

Knowledge Management in Libraries in the 21st Century

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Abstract

Knowledge management refers to effectiveness in identifying, acquiring, developing, resolving, using, storing and sharing knowledge. The role of knowledge management in libraries becomes more and more important with the development of knowledge economy. Information technologies are starting point of knowledge management in libraries. It enlarges the scope of knowledge acquisition, raises its speed and reduces knowledge acquisition cost. Information technologies are often used in knowledge management programmes in informing clientele and employees of the latest innovations in the business sector as well as sharing knowledge among the employees. The information professionals have a role to play as they are traditionally regarded as good managers of explicit knowledge. This paper discusses the concept of knowledge management and what libraries can do to improve their knowledge management activities in all of the key areas of library services and the challenges of such efforts.

Keywords: Knowledge Management, Librarians, Libraries, Information Technology.

Introduction

Knowledge management (KM) according Dalkir (2005) is the deliberate and systematic coordination of an organization’s people, technology, processes, and organizational structure in order to add value through reuse and innovation. This coordination is achieved through creating, sharing, and applying knowledge as well as through feeding the valuable lessons learned and best practices into corporate memory in order to foster continued organizational learning. Another way to view and define KM according to Koenig (2012) is to describe KM as the movement to replicate the information environment known to be conducive to successful R&D—rich, deep, and open communication and information access—and deploy it broadly across the firm. Knowledge management is concerned with managing both recorded (explicit) and tacit knowledge (Chowdhury, 2004). Abell and Oxbrow (2001) sees knowledge

management as the creation and subsequent management of an environment which encourages knowledge to be created, shared, learnt, enhanced, organized for the benefit of the organization and its customers. According to TQMI (2007), knowledge management is concerned with the acquisition, storage and transfer of knowledge within an organization, to enable the individuals, teams and the organization as a whole to be more effective. Many knowledge management (KM) efforts have been largely concerned with capturing, codifying, and sharing the knowledge held by people in organizations. Although there is still a lack of consensus over what constitutes a good definition of KM (see the next section), there is widespread agreement as to the goals of an organization that undertakes KM. Nickols (2000) summarizes this as follows: “the basic aim of knowledge management is to leverage knowledge to the organization’s advantage. ” Some of management’s motives are obvious: the loss of skilled people through turnover, pressure to avoid reinventing the wheel, pressure for organization-wide innovations in processes as well as products, managing risk, and the accelerating rate with which new knowledge is being created.

Within the field of knowledge management, knowledge has been broadly categorized as explicit and tacit. Explicit knowledge is described as documented or codified knowledge while tacit knowledge is non-documented or non-codified one. Nonaka (1991) distinguished between explicit and tacit knowledge as “explicit knowledge is formal and systematic and can be easily communicated and stored, in product specifications or scientific formula or computer programme. Tacit knowledge is highly personal. It is hard to formalize and therefore difficult, if not impossible to communicate. Knowledge management is a new strategic initiative that is changing the paradigm of information systems from one of processing data and providing information to one of harvesting and capitalizing on the knowledge of an entire organization, ranging from expertise in individuals’ heads to documented material (Hussain, Lucas & Ali, 2004). Types of Knowledge as stipulated by Patil (2013) are:-

- Tacit Knowledge:- Tacit knowledge is knowledge embedded in human mind through experience and jobs Coined by Hungarian Medial Scientists Michael Polanyi, it include institutions, values and believes that stem from years of experience.
- Explicit Knowledge:- In contrast explicit knowledge is knowledge codified and digitized in books, document, reports white paper, spread sheets, training courses and explicit knowledge can be retrieved and transmitted more easily than tacit knowledge. Because it is knowledge learned directly from experience, tacit knowledge is difficult to share across space and time.
- Externalized Knowledge: One of the aspects of tacit knowledge is the cognitive dimension that comprises beliefs, ideals, values and mental models.

The classic example in the KM literature of true "tacit" knowledge is Nonaka and Takeuchi's example of the kinesthetic knowledge that was necessary to design and engineer a home bread maker, knowledge that could only be gained or transferred by having engineers work alongside bread makers and learn the motions and the "feel" necessary to knead bread dough (Nonaka & Takeuchi, 1995). The danger of the explicit-tacit dichotomy is that by describing

knowledge with only two categories, i.e., explicit, that which is set out in tangible form, and tacit, that which is within people, is that it then becomes easy to think overly simplistically in terms of explicit knowledge, which calls for "collecting" KM methodologies, and tacit knowledge, which calls for "connecting" KM methodologies, and to overlook the fact that, in many cases, what may be needed is to convert implicit tacit knowledge to explicit knowledge, for example the after action reports and debriefings described below.

