Assessment of Knowledge Management Competencies of Library Staff in University of Cross River State Library, Calabar, Nigeria

By

Ogunjimi, Blessing Etukudo, Ph.D*
Department of Library and Information Science
University of Calabar, Calabar, Cross River State, Nigeria
blessingetukudor@gmail.com

Prof. Williams O. Nkanu
Department of Library and Information Science
University of Cross River State, Calabar, Nigeria

Otun, Mumeen Omoniyi
Department of Library and Information Science
University of Calabar, Calabar, Cross River State, Nigeria

and

Etokudo, Edimek Titus University of Ccalabar, Calabar, Cross River State.

Abstract

The study aimed at assessing the knowledge management competencies of library staff in University of Cross River State, Calabar - Nigeria. To achieve the purpose of this study, three null hypotheses were generated. Literature review was based on variables studied. Survey research design was adopted for the study. The population consisted of sixty-five (65) librarians obtained through total enumeration. Questionnaire served as instrument for data collection. Population t-test analysis was the statistical analysis technique adopted to test the hypotheses under study to ascertain whether to reject or retain them. All hypotheses were tested at .05 level of significance. The findings showed library staff are significantly competent in knowledge creation, knowledge organisation and in the use of ICT tools in University of Cross River State, Calabar. The study recommended among others that for efficiency in the process of organising knowledge, library professionals need new skills to organise resources apart from the methods used in the pre-web era.

Keywords: Assessment, Knowledge, knowledge management, Competencies, Library staff

Introduction

Knowledge is an essential tool for the actualization of organisational goals in contemporary times and librarians are expected to be at the forefront of managing and organising this knowledge to get maximum satisfaction for the users of Information knowledge. The switch from industrial era to information era has created opportunity for new knowledge creation and dissemination. These are very significant in the efficient functioning of systems and processes for global economic development. The information era recognizes knowledge as critical assets for institutions and organisations. These assets require proper management for the organisations to remain relevant in the global competitive environment. Knowledge is perceived as that which incorporates data and information. It encompasses further processing of information combined with individual experience, which has been organised, broadly understood and applied. Wadhwa and Madaan, (2007) explained two main types of knowledge which are Tacit and explicit knowledge. They opined that tacit knowledge is considered as knowledge embedded in the mind of an individual, while explicit knowledge is that knowledge that has been codified, digitized in books, documents, reports, white papers, spread sheets, memos, training manuals which can be retrieved and transmitted more easily.

According to Jimoh and Oyelakin (2017) knowledge management deals with extracting value from an intellectual repository and sharing such valued knowledge with various stakeholders of the organisation. Husain and Nazim (2013) see knowledge management as the platform for engineering human environments for optimal production, transfer and usage of knowledge. Knowledge management will ensure the survival of an organisation by leveraging on collective wisdom to increase responsiveness and innovation. Knowledge management involves the administration process of the identification, creation, capture representative distribution, use and reuse of knowledge.

Library staff are individuals whose area of specialty is in the creation and management of knowledge. They played the role of information managers in handling organisations' documents and explicit knowledge. Thus, for them to be effective in accomplishing their tasks, it is of necessity for library staff to be involved in knowledge management activities and to maximize their prospects for success in what is seen as a very competitive field. The acquisition of

additional competencies in the field of knowledge management, such as knowledge creation, organisation and use of ICT are equally of immense benefit.

Competencies is defined by Todd and Southon (2001) as abilities, skills, know-how, and personal qualities acquired through deliberate, systematic and sustained efforts to smoothly and adaptively perform a particular role and carry-out complex activities or job functions successfully. This implies that for library staff to remain relevant in this 21st century where information is created and disseminated mostly through the use of technology, they must gain new skills and abilities. If they are not ready to acquire new skills, they will become irrelevant to their organisation and according to Sarrafzadeh (2005), they will probably lose out in competition for employment to people of other fields like scientists, engineers and IT professionals. Thus, library staff must encounter rapidly changing environments that require diverse skills, new thinking and broader perspectives and must be prepared to develop innovative ideas for the capture, process and sharing of knowledge and demonstrate good management practices if they want to remain relevant in the emerging knowledge age (Smythe, 2009). Consequently, in line with this background, this study assessed the knowledge management competencies of library staff in University of Cross River State, Calabar.

