

# Developing Strategies For Effective Knowledge Management (KM) In University Libraries In Nigeria

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## ABSTRACT:

The paper examines Knowledge Management (KM) as a new concept for the development of university libraries in the emerging digital academic environments; and explores strategies for effective KM in Nigerian university libraries. A questionnaire survey was used as instrument for data collection with academic librarians as respondents. The findings of the study indicate that human resource development, provision of ICT infrastructure, and capacity building in ICT were the highest ranked strategies toward effective KM in Nigerian university libraries. The paper recommends that adoption of these strategies toward effective KM in university libraries would make Nigerian universities to be competitive in the global academic community.

Keywords: *Knowledge management, University library, Digital environments, Strategy*

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## Introduction

In recent times due to the emergence of the modern information and communication technologies (ICTs), university libraries the world over and particularly in Nigeria, have been witnessing diverse challenges in meeting up the basic goals of their parents' institutions, in terms of knowledge production and dissemination. The university is involved in research, which deals with how knowledge is generated; learning and teaching - the arts of imparting and disseminating knowledge to the larger society. According to Sarrafzadeh, Martin and Hazeri (2010:199):

in this global and increasingly knowledge-based economy, the principal asset for organizations in both the private and public sectors is knowledge. As a consequence, organizations (*universities*) and large firms in particular have invested heavily in activities designed to acquire, control, leverage and account for this intangible resource. In other words, they have invested in knowledge management. KM is now widely recognized as a key factor in organizational success. The ultimate aim of KM is to increase the effectiveness, and sustainability of growth of an organization.

Thus KM has now become a new concept used by the university library in promoting the mission and goal of a university. Other objectives of KM in university libraries are to promote knowledge innovation; to promote relationship between different libraries, between libraries and users (staff and students); to strengthen knowledge inter-networking; and to quicken knowledge flow (Yi, 1999). Woolfey (2009) has observed

that African countries lack organizations to act as intermediaries between users of research information; thus there occurs a low level of “knowledge utilization” in Africa, even in universities. Hence, another significance objective of KM in university libraries in Africa is to improve the current trend of limited level of “knowledge utilization” in the universities in spite of the emerging digital technologies and information revolution.

According to Shanhong (2000), KM will help in the sharing of knowledge within and outside the university library towards the realization and sustainability of the goal of the university. Based on the conventional functions of a library - collection, processing, storage and retrieval, and dissemination of information, the library has become a treasure-house of human knowledge in the emerging information age. It will also participate in knowledge innovation and become an important link in the knowledge innovation chain. Since knowledge has become the driving force for societal development, and organizational growth especially in the universities, the need for effective KM in university libraries in Nigeria cannot be overemphasized. The aim of the study is to explore and develop strategies toward effective KM in university libraries in Nigeria in order to be an integral part of the knowledge economy otherwise refers to as the global economy, where knowledge is resource for national development.

### **Research Methodology**

A survey method was used for the study with questionnaire as the instrument for data collection. Fifty copies of the designed questionnaire were randomly administered face-to-face by the researchers to academic librarians across Nigerian universities at the National Conference/AGM of the Nigerian Library Association NLA held from 24-28 July, 2010 at the International Conference Center, Abuja, Nigeria. Thirty copies of the questionnaire were duly completed and retrieved from the respondents; and used for data analysis with a response rate of 60.0%.

### **Results And Discussion**

The respondents were asked to rank various strategies as shown in Table 1 from a scale of 1 to 4 (with 1 as the least score and 4 as the maximum score respectively) that they consider relatively vital in effective knowledge management in Nigerian university libraries in view of the emerging digital revolution in libraries. The results of the survey indicate that human resource development (12.74%), capacity building in ICT (12.74), and provision of adequate ICT infrastructure (12.23%) receive the highest ranking by the respondents as vital strategies toward effective KM in university libraries in Nigeria.

