

LIBRARY, ICT AND INFORMATION MANAGEMENT: A FESTSCHRIFT

IN HONOUR OF



PROF. ANTHONIA EGHIESO OMEHIA

- INNOCENT C. MMMEJIM
- HUMPHREY I. WICHE
- TONYE IDONIBOYE-OBU
- ONYEMA NSIRIM
- BASSEY O. UMAHI

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DEDICATION

This book is dedicated to the Husband of our dear mother and mentor, His Excellency Chief Sir Barr. Celestine Ngozichim Omehia

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Chapter 29

ASSESSMENT OF DIGITAL LITERACY COMPETENCE OF ACADEMIC LIBRARIANS IN SOUTH WEST, NIGERIA

OYETUNJI, O.E
FAJONYOMI, O.J
ABDULGANIYU, D
AMBALI, Z.O

University Library, University of Ilorin, Ilorin

Introduction

Libraries all over the world have been faced with the evolving technological advancement, globalization, and digitization of information which makes librarians change from their manual role of librarianship to conform to the digital information age (Campbell, 2006). As such, librarians need much more in this digital age to embrace digital literacy skills in their work than ever. Digital literacy today goes beyond the understanding of hardware and software devices but involves other components which include elements of ICT literacy, Information Literacy, Media Literacy, and Visual Literacy (Martin, 2005). According to Anderson (2007), digital literacy is a mixture of Information Literacy, Technology Literacy, Media Literacy, Communication Literacy, and Visual Literacy. Literacy related to digital competence as reviewed by Ala-Mutka (2011) includes Internet Literacy, ICT Literacy, Media Literacy, and Information Literacy. As such, a digitally literate person must be literate in all the components that made up Digital Literacy. Digital competence involves the confidence and critical use of Information and Communications Technology to work and communicate. For librarians to be digitally competent, they must possess the knowledge to understand the functions of main computer application, online communication and the role of technologies in supporting creativity and innovation, skills to manage information, use internet-based services and technology to support critical thinking, innovations and creativity and attitude to interact with the technologies in such a way that will assist their job delivery.

Ahiauзу (2006) on his part stated that the librarian must update his professional skills and knowledge to be able to advance his leadership role in an ever-forward moving knowledge age. The age-long lack of interest of older librarians towards ICT should be dumped. Okiy (2010) asserted that if information professionals do not keep abreast of the changing technologies, they will be unable to manage the different types of information resources and cope with the ever-growing information needs of the users in this electronic age. Some of the studies carried out in Nigeria among academic librarians in determining their skills and competence level in the area of ICT and other related digital literacy components show that academic librarians are lagging in the acquisition of one or more of the digital literacy components. Kabiru, (2014) stated that the various researches conducted revealed that Nigerian librarians are lagging and reluctant to venture into the following three major areas to serve their

users effectively, practice, and become relevant in the new digital information environment. The major areas identified are: Knowledge of Tools and Technology, Information Skills, and Strategic Thinking and Analytical Skills. It was concluded that the crop of librarians that could thrive in the digital age are those who demonstrate specific skills, competence and are deeply committed to gaining new skills and knowledge throughout their careers.

Emiri (2015) stated in the study carried out in South-South (Edo and Delta states) Nigeria that librarians of this present age have very low knowledge of digital literacy skills (DLS) and with a little level of use and proficiency in the skills. He mentioned that librarians are an asset to libraries, therefore training and development of digital literacy skills (DLS) will enhance their productivity, and their level of expertise will determine, to a large extent, how effectively they can perform their jobs and carry out routine jobs in the library. It, therefore, becomes imperative that for librarians to continue to be relevant in the digital age, they need to constantly update their skills and knowledge as new technologies evolve to build up their competence level which makes them continue to be relevant in the digital age and deliver as digital librarians.

Statement of The Problem

In university libraries in South West, Nigeria, most academic librarians were employed in the era of traditional librarianship and have excellent information literacy skills in manual library operation. However, the digital transformation in library operations has made the librarian's job delivery changed. Therefore, there is a need to evaluate the level of digital literacy competence of librarians in selected universities in South-West, Nigeria with their service delivery.

Objectives of The Study

The objectives of the study are to find out the:

1. Sources of digital skills acquisition of librarians
2. Role of librarians acquired digital skills towards effective library service delivery
3. Competency level of digital skills possessed by librarians
4. Challenges that hinders librarians from acquiring digital skills

Literature Review

Digital literacy is the knowledge, skills, and behaviours used in a broad range of digital devices such as smartphones, tablets, laptops, and desktop computers, all of which are seen as a network rather than computing devices (Gui and Argentin, 2011). Various expressions are used for the proliferation of digital literacy terms, but transmit the same idea with slight differences in meaning: information literacy, information and communication technologies (ICT) literacy, media literacy network literacy (Tornero, 2004). Larraz (2013) stated that the components of digital literacy require the presence of four literacies:

- a. Information Literacy, for managing digital information;
- b. Computer Literacy, for treating data in different formats;
- c. Media Literacy, for analyzing and creating multimedia messages; and

- d. Communication Literacy, for participating in a safe, ethical, and civic manner from a digital identity.