Objectives of the Study

The broad objective of the study was to assess the knowledge management competencies of library staff in University of Cross River State, Calabar, Nigeria. Specifically, the study sought to:

- i. Assess the competence of library staff in knowledge creation.
- ii. Assess the competence of library staff in knowledge organisation.
- iii. Assess the competence of library staff in the use of ICT tool.

Statement of hypotheses

The following hypotheses were formulated to guide the study

- Library staff are not significantly competent in knowledge creation in University of Cross River State, Calabar
- ii. Library staff are not significantly competent in knowledge organisation in University of Cross River State, Calabar.

iii. Library staff are not significantly competent in the use of ICT tool in University of Cross River State, Calabar.

Statement of the problem

The emergence of technology (ICT) and the continual influx of knowledge in different formats from within and outside the institutions have made knowledge management much more challenging. The fact that many library staff lack significant skills in the use of ICT, and couples with the need to engage ICT in the management of knowledge by library staff makes a study of this nature necessary.

Emerging developments in library and information services across the globe makes it imperative for university libraries to exhibit higher level of knowledge management competence. Hence, the researcher resolved to seek for information on knowledge management competence of library staff in University of Cross River State Calabar in terms of knowledge creation, organisation and knowledge dissemination through the use of ICT tools.

Literature review

This review was based on the following sub-variables competence of library staff in knowledge creation, knowledge organisation, and in the use of ICT tool.

Competence of library staff in knowledge creation

Bratianu (2015) posits that knowledge creation is one of the most important processes in organisations since it is the only way to keep the organisational knowledge dynamic. In line with the above, Uzohue and Yaya (2016) averred that though libraries have always supported the creation of new knowledge, however, librarians' involvement in that process is changing. Skills that helped librarians bring the world of knowledge to the local community are now being reexamined and modified to support the processes of creating knowledge locally. Scholars such as Seleim and Khalil (2011); Skyrme (2011); and Bratianu (2015) are of the view that the change in perspective shifts the focus from sourcing finished products from publishers to providing the infrastructure to produce new things locally and make them available globally. Marodza and Ngulube (2011) opined that librarians have also promoted a shift from subscriptions as business model to open access, a long-term project that has made slow progress but which has accelerated recently. This takes the form of establishing and populating institutions repositories, supporting

publishing activities in the form of journals, conference proceeding and other publications. This development implies that library staff will have to create and share knowledge themselves because the provider of knowledge is an indispensable fuel for the engine of development.

Ugwu and Ezema (2010) on competences for successful Knowledge management applications in Nigerian academic libraries with a sample size of 100 academic librarians found that the librarians need knowledge management to face the challenges of knowledge economy. In the work of Oyedodun, Laaro, Oyewumi and Akanbi (2018), who adopted survey research design in assessing the knowledge management competence of library and information science professionals in Nigeria with a sample size of 389 respondents. It was discovered that that traditional library skills are part of knowledge management spectrum and processes indicating that management is highly relevant to librarianship.

Competence of Library Staff in knowledge organisation

In recent times, the term Knowledge Management (KM) has been the subject of debates. Graff and Jones (2003) defined KM as tools, techniques and strategies designed to retain, analyse, organise, improve and share business expertise. Aghoghovwia (2014); Nazim and Mukherjee (2013); and Szostak, Gnoli and Lopez-Huertas (2016) posits that the activity of organising and representing documents in various sorts of information systems has a long history of study in library operations. In view of this, it may be argued that knowledge organisation lies at the heart of library staff. A deep-seated belief behind this assertion is that organising knowledge in information systems can qualitatively in the long run lead to intellectual, cultural, historical, scientific and social advancement of society.

