

Applying Knowledge Management in University Libraries: Pre-Conditions and Skills Requirements

Cyprian I. Ugwu- Ph.D
Nnamdi Azikiwe Library
University of Nigeria, Nsukka
Enugu State

Abstract

Purpose: The purpose of this paper was to identify the pre-conditions and skills requirements for applications of knowledge management in university libraries.

Design/Methodology/Approach: The paper highly relied on documentary evidence from the literature in this area. This involved bibliographic searching of full text bibliographic databases and of physical library collection to identify and summarize the literature on: 1) preconditions for KM applications, and 2) Skills requirement of librarians in KM.

Findings: It was found that librarians already possessed the skills required for KM application but needed to acquire skills in the area of knowledge mapping and mining. The conditions needed for successful application of KM were found to include but not limited to organizational learning, development of sharing culture, development of knowledge repository and IT infrastructure and having a strategic plan.

Implication: This paper has implication for transformative change in university libraries. It exposes the university library managers to the conditions that must be put in place for KM applications. It will serve as an instrument for selection of academic librarians for KM initiatives in university libraries.

Originality/Value: This paper enhances understanding of the theoretical foundations of KM and clarifies issues relating to KM applications in university libraries.

Key Words: Academic Librarians, Libraries, Knowledge Management, Pre-conditions, Skills Requirements, University Libraries

Paper type: Conceptual

Introduction

The pressures for survival and visibility in the face of competition from emerging groups of information providers have forced university libraries to begin to look for innovative ways of operation. Accordingly, these libraries are looking outside their professional boundaries for new insights and models as guidelines for innovative services and future development. There were specific suggestions in the literature on what university libraries should do which included applying business management trend or business-oriented solution as a survival strategy. For instance, Wang (2006) discussed the application of total quality management (TQM) in academic libraries and was of the opinion that TQM provides a model and benchmark for the development of new strategies in libraries facing today's great changes and then recommended for its introduction in academic libraries. The application of learning organization as another business-oriented solution for libraries has also

been discussed by Tan and Higgins (2002). They suggested that libraries need to become learning organization to survive. A learning organization environment encourages lifelong learning, continuous professional development, mentoring, mastery and exchange of information and knowledge.

Recently, knowledge management has been perceived as another viable response to the challenges that libraries face in the new competitive information environment. Shanhong (2000) stated that the objective of knowledge management in libraries is to promote knowledge innovation, closer relationship between libraries and between a library and its users and to quicken knowledge flow. There is a widespread recognition within the library and information science literature that KM is relevant to the library and information professions. For instance, Ajiferuke (2003) discussed the popularity of KM in Canada in relation to the roles of information professionals.

Knowledge management is a new field

that draws its definitions from several disciplines, including library and information science. Because it is still a relatively new concept and viewed differently by different writers from different focuses, its definitions vary.

Knowledge management has been defined as a process or set of processes, as a method of management, or as a new dimension of strategic information management and as the use of organizational knowledge. The dimensions of knowledge management, according to Brun (2005), include people, process and Technology. People refer to the entire human resources to be motivated and rewarded for creating, sharing and using knowledge in an organization. Processes refer to the internal processes in the organization that are to be structured and organized for successful knowledge management. Technology refers to the organizational tools that are used to support the people and facilitate the knowledge processes.

In their dimensions of knowledge management, Okunoye (2003) and Handzic (2001) identified processes and enablers. Perhaps, what these authors did was to put people, technology and other element together as enablers. The enablers are the factors in the organizational environment that influence or are related to knowledge management process. These enablers have been described variously in the literature as critical success factors, knowledge management infrastructures and organizational factors. These enablers will be treated in this study as organizational factors. They are factors that an organization needs to put in place for successful knowledge management. Okunoye (2003) summarized the issues raised here thus, “when we talk about knowledge management, we are primarily talking about supporting the knowledge processes with enablers, which, in the present study, are regarded as organizational factors”. The implication of the above definition by Okunoye (2003) is that, firstly, the management of knowledge begins with the identification of the internal processes of the organization. Secondly, the enablers or organizational factors that support the processes should be identified.

