KNOWLEDGE MANAGEMENT AND THE ROLE OF ACADEMIC LIBRARIANS IN NIGERIA

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Abstract
Evolving information and knowledge has impacted all organizations, including libraries. This has made knowledge management become important. The development of knowledge management in recent years has become the key concern for librarians and libraries. As a result, the role of academic librarians in changing to provide the competitive advantage for the parent institution is necessary. This paper studied the interconnections among human needs, academic processes, information and communication technologies, and the processes for their management. It is followed by a discussion on the nature of human needs and the vision of the library, as well as the information and knowledge requirements for meeting such needs in a digital society. It also explored some implications of the trends in digital society for information, knowledge and technology management in the context of library services. The paper would conclude with discussion on some management related challenges for librarians/libraries in knowledge management and suggests that librarians/libraries in the digital and knowledge age should be in charge of knowledge management in their respective institutions in order to leverage the intellectual assets and to facilitate knowledge creation.

Keywords: Knowledge Management, Information Management, Information Academic Libraries

I. Introduction

The concept and name "Knowledge Management" was started and popularized in the business world during the last decade of the 20th century. It was the business world that first recognizes the importance of knowledge in the "global economy" of the "knowledge age". In the new knowledge economy, the possession of relevant and strategic knowledge and its unceasing renewal enables businesses to gain competitive advantage. Tiamiyu and Aina (2008) stated that, "Information and knowledge management in digital age" could be discussed in terms of why and how information and knowledge management, as well as information technology management, could be used by organizations' and it clients as an effective instrument to promote use of information and knowledge for human development. In this instance, libraries seeks to situate information and knowledge management, as well as information technology management, in the context of the human needs and vision of libraries and societies, for which appropriate information and knowledge need to be provided, and for which information and knowledge technologies need to be developed and used. The applications of knowledge management have now spread to other organizations including government agencies, research and development departments, universities, and others.

The 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, preserving, repackaging, disseminating, and serving. However, professionals in information technology and systems have also regarded information management as their domain because of the recent advances in information technology and systems which drive and underpin

information management. One of the clearest evidences of this is that the positions of "Information Officer" (IO) in many organizations are generally held by information technologists instead of librarians. In fact, most of the work of IOs has to do with developing and managing the IT infrastructure and systems, not the managing of information per se.

Statement of problem

Professionals in information technology and systems have regarded information management as their domain because of the recent advances in information technology and systems which drive and underpin information management. With the growing interest in knowledge management, many questions have been raised in the minds of librarians regarding: the difference between information and knowledge; between information management and knowledge management; who should be in charge of information and knowledge management; would librarians and information professionals with appropriate education and training in library and information science be most suitable for the position of "Knowledge Officer" (KO) in their organizations; and what libraries can do in implementing knowledge management.

Aim and objectives of the study

The aim of this study was to establish the ways in which academic librarians can add value to their services by engaging with knowledge management. To achieve this aim the following objectives are formulated:

1. To determine the skills and expertise needed by librarians to participate effectively;
2. To identify those initiatives that academic librarians would follow to facilitate the creation and transfer of knowledge;
3. To determine the degree of involvement in knowledge management.

This paper attempts to answer these critical and pressing questions from the librarians' perspective.

Definition of concepts

Information is defined as meaningful communication symbols transferred between any two points in human communication or machine networks. Knowledge is an organized accumulation of information at specific points in such networks, where point could be a human being, a document, or a database. Information and communication technology (ICTs) comprises pieces of equipments, networked infrastructure and an associated knowledge and skills for creating, manipulating, transferring and using information or knowledge. Information management is the process of facilitating the exchange and use of information. Information management (IM) concerns a cycle of organizational activity: the acquisition of information from one source, the custodianship and distribution of that information to those who need it, and its ultimate disposition through archiving or deletion. This cycle of organizational involvement with information involves a variety of stakeholders including those who are responsible for its safe keeping and disposal, and those who need it for decision making. Information management embraces all the generic concepts of management, including planning, organizing, processing, controlling, evaluation and reporting of information activities, all of which is needed in order to meet the needs of those with organizational roles or functions that depend on information. The life cycle of managing information is an operational matter that requires specific procedures, organizational capabilities and standard that deal with information as a product or service. Knowledge management is

the process of identifying, documenting, organizing, storing and sharing knowledge, and information technology management is the process of developing and deploying ICT in library services. Academic library is a library attached to a higher education institution and servers two complementary purposes: to support the curriculum, and to support the research of faculty and students.