Okiki and Mabawonku (2013) carried out a study on the influence of information literacy skills on academics research productivity in federal universities in Nigeria, the result shows that academics staff possessed high information literacy skills which include the ability to recognize a need for information resources, distinguish potential information resources, construct strategies for locating information, compare and evaluate information obtained from different sources, locate and access information resources, organize, apply and communicate information, and ability to synthesize and build on existing information which greatly influenced their research productivity. In the same vein, Mahmood and Richardson (2011) surveyed the websites of the academic libraries of the Association of Research Libraries (USA) regarding the adoption of digital technologies and usage by the librarians. The study found that all libraries were using various digital tools. The purpose of using these tools as identified are for sharing news, marketing their services, providing information literacy instruction, providing information about print and digital resources, and receiving feedback from users.

As digital technology facilities are crucial in the present library world, most libraries still lack these facilities as pointed out by Onyeneke (2007) that the unavailability of some ICT resources such as the Internet, E-mail, computer conferencing, fax machines, digital cameras, digital scanner, online information sources, and others is the major problem faced by most academic libraries in Nigeria. On the contrary, Ugwuanyi (2011) stated in the research on the influence of ICT literacy skills on its application for library use among academic librarians in South-East Nigeria that 75% of the respondents revealed that essential digital facilities like (computers, interconnectivity, LAN, CD-writer, cataloguing software, powerpoint projector, and scanner) are available and been used by the librarians. Furthermore, Deursen and Dijk, (2010) stated that digital competence is made up of four sets of skills;

- a. Operational skills to operate hardware and software parts digital technology
- b. Formal skills to handle the special structure of digital technology and the capacity to navigate in a hypermedia context.
- c. Information skills which refer to the capacity to search, select and process information in a computer;
- d. Strategic skills, which is the ability to use the computer and the Internet to attain particular professional goals.

In a related development, Vanwynsberghe and Verdegem (2013) categorized digital competence as cognitive and practical. Practical competencies involve having access to, handling, and the operation of digital technology and the content on the web (Deursen and Dijk, 2009), while cognitive competencies are for understanding and critiquing the digital operation and consequences of the digital technologies, content, and filters. (Vanwynsberghe, Hamburger and Vinitzky, 2014). At present, the state of digital competency of staff in Nigerian libraries is still at the infancy level (Nwachukwu, 2005). Adeyoyin (2008) agrees with the above assertion with findings

from a study on assessing the level of digital literacy among the library staff of Nigerian university libraries. Analysis of the data showed that out of 268 professional librarians, only 87 were digitally competent. More also, Omosor (2012) carried out a study at Delta State Polytechnics in Nigeria. It was revealed that there are low computer skills among the institution's librarians. A study by Adomi and Anie (2006) on the assessment of computer literacy skills of professionals in Nigerian university libraries also revealed that most of the respondents possess substandard levels of computer skills.

Okeji, Nwankwo, Anene, & Olorunfemi (2020) conducted a study on Assessment of Digital Literacy Skills of 21st Century Librarians in Private University Libraries in Anambra State. The findings of their study revealed that academic librarians in private universities in Anambra State possess digital literacy skills, the librarians sponsor themselves to train on digital literacy, they attend training twice a year and power failure and poor internet are the challenges librarians in private universities in Anambra State face. In another study conducted by Mulat and Natarajan (2020) on Digital Literacy Skills Among Library Professionals in Jimma University Libraries, the study revealed that electronic mailing, internet use, social networking, and mobile phone use are the major digital literacy skills amongst librarians. Also found that librarians acquired the skills through attending workshops, formal education, and youtube. The study further revealed that the availability of electricity and the internet are constraints hindering the use of digital literacy skills among librarians.

Librarians possessing ICT skills to manage the digital information age is not enough to ascertain their adequacy and competency, but the continued acquisition of knowledge and skills on the fast-changing ICT to provide better service delivery (Sun, Kumar and Satpathy, 2011). Okoli (2010) opined that librarians must be involved in training and retraining which will help to build their competence level. Ahiauzu (2006) on the other hand stated that librarians must up-date their professional skills and knowledge to be able to advance their leadership role in an ever-forward moving knowledge age. The age-long lack of interest of older librarians towards ICT should be dumped. One may be right therefore to submit that in repositioning the academic library in the 21st century, libraries should aggressively subscribe to the full introduction of IT (ICT) in our libraries. ICT remains a repositioning force in academic libraries in Nigeria amongst others.

Methodology

This study adopted a descriptive survey research design; Purposive sampling technique was adopted in selecting three universities each from three states to represent federal, state, and private university libraries; sample size for the study was one hundred and thirty-eight academic librarians; Questionnaire was used for data collection and analyzed using descriptive statistics.