Literature reveals that knowledge management has its origin in information services and management practices (Clair, 2003). In information services, its origin could be traced to the purpose of special libraries (Special Libraries

Association, 1999). This general purpose of special libraries captured what special librarians thought of themselves doing, and by that, it can be said that they anticipated knowledge management long before Thomas Stewart identified the management of an organization’s intellectual capital as a valuable corporate function (Stewart, 1993). These special librarians see themselves as knowledge professionals who provide focused information and services to a specialised clientele, and the purpose of special libraries is to put knowledge to work (Clair, 2003). What that is of course, is knowledge management, as defined here, and the benefits that KM provides to organization that employs the specialist librarian. In management practice, Tiwana (2000) described chronologically how management of knowledge in business organizations has been coming since 1950’s. Tiwana stated that by mid- 1990’s KM had become like a management discipline as many people became involved in it especially those seeking new and better ways to manage their organizations. He concluded that by 2000 KM applications became widespread. Many organization including universities and their libraries became interested in KM.

The widespread applications of KM represent the awareness that knowledge is an important organizational resource that needs to be effectively managed to achieve organizational goals. This need has led organizations to establish new staff positions such as knowledge managers and chief knowledge officers (CKO). While the knowledge managers are responsible for the identification, organization and sharing of new knowledge, the chief knowledge officer is responsible for the coordination and organization of knowledge management activities in an organization.

Objectives of the Study

The specific objectives of this study are to:

1. Identify from the literature the pre-conditions for KM applications in university libraries.
2. Summarize the skills requirements of librarians for KM applications in university libraries.

KM in University Libraries

KM is based on strategic planning. This suggests that a KM strategy is needed if KM must succeed in an organization. Libraries wishing to implement KM initiatives should have a strategic plan that defines the objectives of KM, the roles of librarians and areas of KM applications.

KM is most effective when it is tied to organizational objectives such as the objectives or goals of the university library. It becomes critically important that the purpose of KM should be made known to library staff before its implementation. Both the rationale and benefits of KM will add up to define its purpose especially in the library setting.

The impetus for embracing knowledge management in university libraries according to Wen (2005) is mainly for a combination of library budget shortfall and high user expectation. Budget shortfall is a primary driving force for application of knowledge management in university libraries. In recent years, budgets in university libraries including those in Nigeria have been declining. At the same time, students, faculty and university administration have a greater expectation of university libraries due to the advancement of information technology and the explosion of knowledge in the digital age. University libraries have felt the pinch from both sides-less budget and more demand. They have also sensed the threat of being marginalized by lecturers who have developed their information gathering strategies to meet their needs (Wen, 2005). Wen concluded that knowledge management is such a tool that could help university libraries to operate more efficiently with reduced funding and enhance access to information and knowledge resources.

The library and information community has had varied perceptions of KM. This is because some library and information professionals could not establish clearly the relationship between KM and Librarianship. It was because these professionals could not see clearly or rather articulate the importance of KM or why it is vital to practice KM in academic libraries. Jain (2007) summarized the reasons for KM in academic libraries thus:

- Due to rapid knowledge decay and consequently need to create new knowledge

- High staff turnover and loss of knowledge.
- Needs of operational efficiency to address increased demands from faculty and students
- Need to establish best practices
- Need to manage e-evolution
- Need to leverage the available knowledge
- Necessity to survive and sustain competitive edge in the global community of profession
- And finally, seeing KM as a great opportunity to spread out the role of Librarians to the academic community.