Knowledge organisation according to Hjørland (2008), encompasses activities such as Cataloguing, document description, indexing and classification performed in libraries, databases, archives etc. These activities are done by librarians, archivists, subject specialists as well as by computer algorithms. Knowledge organisation as a field of study is concerned with the nature and quality of such knowledge organising processes as well as the knowledge organising systems used to organise documents, document representations and concepts. Library staff has often concentrated on applying new technology and standards, and may not have seen their work as involving interpretation and analysis of meaning. Consequently, traditional human-based activities are increasingly challenged by computer-based retrieval techniques.

Saumure and Shiri (2010) conducted qualitative analyses for exploration of the dominant knowledge organisation trends in the pre-web and post-web eras. They reported that the content of the professional literature in this era has shifted since the advent of the web. Although classic knowledge organisation principles remained prominent throughout both eras, the presence of new content areas, such as metadata, denoted a shift in knowledge organisation trends. In the pre-web era, the literature was in large part related to indexing and abstracting. They reported that in contrast, cataloguing and classification issues dominated the landscape in the post-web era. An interesting finding of this study was the presence of topics on personal information management. This topic broadens the context of knowledge organisation outside the traditional institutional boundaries.

Chaudhry (2011) pointed out that information professionals would be required to expand their skill set and sharpen their competencies to address the needs of the new environment with suggestions that expansion of skills would help take advantage of opportunities made available through the initiatives of digital libraries and knowledge management systems. Aytac, Kipp, Neal, and Hsieh-Yee (2012) stressed that knowledge organisation courses must expand and include topics beyond traditional cataloguing that early courses in the area of knowledge organisation emphasized cataloguing, subject analysis, classification and resource description while emerging trends encompass courses in metadata creation and organisation of electronic resources. Newer courses intersect with natural language processing, the semantic web and social networking. Some of these courses move beyond the description of resources while maintaining linkages to resource description through subject analysis and metadata creation in order to better educate tomorrow's information professionals.

Competence of library staff in the use of ICT tool

Library staff must update and upgrade their ICT skills to perform better in the digital environment. Cherinet (2018) posits that heavy reliance on technology suggests that library staff must be able to adapt and learn new technologies, advance skills, and tools such as Automation skills, Digital library competencies, Web 2.0 competencies, computer hardware competencies, institutional repository competencies, library management software skills, web page creations, RFID, e-journal, e-book, e-resources, knowledge management competencies virtual reference,

online metadata schema, database creation, internet competencies to be able to serve the users of library in this technological world.

Today, information produced, are available in print and digital forms. Therefore, in order to manage modern technologies, the library staff must become an expert in their (technology) uses for the maximum benefits of the users. Library staff should be able to apply the skills acquired through staff development while discharging their professional duties. ICT skills means the ability to find, develop and present information; be it text, image, number, or the entire integrated task (Raju, 2017). Therefore, library staff must adjust to a rapidly changing environment to acquire skills to become knowledgeable asset to the library. Bansode and Viswe (2017) averred that library staff needs to enhance their literacy level in the area of open-source library automation software, digital library software, and institutional repository software, etc. Furthermore, Ojedokun and Okafor (2015), examined "relevance and adequacy of IT skills set in some Nigerian University in a digital environment and the result revealed that many of the respondents do have knowledge and skills of email use and word processing task but lack knowledge of search engines and directories other than Google and Yahoo, respectively." Anthony and Vijayakumar (2015) in their study reported that "Library professionals have above average skills for ICT based information retrieval (accessing, searching and use of e-journals). The respondents also have an average level of skill in electronic document delivery, Inter library loan, online Indexing, abstracting services, Digital Reference services, Development of Institutional repository, SDI services, and electronic new additional alert."

Ajeemsha and Madhusudhan (2012) outlined "what skills and competencies are required for library staff in the digital era through the content analysis of literature in this area. The authors found that library staff in the digital era are required to be analytical, creative and flexible, have general skills such as communication, teamwork, critical thinking, and more technical skills including knowledge of collection development, digital library software, and metadata. The literatures further indicated that library staff requires knowledge of metadata standards, markup languages, experience in cataloguing, electronic publications and web design which are knowledge related to be efficient in knowledge management in the information age. Generally, the views of the authors reviewed were crucial to this study. However, the literature reviewed has shown that there is no such literature relating to knowledge management

competency in this geographical location. Therefore, this research work intends to fill this glaring gap.