II. Is there a difference between information and knowledge?

Merriam Webster, (2017) can be thought as the resolution of uncertainty or that which answers the question of "what an entity is". Information is turned into knowledge when an individual processes and internalizes it. Knowledge is made explicit and become information. Knowledge as a set of organized statements of facts or ideas, presenting a reasoned judgment or an experimental result, which is transmitted to others through some communication medium in some systematic form. As for information, Information is data that has been organized and communicated. This is the process for knowledge creation and use as a continuum where data transforms into information, information transforms into knowledge and knowledge drives and underpins behavior and decision-making. Information combined with user's ability and experience that is used to solve a problem or to create new knowledge.

The differences between information and knowledge can be summarized as: Information is visible, independent from action and decision, different in format after processing, physical product, independent from existing environment, easily transferable, and duplicable. Knowledge is invisible, closely related to action and decision, different in thought after processing, spiritual product, identified with existing environment, transferable through learning, and not duplicable. Two types of knowledge have been noted. They are explicit knowledge and tacit knowledge. Aina, and Tiamiyu (2008) defines explicit knowledge as "knowledge that is documented and public; structured, fixed-content, externalized, and conscious" and tacit knowledge as "personal, undocumented knowledge; context-sensitive, dynamically-created and derived, internalized, and experience-based; often resides in the human mind, behavior, and perception." This set of definitions can be applied to all other human endeavors and intellectual activities.

The thrust of knowledge management is to create a process of valuing the organization's intangible assets in order to best leverage knowledge internally and externally. Knowledge management, therefore, deals with creating, securing, capturing, coordinating, combining, retrieving, and distributing knowledge. The idea is to create a knowledge sharing environment whereby sharing knowledge is power as opposed to the old adage that, simply, knowledge is power.

III. The role of Librarian in knowledge management

Knowledge management (KM) is the process of creating, capturing, sharing and using knowledge to enhance academic performance. The librarian's role in knowledge management is in creating added value to knowledge, modifying it by implication or organization to suit new purpose. Tiwana (2004), argues that, knowledge management processes should include generating, new knowledge, accessing knowledge from external sources, representing knowledge in documents, data bases and embedding knowledge in products or services. Others included transferring existing knowledge, using accessible knowledge in decision making, facilitating knowledge through culture and measuring the value of knowledge assets and impacts of knowledge. Thus, "Knowledge management is concerned with the exploitation and development of the knowledge assets of an organization with a view to furthering the

organization's objectives. The knowledge to be managed includes both explicit, documented knowledge, and tacit, subjective knowledge. Management entails all of those processes associated with the identification, sharing and creation of knowledge. This requires systems for the creation and maintenance of knowledge repositories, and to cultivate and facilitate the sharing of knowledge and organizational learning. 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.

1. To create knowledge repositories, both knowledge and information, can fall into three categories: Those which include external knowledge, such as competitive intelligence. Those that include structured internal knowledge, such as research reports and product oriented marketing materials, such as techniques and methods. Those that embrace informal, internal or tacit knowledge, such as discussion databases that store "know how".

2. To improve knowledge access and transfer. Here the emphasis is on connectivity, access and transfer. Technologies such as video conferencing systems, document scanning and sharing tools and telecommunications networks are central.

3. To enhance the knowledge environment so that the environment is conductive to more effective knowledge creation, transfer and use. This involves tackling organizational norms and values as they relate to knowledge. Increase awareness on sharing knowledge embedded in client relationship and engagements. Provide awards for contributions to the organization's structured knowledge base. Implement decision audit programs in order to assess whether and how employees were applying knowledge in key decisions. Recognize that successful knowledge management is dependent upon Structures and cultures.