The aim of knowledge management is to discover how knowledge is used and shared within organizations and seeks knowledge as information required in a particular situation. Its objective is to ensure that the right information gets to the right person timely to enable him to take the most appropriate decision (Obasikene, 2008). This means that the proponents of knowledge management seem to be more concerned with knowledge delivery than in managing knowledge. Knowledge management is not just about information; it is also about people. The future lies in helping people to become their own knowledge manager. Knowledge management can be viewed in terms of:

- People – How do you increase the ability of an individual in the organization to influence others with their knowledge?
- Processes – its approach varies from organization to organization, there is no limit on the number of processes.
- Technology – It needs to be chosen only after all the requirements of a knowledge management initiative have been established.

Or

- Culture – The biggest enabler of successful knowledge-driven organizations is the establishment of a knowledge-focused culture.
- Structure – The business processes and organizational structures that facilitate knowledge sharing.
- Technology – A crucial enabler rather than the solution.
Management entails all those processes associated with the identification, sharing and creation of knowledge.

Knowledge management in libraries

While the business world is changing in the new knowledge economy and digital age, libraries of all types are undergoing drastic changes also. The new role of libraries in the 21st century needs to be as a learning and knowledge center for their users as well as the intellectual commons for their respective communities. As a learning organization, libraries should provide a strong leadership in knowledge management. Libraries should improve their knowledge management in all of the key areas of library services. To cope with the exponential growth in human knowledge, libraries need to develop their resources access and sharing strategies from printed to electronic and digital resources. An important objective of knowledge management in libraries, according to Jain (2013) is an all-round improvement of library staffs' quality and

repositioning of human value in an organisation. He further stated that in the knowledge based economy, appropriate KM has proved a strategic management tool to survive and thrive in the ever-changing global environment.

As a learning organization, libraries should provide a strong leadership in knowledge management. Unlike those business organizations whose goal for knowledge management is for competitive advantage, most public, academic, and research libraries, with the exception of company libraries (which may be known or called corporate libraries, special libraries, or knowledge centers), have a different orientation and value. Instead of competition, internal use only, and little sharing of knowledge with others outside, the most important mission of public, academic, and research libraries is to expand the access of knowledge for their users. Charged by this mission, libraries should aim their knowledge management goal high. Below are examples of what libraries can do to improve their knowledge management in all of the key areas of library services. The objectives of knowledge management in libraries are to promote knowledge innovation which is the core of the knowledge economy society (Krishnan, 2010).

Although the library world often claims the ownership of KM, in practice, the adoption of KM in libraries is not as pervasive as in business sector. But KM in non-profit organization can improve communication among staff and between top management and can promote a culture of sharing (Teng & Hwamdeh, 2002).

Technological influences on library environment have facilitated libraries to be engaged in KM as Sarrafzadeh (2005) comments that digitizing libraries' resources and moving to toward digital and hybrid libraries, providing remote access to Internet-based knowledge resources, and providing twenty-four hours a day and seven days a week reference services through the web, are potentially important steps toward KM implementation in libraries.

Approaches to Implementing Knowledge Management in Libraries

The goal of knowledge management is for organizations to become aware of its knowledge individually and collectively and to shape itself so that it makes the most effective and efficient use of the knowledge it has or can obtain. Competency is an essential factor in the discussion of resource based of an organization. For an organization to reposition itself in the environment of competition, it requires competency building. This refers to any process by which an organization qualitatively changes its existing stocks of assets or capabilities or creates new abilities, in areas that will help it achieve its aims. Competency building involves the creation of new strategic options (Sanchez, Heene, & Thomas, 1996). These competencies are focused on the four domains of organizational resource base of culture, strategy, leadership and structure.

Research has shown that these competencies are critical and organizations must focus on them to be competitively ready. Akhavan, Jafari, and Thomas (2006) conducted a study of six successful companies in knowledge management programmes and found out that issues concerning strategies, leadership and culture were critical success factors of knowledge

management programme in the organizations surveyed. A study to identify the competences perceived to be essential for successful application of knowledge management in academic libraries in Nigeria reveals that skills needed for successful knowledge management applications include cultural skills, leadership skills, strategic skills and restructuring skills (Ugwu & Ezema, 2010). It further stressed that for effective implementation of knowledge management in university libraries in Nigeria, librarians should be trained to acquire the identified skills to face the challenges of knowledge economy. This fundamental study reveals the relevance of knowledge management in university libraries in Nigeria in line with the competencies needed for effective implementation.