Methodology

Survey research design was adopted for the study. The population of the study comprised of 65 library staff (professionals and para-professionals) from University of Cross River State. Nigeria. Attention was focused on only the professional and paraprofessional members of staff because they were considered as the most relevant to the study. Purposive sampling technique was used for the study. The instrument used for data collection was a structured questionnaire design to elicit appropriate and relevant information from the respondents. The validity of the instrument was ascertained. The reliability of the instrument was carried out using split-half reliability method and the coefficient values ranged .72 to ,89 this was considered high enough to justify the reliability of the instrument for use.

Results and Discussion

Hypothesis one

Library staff are not significantly competent in knowledge creation in University of Cross River State Library, Calabar. There is only one variable in this hypothesis which is library staff competence in knowledge creation. The statistical technique deployed to test this hypothesis was Population t-test analysis for one sample mean. The results of the analyses are presented in table 1.

Table 1: Population t-test analysis of whether library staff are significantly competent in knowledge creation (N=65)

Variables	X	SD	t-value	Sig level
Sample mean	21.65	2.19		
			6.07*	0.00
Reference Mean	20.00	0.00		

^{*}Significant at .05 level, critical t = 1.67, df = 64

The results presented in table 1 showed the mean and standard deviation of Library staff competence in knowledge creation. The comparisons of this sample mean with reference mean score of 20.00 yielded t-value of 6.07. The calculated absolute t-value is higher than the critical t-value of 1.67 at .05 level of significant with 64 degrees of freedom. With these results, the null hypothesis which stated that Library staff are not significantly competent in knowledge creation rejected. This result implied that library staff are significantly competent in knowledge creation.

Hypothesis two

Library staff are not significantly competent in knowledge organisation. The statistical technique adopted to test this hypothesis was population t-test analysis. The results of the analyses are presented in table 2.

Table 2: Population t-test analysis of whether Library staff are significantly competent in knowledge organisation (N=65)

Variables	X	SD	t-value	Sig level
Sample mean	26.35	3.48		
			14.77*	0.00
Reference Mean	20.00	0.00		

*Significant at .05 level, critical t = 1.67, df = 64

The results presented in table 2 showed that the mean and standard deviation of Library staff competence in knowledge organisation. The comparison of this sample mean with reference mean score of 20.00 yielded t-value of 14.77. The calculated absolute t-value is higher than the critical t-value of 1.67 at .05 level of significant with 64 degrees of freedom. With these results, the null hypothesis which stated that Library staff are not significantly competent in knowledge organisation is rejected. This result implied library staff are significantly competent in knowledge organisation.

Hypothesis three

Library staff are not significantly competent in the use of ICT tools. There is only one variable in this hypothesis, Library staff competence in the use of ICT tools in University of Cross River State Library, Calabar. The statistical techniques deploy to test this hypothesis was

student t-test analysis for one sample mean (also known as population t-test analysis). The results of the analyses are presented in table 3.

TABLE 3: Population t-test analysis of whether Library staff are significantly competent in the use of ICT tools (N=65)

Variables	X	SD	t-value	Sig level
Sample mean	23.67	2.59		
			11.47*	0.00
Reference Mean	20.00	0.00		

^{*}Significant at .05 level, critical t = 1.67, df = 64

The result presented in table 3 showed that the mean and standard deviation of Library staff competence in knowledge organisation. The comparison of this sample mean with reference means score of 20.00 yielded t-value of 11.47. The calculated absolute t-value is higher than the critical t-value of 1.67 at .05 level of significant with 64 degrees of freedom. With these results, the null hypothesis which stated that Library staff are not significantly competent in the use of ICT tools is rejected. This result implied that Library staff are significantly competent in the use of ICT tools.