Pre Condition for KM Applications

KM can be used to gain competitive advantage, to break economic and technological constraints, and to satisfy the information needs of library users. These benefits imply that professional librarians and the entire library and information staff should work closely together to put measures in place to ensure that KM takes its root in improving library and information services. These measures or pre conditions for KM applications include:

1. Creating good learning environment: Learning organization environment is one of the conditions for the success of knowledge management. Good or conducive learning environment should be created. This is an environment that encourages staff to be at their best, to help one another and to become what they want to be. Team working and mentoring are characteristics of a good learning environment. Library managers are expected to ensure that a good learning environment is created to help staff refurbish themselves for KM applications.
2. Developing knowledge enabling technologies: Information technology (IT) is one of the drivers of KM in organisations. IT can support KM by facilitating the process of organisation, storage, retrieval, dissemination and sharing of explicit knowledge and information rapidly in the organisation. It also helps to connect people with people. It must be noted that technology is not an end in itself but the means to an end.

Libraries should therefore formulate IT policies to ensure that IT infrastructures are fully developed to include collaborative tools for the capturing and sharing of tacit knowledge of staff.

3. **Developing central knowledge repository:** A central knowledge repository is an essential feature of knowledge management. This is because KM sees knowledge broadly or holistically. What this means is that KM is applied for organisational improvement and productivity. It considers the entire organizational knowledge. That is, it does not consider the library in isolation, rather it considers the knowledge generated in the university in which the library is an essential part of. Therefore, it is very crucial to have a central knowledge repository for the university and not for the library. This will help to adopt KM successfully in the library.
4. **Developing a strategic plan:** Knowledge management is visionary and is based on a strategic plan. This means that KM cannot be practised without having a strategic plan. Library managers should create work-related knowledge required by the staff as one of the preparatory steps for KM adoption. They are also to identify knowledge required in the library within a specified period of time. This is because knowledge identification is the starting point of KM in any organisation. This will help to attract, recruit and retain staff for KM applications.
5. **Creating knowledge sharing culture:** Knowledge sharing is one of the important tenets of knowledge management. A culture that facilitates knowledge sharing needs to be created to ensure the success of KM in the library. This requires that library managers should develop incentive, reward programmes, and possibly re-align them with the human resources policy in the library. Also, professional discussions and other similar meetings should be established in the library to encourage staff to share their knowledge and experiences. This is because librarians, according to Jain (2007) need to share their intellectual and operational knowledge within and outside the library.

Librarians' Skills for KM in Libraries

It is important to understand the skills librarians possess and are required to possess that will help them to play their KM roles effectively. Librarians should be aware of the fact that the KM processes are for a very long time present in libraries. This is why it is expected that Librarians should be in charge of KM projects in their establishments. This simply means that the KM processes are not strange to them and that they have the competences needed to ensure that these processes are efficiently carried out to meet the goals of the parent institution or organization.

In support of the above views, Shanhong (2000) Townley (2001) and Bishop (2001) highlighted the skills and attributes information professionals bring to new roles in information and knowledge management. What this means is that Librarians have skills that will enable them to work in the KM environment. These skills include networking, subject knowledge, cataloguing, researching, and collection development. Cataloguing skills are useful in metadata creation. Knowledge of classification can be very helpful for building taxonomies and anthologies, or for organizing knowledge resources on internets, web sites and portals. Collection development skills provide a good foundation for Librarians' active involvement in content creation and management. Indexing and abstracting can be very useful for adopting knowledge management techniques like business intelligence. Researching skills provide an excellent foundation for librarians to make contributions in the area of customer management. Experiences acquired through searching of online databases can aid Librarians in building knowledge bases and repositories.

The recent paper by Ugwu and Ezema (2011) identified specific areas where skills could be developed to enable librarians successfully implement KM in Nigerian academic libraries. The competency areas are KM strategy, KM culture, restructuring of academic libraries for KM and KM leadership. Even though the four skill areas are essential, Ugwu and Ezema (2010) were of the opinion that skill development of librarians should first and foremost start from creating knowledge management culture in academic libraries in Nigeria. This could be followed by training librarians to be KM leaders. The next area of skills development was KM strategy, while the

last skills development area could be those required to restructure academic libraries in Nigeria for KM success.

