
<b>Total</b>	<b>60</b>	<b>100</b>

**Understanding of Knowledge Management:** KM or Knowledge Management is already a well known phrase and 57 (95%) of the respondents indicated that they have heard about it either through reading (61.6%), trainings (63.3%) or even discussion (50%) with their fellow colleagues.

The importance of knowledge is certainly being communicated to the staff in the organization when 57 (93.3%) out of 60 respondents agreed to the statement while 3 (5%) disagreed and only 1(1.7%) refused to respond to the question.

**Organizational culture:** In order to facilitate the ease of managing knowledge in the organization there should be a good communication flow within the organization. A total of 47 (78.3%) either “agreed” or “strongly agreed”, shows that there is a good communication in the organization between departments, sections and units. This is certainly a good sign that the organization will face fewer problems when if they were to organize Knowledge Management programs.

**Knowledge sharing climate:** The knowledge sharing climate do exist in the organization proved by 39 (65%) of respondents who “agreed” with the statement that they are able to work as team in their respective units or divisions and a total of 10 (16.7%) “strongly agreed” with the situation.

**Technology:** When asked whether IT is the best information storage utility for knowledge acquisition and sharing, 96.7% respondents agreed with the statement. This is considered very normal as most people think that technology is the answer to managing knowledge in most organizations.

Internet was said to be the most popular used channel for acquiring knowledge where 100% of the respondent cited that they use the medium in their daily work followed by OPAC (80%), E-mail (50%), Reading Promotions (40%), Intranet (38.3%), Mylib Web Portal (36.7%), Statistics (31.7%) etc.

**Perception on Knowledge Management initiatives:** With regards to documenting best practices in the organization, a total of 80% of the Directors involved in the survey “strongly agreed” that National Library of Malaysia should document the best practices and expertise it requires to successfully conduct it services. This is either “agreed” or “strongly agreed” by other respondents (92.3%).

In managing knowledge in an organization, it is very important to have a knowledge management policy and that is well understood by all employees. This will help the employees to be aware of what kinds of knowledge that needs to be managed and shared by them. Having a well defined Knowledge Management policy will help the organization to store and access the right information and knowledge for the benefits of the staff and the organization. A total of 30 (50%) respondents “strongly agreed” and 27 (45%) “agreed” with this statement.

## 5.0 Conclusion

Through the literature review, it is revealed that knowledge management equips organizations to be more competitive. By leveraging knowledge, libraries can achieve a multitude of benefits, including savings in research and development costs, transfer of best practices, increased employees capabilities and enhanced employee satisfaction.

Creating a learning organization is a necessity for any knowledge management initiatives. Organizations including libraries must recognize that people operate and communicate through learning, which includes the social processes of collaborating, sharing knowledge and building on each other ideas. Knowledge sharing is not merely a neutral exchange of information but it affects working relationships, distribution of power, patterns of influence and alters how individuals define their responsibilities.

As seen through most research, organization may need to change employees' behaviour and built social cohesion and allegiance or commitment to make their knowledge management initiatives works. This is due to the fact that changing peoples' behaviors is the major challenge faced by organizations managing knowledge followed by retaining talented people in their organization. Librarians like any other individuals seek the security of a stable organization and look to the library as a guide to support their careers and development as individuals, therefore libraries should recognize the knowledge of their staff and create an environment where knowledge can be valued and shared.

## Acknowledgements

The authors would like to acknowledge the kind assistance and support from the staff and the management of the National Library of Malaysia who have participated in the survey and make the research possible.

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