**Table 1. Strategy Rankings**

Strategy	%
Human resource development	12.74
Capacity building in ICT	12.74
Provision of adequate ICT infrastructure	12.23

Recruitment of specialized/technical staff in ICT	10.72
Electronic collection development	10.72
Funding/budgeting for ICT	10.47
Digitization of information resources/services	10.47
Formulation of relevant KM policy	10.34
Setting up of virtual libraries	9.58

### ***Human Resource Development***

The high level of human resource development has been observed to be the most vital strategy in effective KM in Nigerian university libraries in the emerging digital academic environments. Human resource development is concerned with regular intellectual empowerment of librarians as well as all library staff in order to re-position them to provide effective and efficient library services to the patrons. This is informed by the fact that, “the university library is a dynamic unit within a dynamic system which underscores the need for the library to be proactive in its thinking” (Adekanye, 2010: 238) towards KM as an essential tool for efficient information delivery in the fast changing global academic environment. Furthermore, according to Adekanye (2010) the library as the storehouse of knowledge is concerned with acquisition of materials for teaching, learning and research; processing of these materials; assisting in their retrieval, and the dissemination of information to facilitate the active and effective exploitation of the acquired resources. Thus, for effective KM in university libraries, it is apparently necessary to train/retrain the librarians/library staff to acquire modern knowledge/skills that would assist them in the provision of the needed access to the available information resources to their numerous clientele. Therefore there is need for Continuing Professional Development (CPD) for librarians to acquire the vital knowledge and competence required in the practice of modern librarianship and information profession toward effective KM in university libraries in Nigeria (Adanu, 2007).

### ***Capacity Building In ICT***

Information and communication technology is the new tool that provides effectiveness and efficiency in information processing, evaluation and dissemination in university libraries the world over. ICT provides adequate support for information preservation, storage and retrieval, and thus it is a veritable tool for effective KM in university libraries in Nigeria. With ICT, the provision of electronic information services is now common in Nigerian university libraries; library patrons can now have access to computerized information, Online Public Access Catalogue (OPAC), online/CD-ROM databases and other resources on the Internet and computer networks (virtual/digital libraries)..

However, in spite of the impact of ICT in KM, the adoption and diffusion of ICT in university libraries in Nigeria has not been rapid, smooth and rife as obtained in the advanced information societies, where ICT provides the key for information access and use among library patrons. One of the major impediments against effective integration of ICT in the provision of library tasks/services in Nigeria has been low level of ICT skills among librarians/paprons. This overtly informed the rationale of considering

capacity building in ICT by the respondents as one of the prioritized strategies in effective KM in university libraries in Nigeria. Capacity building in ICT is concerned with acquisition of basic ICT knowledge/skills to librarians and library staff to enhance their proficiency in provision of modern electronic information services to the patrons. Lawal and Ani (2008) have discussed the impact of ICT capacity building programme in KM in University of Calabar Library, Nigeria and report that the library has been supporting active participation of librarians in national workshops on ICT, besides organization of basic computer literacy programmes for the librarians/library staff in order to improve their ICT skills.

### ***Provision Of ICT Infrastructure***

Modern ICT infrastructure that brings innovation in KM in university libraries includes the computers and the Internet. Computers are used in variety of ways in KM in university libraries: information generation, processing, storage, preservation and transmission; and these have led to the concept of library computerization. Library computerization has facilitates the provision of electronic information services to the library patrons and thus improves the ease and efficiency in which knowledge is accessed and used or managed in research. Ehikhamenor (1990) has traced the computerization efforts of university libraries in Nigeria towards effective knowledge management to the early 1970's with the first product of computerization, the *catalogue of serials in the library* published in one bound volume in March 1975 by the Ibadan University Library. Since then, there has been tremendous progress towards computerization of university libraries in Nigeria culminating with the donation of computers to all the federal university libraries by National Universities Commission (NUC) through the World Bank Project in 1994-5 (Bozimo, 2005/2006; Omoniwa, 2001).