In practice, the library and information professionals are traditionally concerned with the dissemination of information and/or knowledge. Hence, knowledge management should be a very common practice in day-to-day library work. As a learning organization, libraries should provide a strong leadership in knowledge management. Most public academic and research libraries with the exception of company libraries – corporate libraries, special libraries or knowledge centres whose goals for knowledge management is for competitive advantage, have a different orientation and value. Their mission is to expand the access of knowledge for their users. Charged with this responsibility or mission, libraries should aim their knowledge management goal high and carry out the following activities to improve their knowledge management in all the key areas of operation of library services.

Importance of implementing knowledge management in libraries

As a learning organisation, libraries promote a strong leadership in knowledge management. Knowledge management is essential to the growth of an organisation as it has become an importance guideline for the information and knowledge society as well as for libraries. The mission of most libraries – public, academic and research libraries, is to expand the knowledge access to their users. Bearing this in mind, libraries should design their KM high. It is necessary for libraries to make KM a part of their routines and think of it in a systematic way, in order to channel resources, planning, among other things and benefit from the improvement that can be achieved through KM, perfecting their services and satisfying their users. A vast amount of knowledge exists in various areas and its management is very vital in providing quality information sources, making effective decisions, improving the overall performance of the employee and becoming more relevant to the parent body.

KM focuses on the means of managing tacit knowledge which is embedded in employee in the form of their experience, know-how [expertise]. Interesting knowledge in the form of tacit knowledge resides in the individual employee in the establishment and should be harnessed because it is through this know-how that people can make breakthrough. Aharony (2011) asserted that KM is a process that involves transferring knowledge resources through capturing, identifying, organising and sharing, in order to improve organisational effectiveness. It offers the opportunities for creating knowledge to leverage the intellectual capital and knowledge assets of an organisation. These assets require to be managed adequately in order to make the organisation

remain relevant in the global competitive environment. Patil (2013) enumerates the importance of implementing KM in libraries as

- To enhance users' satisfaction
- To interact and retain new information seeker
- To increase public faith in the organisation to strive, meet and manage needs of the user community.
- To be able to justify the spending of funds allocated to the organisation, library and information centre by the parent body,
- Recruiting the best people for the job
- Exposing professionals to the complexity of real problem to retain professionals to stimulate and cultivate professional know-how to retain professionals to react to problem solving techniques.

A major force for adopting KM in libraries is the promotion of existing library practice and better services for clientele. There is need for improved library services and customer satisfaction. The rapid advance in information and communication technologies and changing needs of customers, has led to increased need for a more improved approach to library services delivery, in libraries. KM enables librarians to capture, store, organise, share and disseminate the right information to the right customer at the appropriate time. However, library and information practitioners face the challenges of constant budget decline, lack of incentive, inadequate staff training and expertise, a lack of KM strategy, insufficient ICT infrastructure and lack of knowledge sharing culture, in implementing KM in libraries.

Knowledge Management in Libraries: The Role of Librarians

To facilitate the implementation of knowledge management, a well-defined and operational knowledge management system should be in place. Latest information technology should be used in the libraries. In this regard, the library director / librarian should consider himself as the chief knowledge officer of the entire organization and should work together with the chief information officer, heads of the planning department, the computer and information technology center, the human resource management department, the finance department etc., to design and develop such a system. Such knowledge management system should be built on the existing computer and information technology infrastructure including upgraded intranet, extranet, internet and available software programs to facilitate the capture, analysis, organization, storage and sharing of internal and external information resources for effective knowledge exchange among users.

Knowledge management enables the communication of knowledge from one person to another so that it can be used by the other person. It is an art of performing **knowledge actions** such as organizing, allocating, filtering, storing, gathering, sharing, disseminating, and using

knowledge objects such as data, information, experiences, evaluation, insights, wisdom and initiatives. In general terms, it is the performance of knowledge actions on **knowledge objects**.

The implementation of an appropriate knowledge management programme in service organization such as the library has the potential of improving customer services, continually improving business processes, quickly bring new products to markets, and bringing innovative ideas to commercialization (Heisiz & Verbeck, 2001). Knowledge management as a process is about acquisition, creation, packaging and application of reuse of knowledge. The libraries are the backbone of information dissemination in any institution and the different services offered by the libraries are mainly designed to accomplish the objectives of the institution. The purpose of the library is to deliver the right information to the right patron at the right time.