Discussion of findings

Competence of Library staff in knowledge creation

The result of this hypothesis showed that Library staff are significantly competent in knowledge creation This result is supported by Seleim and Khail (2011) and Bratianu (2015;) who noted that this change in perspective has shifted the focus from sourcing finished products from publishers to providing the infrastructure to produce new knowledge locally and make them available globally. Nazim and Mukherjee (2013) also submitted that some of the support the library can provide is to enhance the creation of new knowledge in form of establishing and populating institutional repositories. This implies that it is the place of the library staff to assail beyond mere information keepers to producers and creators of knowledge themselves. This present study has shown that library staff of University of Cross River State are not just consumers but they are involved in knowledge creation.

Vol. 11: Nos. 1 and 2; April/Oct., 2022.

Competence of Library staff in knowledge organisation

Hypothesis two indicated that Library staff are significantly competent in knowledge organisation. This finding is in line with the view of Hjorland (2008); Szostak, et al (2016) who said that knowledge organisation is the core area of library profession and it encompasses cataloguing and classification, bibliographic organisation, indexing, abstracting, subject analysis and controlled vocabularies. The scholars in their view pointed out that most of the knowledge organisations scheme and tools such as thesauri and ontology were developed many years ago when digitization was not foreseen. In this present study, the organisation of knowledge has gone beyond the traditional cataloguing and the library staff are working towards adopting new form of knowledge organisation.

Competence of Library staff in the use of ICT tools

From hypothesis three it is revealed that Library staff are significantly competent in the use of ICT tools The findings of this hypothesis is related to the view of Cherinet (2018); and Ojedokun & Okafor (2015) who found that most library staff have knowledge and skills of email use and word processing tasks but lack knowledge of other search engines and directories not beyond Google and Yahoo, respectively. Similarly, the study equally agreed with Anthony & Vijayakumar (2015) who observed that library staff have above average skills for ICT based information retrieval such as accessing, searching and use of e-journals. These staff are also not lacking in the areas of electronic document delivery. The Present study discovered that most staff can use many of the ICT tools such as scanners, printers, photocopying machine, computer for word processing. However, more is expected from them.

Conclusion

Based on the results and findings of this study, it is hereby concluded that library staff in University of Cross River State, Calabar are significantly competent in knowledge creation, knowledge organisation and in the use of ICT tool. The study showed that majority of library staff are computer literate and have sound knowledge of available ICT tools in the library. However, there is still work to be done in this 21st century. Library staff should develop the ability to manage digital libraries and digital knowledge to continue to be relevant to the users and the society at large.

Recommendations

Based on the findings of the study, the following recommendations were made:

- That the University of Cross River State Library Administration should train and retrain library staff in areas of knowledge creation to enable them generate more knowledge for the library and society at large
- ii. That for efficiency in the process of organising knowledge, library professionals need new skills to organise resources apart from the method that was used in the pre-web era. They should teach existing library staff to increase man-power in the library.
- iii. That the University of Cross River State should provide assistive funds to enhance procurement of more sophisticated ICT tools to ease the burden of maintaining the traditional method of knowledge management.
- iv. In-house training should be organised from time to time. Also, the management of the library should encourage mentorship programme where the expert or experienced staff should teach new staff on new technologies in the library.
- v. Library staff should be sponsored to conferences, workshops and seminar on emerging technologies.

References

- Aghoghovwia, D. V. (2014). The role of libraries in knowledge management. *Journal of Humanities and Social Science*, 19(3), 55-57.
- Ajeemsha, S. &. Madhusudhan (2012). "Competencies for LIS Professionals in the Working Environment: Analysis and Dimensions." *International Journal of Library and Information Studies*, 2(4) 18–25.
- Antony, S. M. & Vijayakumar A. (2015). "ICT Skills among Women Library Professionals in SsusAndCusat: An Analytical Study." *Asian Journal of Multidisciplinary Studies*, 3(5)142 148.
- Aytac, S., Kipp, M. E., Neal, D., Rubin, V. L., Pattuelli, C., & Hsieh-Yee, I. (2011). Emerging trends in knowledge organisation and information organisation course curriculum. Proceedings of the American Society for Information Science and Technology, 48(1), 1-4.
- Bansode, S. Y., & Viswe, R. R. (2017). ICT Literacy among Library staff Working in the University Libraries in Maharashtra, India: A Study. *DESIDOC Journal of Library & Information Technology* 37 (5) 353
- Bratianu, C. (2015). Organisational Knowledge Dynamics: Managing Knowledge Creation, Acquisition, Sharing, and Transformation. Hershey: *IGI Global*. DOI: 10.4018/978-1-4666-8318-1.ch008
- Chaudhry, A. (2011). Goals of LIS education: A case of developing knowledge organisation competencies. *IFLA Pre-Conference Symposium on LIS Education in Developing Countries*, Puerto Rico.
- Cherinet, Yared & Mammo (2018). "Blended skills and future roles of librarians." *Library Management*, 39 (1/2) 93-105.
- Groff, T. R. & Jones, T. P. (2012). *Introduction to knowledge management: KM in business*. USA: Routledge.
- Hjørland, B. (2008). What is Knowledge Organisation (KO)? *Knowledge Organisation*, 35(2), 86-101.