After the computerization era, another major technological innovation in university libraries in Nigeria to support effective KM was the introduction of the Internet to assist in electronic access to information and dissemination. The Internet has been described by scholars as a global information resource that is vital for KM in modern librarianship and information profession (Adika, 2003; Badu and Markwei, 2005; Iwe, 2005; Nwokedi, 2007; Missen, Ojoade, Paulos, Akintunde, Carthy, McCarthy, Ibrahim, and D'Alessandro, 2010; Sarrafzadeh, Martin and Hazeri, 2010). According to Iwe (2005), the development of information and communication technologies particularly the Internet in recent years has revolutionized access to information on a mass scale, thus reducing the costs involved. This view receives support from Adika (2003) who asserts that the Internet makes it possible for users to have access to large volumes of information irrespective of their geographical location. Nwokedi (2007) adds that the Internet offers the opportunity for access to up-to-date research reports and knowledge globally. The implication is that through the Internet, resource sharing is enhanced, and access to knowledge is ubiquitous. In view of the tremendous benefits of the Internet in KM in university libraries in Nigeria, Alasa and Kalechukwu (1999) advocate the need for effective provision of Internet access to library patrons in order to accelerate knowledge generation and transfer.

However, in spite of the apparent impact of ICT in university libraries the world over, and Nigeria in particular, scholars have persistently decry the poor state of ICT infrastructure in Nigerian academic libraries (Ehikhamenor, 1990; Alasa and Kalechukwu, 1999; Missen et al., 2010). The situation is akin to other developing countries as Ali (2005) has also diagnosed poor ICT infrastructure as a menace to modern librarianship in India. Thus the ranking of the provision of ICT infrastructure as the fourth strategy towards effective KM in university libraries in Nigeria is plausible as it will help to bridge the existing “digital divide” in Nigerian academic environments and promote access to information and utilization.

Besides the Internet, there is also need for the provision of relevant computer networks such as Library LAN and Intranet/Campus network in university libraries in order to provide access to information within the universities (i.e. departments/faculties). According to Alasa and Kalechuchwu (1999), the adoption of Local Area Network (LAN)/Intranet and other computer networks in university libraries will be a boost KM process in Nigeria. This implies that librarians can provide the needed information from the libraries to academic staff in their offices for knowledge generation and transfer without waiting for them to come to the library for information patronage. This informed the rationale for the proposition by Ani, Esin and Edem (2005) for adoption of information technology (ICT) in university libraries as a strategy for library networking and KM in Nigeria.

### ***Recruitment Of Specialized/Technical Staff In ICT***

One of the common factors that impede access to knowledge in university libraries in developing countries especially in Nigeria has been lack of specialized/technical staff in ICT. With the diffusion and integration of ICT in information processing, storage and retrieval, preservation and dissemination in libraries, the need to recruit specialized/technical staff with relevant experiences/skills in specific areas of ICT cannot be overemphasized. It is imperative to employ the services of experts such as systems analysts, web developers, computer programmers among others to support librarians towards effective KM in university libraries in Nigeria. This is necessitated by the fact that professional librarians do lack these skills which are pre-requisite and vital in the practice of modern librarianship and information profession, thus knowledgeable librarians could be trained to acquire specialized/technical skills in ICT. This will also call for curriculum review where basic courses in these areas can be offered in our library and information science programmes in order for the future librarians and information professionals to be equipped with specialized/technical knowledge/skills in ICT.

### ***Electronic Collection Development***

Access to information has been pervasive with the emergence of information in electronic/digital format, as information that were formerly in printed sources are now available in electronic form. Thus information seeking behavior of most library patrons is now in favour of electronic resources. Electronic resources are information sources that are accessible on the computers, CD-ROMs, Internet and related networks and these include electronic books/journals, online databases. Thus electronic collection

development is diffusing into Nigerian university libraries in line with global librarianship. A study by Ani and Ahiauzu (2008) has shown that university librarians in Nigeria have begun to subscribe to electronic resources in order to satisfy the changing information needs of their patrons. It is therefore obvious that effective electronic collection development is a good strategy towards enhanced level of KM in university libraries in Nigeria.