The new role of libraries in the 21st century needs to be a learning and knowledge centre for their users as well as the intellectual commons and their respective communities where people and ideas interact in both real and virtual environments to expand learning and facilitate the creation of new knowledge (Hussain & Nazin, 2013). As a learning organisation, it should provide a strong leadership in KM. Librarians have a crucial role in the development of processes and policies that harness the knowledge base of an institution. As information custodians and disseminators within institutions, librarians make substantial contributions to the successful implementation of knowledge management projects. Implementing knowledge management in libraries enhances the traditional functions of the library which include collecting, processing, disseminating, storing and utilizing information to provide multi-disciplinary services to meet the personal and professional needs of the library users. Presently, this role of information management has changed to that of knowledge management programmes in which he is involved in identifying, acquiring, developing, resolving, storing and sharing knowledge. Library and information professionals should manage relationship with external providers of information and knowledge and have to negotiate with them.

Creating the Future/Challenges

We are to create our own future. So if we are to take a leading role in the future of knowledge management, where do we start? A knowledge management programme in libraries will promote relationship between libraries, between libraries and the users to strengthen knowledge internetworking and to quicken the knowledge flow. In the knowledge economy era, libraries are entrusted with an important job of carrying our researches on development and application of information resources, construction of virtual libraries, protection of intellectual property rights in the electronic era, etc. paving the way for knowledge innovation (Krishman, 2010).

The main challenge is to: engage individuals (staff) in the discussion about knowledge management and help them to understand what the benefits will be for them. establishing principles that will guide knowledge management strategies are crucial. These provide the checklist against which decisions can be made about future policies, practices and systems.

Embedding these principles within the organization is critical if there is to be closer understanding about the value of information and the value of sharing knowledge across the institution.

Libraries are encouraged to take a long term view of knowledge management and to identify the major information and knowledge obstacles faced by staff now and to plan for the elimination of them over time. An audit of the information and knowledge system in the library (or the institution) may be an action that can help identify the urgent need for knowledge management strategies that may be employed including identifying the multiplicity of data sources held in file cabinets, insecure laptops, hard disks that are not regularly backed-up, in the heads of key staff approaching retirement, etc.

The biggest challenges are not tools, techniques or technology, but human and cultural factors. Knowledge sharing must become an ingrained behaviour for all professional library staff. This requires personal development, leadership, and the changes in the way that managers treat individual staff and that institutions should motivate and reward their staff. Knowledge management occupies very outstanding position in the creation of the knowledge's innovation system of a country.

As the traditional custodian of information, librarians need to be aware of the implication of the changes in knowledge society and develop technological and managerial skills that will enable them to make effective use of information to meet their organizational and changing needs. Professional profiles are also changing so rapidly and very radically these days impacting on the librarian's portfolio, since libraries are becoming knowledge management organizations with librarians as their active agent.

Conclusion

Libraries have had a long and rich experience in the management of information. Many of such knowledge and skills in librarianship can be applied to knowledge management. Librarians are generally driven by a desire to provide access to information sources and match this desire with values that assume information sharing as a good thing. These attributes are important for the successful practice of knowledge management. But they are not sufficient. They need to be harnessed in two directions towards specific organizational objectives that provide greater value to customers and clients; and second, in the way in which libraries and information services are themselves managed.

Librarians are generally driven by a desire to provide access to the information sources and match this desire with values that assume information sharing. These attributes are important for the practice of knowledge management. But they are not sufficient. They need to be harnessed towards specific organizational objectives that provide greater value to the customers and clients, and in a way in which library and information services are themselves managed. Knowledge management is not owned by one group in an organization or one profession.

But if librarians and information professionals want to be key players in the emerging knowledge management phenomenon, they need to understand the multiple perspective of the programme. Knowledge management is fundamental to future success in a knowledge intensive workplace. Properly executed, it can bring significant benefits for the library, namely: increasing the productivity through better knowledge sharing, provides better customer services by providing rapid access to information and help solve intractable problems by connecting together the relevant experts. There are several lovers, including customer knowledge, knowledge in the people and processes, that are potential focal points for knowledge initiatives.

To cope with the exponential growth in human knowledge and to enhance the implementation of KM in libraries, library and information professionals should develop their resource access and sharing strategies from printed to electronic and digital resources. They need to improve their KM in all the key sectors of library services through these methods;

- Library and informational professionals should put in place a well-defined knowledge management system and use the latest information technologies in libraries as enabler.
- Librarians and libraries in the digital and knowledge age should be in-charge of KM in their respective establishments in order to leverage the intellectual assets and to facilitate knowledge creation.
- Libraries should develop and maintain all integrated online public access catalogue (OPAC) with both internal and external resources as well as printed and other formats of knowledge.
- Librarians should create awareness and disseminate knowledge among the country through provision of personal computers, intranets, internet facility, well-equipped libraries especially e-libraries.
- They should conduct knowledge audit, to find out the knowledge needs of the library community, available knowledge assets and their location, knowledge flow and hindrances to knowledge capturing.
- Library should create all collaboration with other libraries of the same status so as to gain new and practical knowledge.

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