4. To manage knowledge as an asset and to recognize the value of knowledge to an organization. Others, however, sought to take a process view to define knowledge management.

5. 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 where, to borrow the phrase from the Keystone Principles, "people and ideas interact in both the real and virtual environments to expand learning and facilitate the creation of new knowledge." 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.

Knowledge Resources Management

Because of the exponential growth in human knowledge in a variety of formats, libraries need to develop their resources access and sharing strategies from printed to electronic and digital resources in concert with their mission and charges. Restricted by limited funding, technology, staff, and space, libraries must carefully analyze the needs of their users and seek to develop cooperative acquisition plans to meet these needs. The changing concept from "ownership" to "access" and from "just in case" to "just in time" should be the goal of a sound resources development strategy. An integrated online public access catalog (OPAC) with both internal and external resources as well as printed and other formats of knowledge should be developed and maintained. Useful websites and knowledge sources should be regularly searched and selected from the Internet and included in OPACs by hard links. A system for the reviewing and updating of these resources should be performed. Going beyond explicit knowledge, libraries should also develop means to capture all that tacit knowledge that is of importance to their users, their organizations, and to the internal operation of libraries. The web site of each library should serve as portal for all sources of selective and relevant knowledge and information whether explicit or tacit, whether on site or remote, and in all formats. The term "portal" has been defined by Michael Looney and Peter Lyman (2000), as "a means of gathering a variety of useful information resources into a single, one-stop Web page, helping the user to avoid being overwhelmed by infoglut or feeling lost on the Web."

Universities, polytechnics, colleges of education and research organizations among others are themselves knowledge reservoirs. These highly valued intellectual assets, regardless of whether they are explicit or tacit, should be inventoried, archived, indexed, frequently updated, and made accessible in digital form. In addition, the traditional, time-honored methods of cataloging and classification are barely adequate to handle the finite number of books, journals, and documents, but are inadequate to deal with the almost infinite amount of digital information in large electronic databases and on the Internet.

Resources Sharing and Networking

Libraries have had a long tradition of resources sharing and networking. These have been greatly expanded by the rapid development of computer, telecommunication, networking, and digital technologies since the 1960s. it is very common for libraries to be a member of several consortia at the same time for various types of cooperative work and resources sharing. The best examples of these are should be especially useful for libraries to cooperatively capture digital resources of all types, describe them in a standard format, and make them easily searchable by users. The successes of most of these examples in resources sharing and networking are largely the result of the full cooperation and participation of all member libraries without selfishness. Experiences indicate that all libraries, regardless of size and specialties, have been benefited by library cooperation and resources sharing.

5.3 Information technology development

To facilitate the implementation of knowledge management, a well-designed and operational knowledge management system should be in place. Latest information technology should be used as an enabler. In this regard, the e-librarian should consider him/her self as the chief knowledge officer of the entire unit and should work together with the director, heads of the planning department, the computer and information technology center, the human resources management department, the finance department, etc. to design and develop such a system. Such a knowledge management system should be built on

existing computer and information technology infrastructures, including upgraded intranet, extranet, and 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, resource persons (faculty, researchers, and subjects specialists, etc.), In recent years, many of the newly developed information technologies for database and information/document management can be utilized in knowledge management; such as, data mining, text mining, content management, knowledge extraction, knowledge mapping, and information visualization, etc.

User services

The utmost goal of knowledge management is to provide users with a variety of quality services in order to improve the communication, use and creation of knowledge. As much as possible these services should be tailored to the interest and needs of each user. Information about each user can be obtained by analyzing the records of user registration, surveys, circulation and interlibrary loans, frequently asked reference questions, and the use of e-journal and digital resources, etc. User satisfaction and needs should be collected through periodic users' surveys. The findings should be used for the planning and redesign of library services. It is very important, however, that user's privacy should always be protected. Some of the manual services such as "new publication alert" and "selective dissemination of information," which libraries have been providing, can now be done automatically by employing the "push technology" with great efficiency and convenience. Each library user can also set up his/her email enabled by library systems and networks for collecting and organizing resources for personal use and to stay informed of new resources provided by the library.