### ***Funding/Budgeting For ICT***

Inadequate funding/lack of budgetary allocation to ICT has been a major obstacle towards effective KM in university libraries in Nigeria. With poor funding/budgeting, the provision of ICT infrastructure or effective electronic collection development requires to accelerate the level of KM in university libraries would be a mirage; as money is required to procure computers, provide reliable Internet connectivity or make subscription to e-resources (online databases). Accordingly, Ifidon (2002) has asserted that the quality and adequacy of the resources and services available in Nigerian university libraries are functions of the level of financial support which the libraries received from their governing authorities and advocates the need to evolve appropriate policy on funding of university libraries in Nigeria. Therefore, improved level of funding/budgeting for ICT is apparently a good strategy towards amelioration of the problems against effective KM in university libraries in Nigeria. Thus, university authorities, federal and state governments and NUC should as a matter of urgency look into the challenges facing most university libraries in the area of funding/budgeting towards enhanced knowledge management in the systems. It is also expected that strategic plans for knowledge management in university libraries should aim at providing the right knowledge, to the right user at the right time in Nigerian universities.

### ***Digitization Of Information Resources/Services***

Library computerization has made it possible for digitization of local resources into electronic format for quick access within and beyond the university library environment. Hence through this process, Nigerian journals, postgraduate theses/dissertation etc. are now made available for teaching/research in different universities electronically. For instance, NUC has been in the forefront of digitizing local journals in Nigeria for wider access and usage, and these resources have been made accessible to the users through the Internet, virtual libraries and Intranet/campus networks. Digital resources are better managed than their printed counterparts in terms of storage, preservation, retrieval and dissemination; they also are less prone to theft. Thus digitization of library resources has been described as significant innovation and strategy that will shape the information delivery and potentially enhances effective KM in university libraries in Nigeria (Adekanye, 2010).

### ***Formulation Of Relevant KM Policy***

KM is a new concept in modern librarianship and information profession especially in Nigerian universities. This calls for appropriate development and articulation of policies that will help in effective KM in university libraries. Ani and Edem (2011)

have made advocacy for two levels of KM policy in Nigerian university libraries: one, each individual university (or university library) should develop its own KM policy; and two, the NUC, should coordinate and develop national KM policy for all university libraries in Nigeria. It is expected that the development of appropriate KM policy would be a strategic tool for Nigerian university libraries to overcome perceivable challenges on effective KM.

### ***Setting Up Of Virtual Libraries***

Virtual libraries provide a wider access to electronic resources towards effectiveness and efficiency in knowledge management in university libraries in Nigeria. Ani (2005) has reported the needs for setting up of virtual libraries as tools towards effective KM in Nigerian universities. In view of the importance of virtual libraries, the Federal Government through the Ministry of Education and NUC has established Nigeria Virtual Library Project (NVLP) in 2002. Nigeria Virtual Library Project when fully implemented will ensure that all federal universities in Nigeria are linked with national virtual library (NVL, 2010) currently runs by the NUC (Okebukola, 2002). In view of irregular subscription of scholarly journals and books in university libraries due to inadequate funding and rising cost of these materials, virtual libraries readily offers needed access to current information resources for effective knowledge management. Adequate steps should therefore be drastically taken to set up virtual libraries in all university libraries in Nigeria as a panacea and strategy to enhance quality knowledge management among librarians and patrons in the globalized academic community.

### **Conclusion**

Sarrafzadeh, Marin and Hazeri (2010) have observed that KM has been perceived as another viable response to challenges that university libraries are facing in continuously changing environment; and thus a vital tool to enhance the poor level of “knowledge utilization” in African universities. KM has also been used as tool by university libraries to ensure competitiveness and increase in productivity of librarians and patrons in the emerging knowledge economy and electronic environment. In spite of the wider adoption of KM in global perspective by universities libraries to tackle the myriad of challenges toward effectiveness, efficiency and sustainability of knowledge generation and dissemination in the universities, Nigerian university libraries are yet to appreciate the import of this new concept. In view of this, the findings of study have revealed different strategies that would accelerate effective KM in university libraries in Nigeria. These are human resource development, provision of ICT infrastructure, capacity building in ICT, recruitment of specialized/technical staff in ICT, electronic collection development, funding/budgeting for ICT, digitization of information resources/services, formulation of relevant KM policy and setting up of virtual libraries. The paper recommends that adoption of these strategies toward effective KM in university libraries would make universities in Nigeria to be competitive in the global academic community.

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