- Husain, S. & Nazim, M. (2013). Concepts of knowledge management among library & information science professionals. *International Journal of Information Dissemination and Technology*, 3(4), 264-269
- Jimoh, R. G. & Oyelakin, A. M. (2017). Achieving knowledge management functionalities in the emerging technology-driven society using information technology. In W. O. Egbewole & M. O. Abdulraheem (Ed.), *History and philosophy of science* (Revised) (165-175). Ilorin, Unilorin Press.
- Mavodza, J & Ngulube, R. (2011). Exploring the use of knowledge management practices in an academic library in a changing information environment. *Sajnl Lib & Infor sci*, 77 (1), 15.
- Nazim, M & Mukherjee. B. (2013). Knowledge management competencies required among library and information science professionals: An Indian perspective. *Library Review*. 2 (67). 375-387.
- Ojedokun A. A., & Okafor V. N. (2015). "ICT skills acquisition and competencies of librarians: Implications for digital and electronic environment in Nigerian universities libraries." *The Electronic Library*, 33 (3) 502-523.
- Oyedokun, T. T., Laaro, M. D., Oyewumi, F. A. & Akanbi, M. L. (2018). Assessment of knowledge management competencies of Library and Information Science professionals in Nigeria. *Library philosophy and Practice (e-journal)*http://digitalcommons.unl.edu/libphilprac/1919
- Raju, Jaya (2017). "Information Professional or IT Professional? The Knowledge and Skills Required by Academic Librarians in the Digital Library Environment." *Libraries and the Academy 17*(4), 739-757.
- Sarrafzadeh, M. (2005), "The implications of knowledge management for the library and information professions", actKM *Online Journal of Knowledge Management* 2 (1), 92-102, www.actkm.org/actkmjournal_vol2iss1.php.

- Saumure, K., & Shiri, A. (2008). Knowledge organisation trends in library and information studies: A preliminary comparison of the pre- and post-web eras. *Journal of Information Science*, 34(5), 651-666.
- Seleim, A. & Khalil, O. (2011). Understanding the knowledge management intellectual capital relationship: A two-way analysis. *Journal of Intellectual Capital*, 12 (4), 286-314.
- Skyrme, D. J. (2011). Knowledge management: Making it work. *The Law Librarian*, 31(2), 84-90.
- Szostak, R., Gnoli, C., & Lopez-Huertas, M. (2016). *Interdisciplinary knowledge organisation*. Switzerland, Springer International Publishing.
- Todd, R. J. & Southon, G. (2001), "Educating for a knowledge management future: perceptions of library and information professionals", *The Australian Library Journal*, 50 (4), 313-326.
- Ugwu, C. I. & Ezema, I.J. (2010), "Competencies for successful knowledge management applications in Nigerian academic libraries", *International Journal of Library and Information Science 2(9)* 184-189.
- Uzohue, C.E. & Yaya, J.A. (2016). Knowledge management competencies required for library and information professionals in 21st century Nigeria libraries. American Journal of Business and Society, 1 (3), 90-97.
- Wadhwa, S. & Madaan, J. (2007). Conceptual framework for knowledge management in reverse enterprise system. *Journal of Knowledge Management Practices*, 8(2). www.tlainc.com/artcl137.htm