Human Resources Management

A great amount of expert knowledge is possessed by library staff and users, both in and outside the libraries. In university and research communities such expertise is abundant and should be inventoried, indexed, and updated regularly and be made searchable and accessible through electronic databases created and maintained by libraries. The knowledge and accumulated experiences of library staff members form the intellectual assets of any library and should be valued and shared. An organizational culture for sharing of knowledge and expertise should be established with appropriate rewards and incentives. As a learning organization, libraries should allocate annual funding to provide continuing education and staff training to all staff members. Knowledge must be renewed and expanded to prevent it from becoming stagnant. Libraries should also encourage the transfer of knowledge and experience from experienced staff to new staff members. A mentoring system should be in place to help newcomers to learn from experienced library staff. Informal seminars and workshop sessions where staff can interact and exchange "lessons learned", "best practices" and other specific experience and knowledge should be scheduled at regular intervals and at convenient times. Special interest groups and chat rooms can be created through whatsapp. Since many valuable experiences have been accumulated over time, libraries should pay attention to favorable working conditions and environment, which will contribute to better staff retention.

IV. Conclusion

In conclusion, knowledge management has been regarded as strategically important for organizations to gain a competitive advantage over their competitors, to add value to their services, and to win greater satisfaction from their clientele. In the library world, there is a lesson to be learned from the business

world. Knowledge management is as important for libraries as for the businesses minus the competitive, proprietary, and moneymaking concerns. In fact, libraries have had a long and rich experience in the management of information. Many of such knowledge and skills of librarianship can be applied to knowledge management. For any library to succeed in implementing knowledge management will require a strong leadership and vision from the top administration, which can influence the organization's knowledge sharing efforts in a positive way. As libraries enter the knowledge age of the 21st century, we should not take a back seat in the development of knowledge management. Instead, armed with our professional knowledge and experiences, we should be in the driver's seat.

Information technology and systems can provide effective support in implementing knowledge management. Librarians should work together with IT professionals and others to develop the appropriate knowledge management systems. Furthermore, knowledge management should never be viewed as a way to control the process of knowledge creation. In the process of knowledge creation, every library should strive to be an enabler and facilitator by mobilizing all its efforts and resources. The best knowledge creators are academics. As a learning and knowledge organization, academic institutions should empower their libraries to develop campus-wide knowledge management systems. It is now time for libraries to reposition themselves in the central stage of and as a leading player in knowledge management.

References

Aina, L. O., Mutula, S. M. and Tiyamiyu, M. A. (2008), Information and Knowledge Management in Digital Age: Concepts, Technologies and African Perspectives, 2008 ISBN: 978-978-084-723-4 Printmarks Ventures, Ososami, Ibadan.

Drucker, Peter. (1993). *Post-capitalism Society*. Oxford, Great Britain: Butterworth- Heinemann.

Looney, Michael and Lyman, Peter. (2000). "Portals in Higher Education: What are they, and what is Their Potential?" *EDUCAUSE Review* 35*4*:30. Available online from http://www.educause.edu/pub/er/erm00/article004/looney.pdf
http://www.isc.org/index.pl?/ops/ds/host-count-history.php
http://blog.searchenginewatch.com/blog/041111-084221

Merriam Webster.com. Retrieved, 2017.

Tiwana, A. (2004), The Knowledge Management and tool kit. Upper Saddle River. NJ; Prentice Hall cited in Guy Statement. Clair, "Knowledge Management", Encyclopedia of Library and Information Science M. Dekker, 2003. P. 1486.

Tiyamiyu, M.A.(2003) Information and Communication Technologies for social Development: Issues, Options and Strategies. In Aina, L. O., Mutula, S. M. and Tiyamiyu, M. A. (2008), Information and Knowledge Management in Digital Age: Concepts, Technologies and African Perspectives, 2008. Printmarks Ventures, Ososami, Ibadan.