In their paper, “knowledge management competencies needed by Librarians for effective library services in the information age”, Ozioko, Ezeani and Ugwu (2008), identified the following as the required KM skills:

1. Building classification schemes for the organization of knowledge.
2. Cruaging Internal and external knowledge.
3. Understanding of the Library’s information and knowledge flow.
4. Using information technologies.
5. Collaborating and Communicating
6. Sharing and transferring of knowledge.
7. Managing documents and information, and
8. Understanding of information and knowledge needs of users.

Training is very crucial for the acquisition of the above KM skills. The training modes like conferences, train the-trainer workshop, seminars and continuing education programmes are opportunities for skills acquisition. Co-operation and collaboration with other libraries can also help to improve skills as new things are often learnt which encourage best practices within the profession.

Maponya (2004) took a definite stand when he insisted that academic librarians are in need of skills and competencies that could help them in knowledge management activities. He identified four critical skills needed as:

- Building knowledge taxonomies
- Understanding of information and knowledge need of users
- Ability to map internal and external knowledge and
- Understanding of library’s information and knowledge flows.

The KM skills needed by the information professionals have been summed up by Teng and Hawamdeh (2002) as follows:

- IT literacy, that is knowing how to use technology to capture, catalogue and disseminate information and knowledge
- A sharp and analytical mind
- Innovation and inquiring, and
- Knowledge creation, flow and communication.

One can clearly see from the above that it is important for university libraries to encourage Librarians to constantly update their skills to enable them remain on the leading edge in the rapidly changing information environment.

Conclusion

One of the components of KM is people, and, in this case, librarians should be made to understand the conditions KM applications. Though there are some previous studies in this area, it is believed that knowledge of these conditions and skills requirement of librarians will increase participation in KM and this will in turn lead to clear understanding and success of KM applications.

In conclusion, knowledge management has been found to be a useful strategy for the survival of libraries in an era characterized by budget shortfalls, increasing competitive information environment and serious information overload due to advances in technology.

References

- Ajiferuke, Isola (2005). Role of information professionals in knowledge management programme; Empirical evidence from Canada: Retrieved from <http://inform.nu/Articles/Vol6/v6p247-257.pdf> on November 05, 2008o
- Brun, Caroline (2005). ABC of knowledge management. Retrieved from <http://proceedings.informingscience.org/insite2008/IISITV5p571-590Grant532.pdf> on October 25, 2008.
- Clair, Guy (2003). *Knowledge management*. New York: Marcel Dekkar.
- Handzic, M. (2001). Knowledge management: A Research Framework. In Proceedings of the 2nd European Conference on Knowledge Management (ECKM) (pp.3 5 – 42). USA: Bled.
- Maponya, Pearl N, (2004). Knowledge management practices in academic libraries: a case study of the University of Natal, Pietermaritzburg libraries: Retrieved from <http://mapule276883.pbworks.com/f/Knowledge%2Bmanagement%2Bpractices%2BIn%2Bacademic%2Blibraries.pdf> on November 05, 2008 .
- Okunoye, Adekunle, O. (2003). Knowledge management and global diversity: A framework to support organization in developing countries. Finland: University of Turku,.

- Special Libraries Association. Historical Highlights. In *Who's Who in special libraries 1999 – 2000*; Washington, DC: Special Libraries Association.
- Stewart, T. (1997). *Intellectual Capital: The new wealth of roganizations*. New York: Double Day,
- Tiwana, A.(2000). *The knowledge management toolkit*; Upper Saddle River, NJ, USA: Prentice Hall.
- Wang, H (2006). From user to customer TQM in academic libraries? *Library Management*, 27(9): 606 – 20.
- Wen (2005)
- Townley (2001)
- Ugwu and Ezema (2010)
- Ugwu and Ezema (2011)
- Tan and Higgins (2002).
- Teng and Hawamdeh (2002)
- Shanhong (2000)
- Ozioko, Ezeani and Ugwu (2008),