Findings and Discussions

Demographic Characteristics of Respondents

The composition of respondents of this study is shown Table 1 below:

Table 1: Demographic details of Respondents

Universities	Frequency	Percentage
University of Ibadan	22	21.8%
Federal University of Agriculture Abeokuta	19	18.8%
Obafemi Awolowo University	16	15.8%
BOWEN University	12	11.9%
Olabisi Onabanjo University	11	10.9%
Babcock University	9	8.9%
Lead City University	8	7.9%
Osun State University	4	4.0%
Total	101	100%

Table 1 shows the result of the demographic attribute of the respondents. From the result above, the University of Ibadan has the highest number of respondents of 21.8%, followed by the Federal University of Agriculture Abeokuta which has 18.8% and Obafemi Awolowo University has the third-highest number of respondents 15.8%. Osun State University has the lowest number of respondents which is 4.0%. The result above shows that federal university has the highest number of respondents which is 56.4%, followed by private universities 28.7 which state universities have the lowest 14.9%. This shows that the federal universities selected have a high number of respondents.

Sources in which Librarians Acquire their digital Skills

The responses are summarized in Table 2 below;

Table 2: Sources in which Librarians acquire their digital Skills

Sources	Yes	No
Self-Practice	89 (88.1%)	12 (11.9%)
Workshop, Conference & Seminar	85 (84.2%)	16 (15.8%)
Friends & Colleagues	80 (79.2%)	21 (20.8%)
On the Job Training	76 (75.2%)	25 (24.8%)
Library School	65 (65.4%)	36 (35.6%)
Trial & Error	59 (58.4%)	41 (40.6%)
Others	2 (2%)	99 (98.0%)

Table 2 above shows that most of the respondents 89 (88.1%) acquired their digital skills through self-practice (1.12) mean and SD (.325), 85 (84.2%) respondents admitted that they got their digital skills through workshops, conferences, and seminar, 80 (79.2%) respondents acquired their digital skills through friends and colleagues. Compared to the three highest sources through which the respondents claimed to have acquired their digital skills, few numbers of respondents 65 (64.5%) claimed to acquired their digital skills through library school, while trial and error source is the least means through which the respondents 59 (58.4%) acquired their digital skills which have (1.41) mean and SD (.494).

Competency level of the Digital Skills possessed by Librarian

Table 3: Mean Rank for Digital Literacy competence of librarians

Digital Literacy Skills		Mean	Standard Deviation	Mean Rank	Remark
Information Skills	Literacy	2.67	1.023	2.62	High Competency
Media Literacy Skills		2.63	1.029	2.53	High Competency
Visual Literacy Skills		2.58	1.096	2.53	Low Competency
Computer Literacy Skills		2.58	1.018	2.32	Low Competency

The result of table 3 shows the competence level of the respondents. The result shows that the information literacy skills of the respondents have the highest mean weight (2.67) and ranked the highest (2.62), followed by media literacy skills which have (2.63) and visual literacy skills have the third-highest mean of (2.58) ranked (2.53); both media and visual literacy skills of the respondents are of the same mean rank which is the second to the highest, while a computer literacy skill of the respondents has the lowest mean (2.52) and also has the lowest mean rank (2.32). The remark is based on the average of the total mean of all the literacy which (2.6), any of the literacy mean that is above the average mean value of the total mean value (2.6) implies that the respondents are competent in such literacy, otherwise, low competence level. Information Literacy (2.67) and Media Literacy (2.63) have above the average mean value as such; it shows that the respondents are highly competent when it comes to information and media literacies. Visual Literacy (2.58) and Computer Literacy (2.52) have a mean value that is less than the average mean value respectively. This indicates that the competence level of the respondents in the aspect of visual and computer literacy is low.

Challenges faced by librarians in acquiring and using digital literacy skills

Table 4 presents the challenges faced by librarians in acquiring and updating their digital skills.

Table 4: Mean Rank for Challenges faced in Acquiring and Updating Digital Skills

Digital Literacy Skills	Mean	Standard Deviation	Mean Rank
Technophobia	2.49	0.96	7.06
Lack of Personal Interest	2.41	0.93	6.64
Inaccessibility to Digital Facilities	2.19	0.86	5.84
No time is given to librarians due to their working hours	2.10	0.92	5.59
Lack of support from authorities for implementing ICT application in library	2.05	0.83	5.46
High cost of digital skill training	2.04	0.82	5.36
Inadequate Information and Communication Facilities	2.00	0.78	5.18
Inadequate training	1.84	0.69	4.65
Irregular Power Supply	1.84	0.75	4.62
Poor Internet Connectivity	1.88	0.81	4.61

Table 4 above shows that the mean rank, ranks technophobia (7.06) the highest challenge faced by the respondents, lack of personal interest (6.64), inaccessibility to digital facilities (5.84), no time given to librarians due to their working hours (5.58), lack of support from authorities for implementing ICT applications in the library (5.46) high cost of digital skill training (5.36) inadequate Information and Communication facilities (5.18), Inadequate training (4.65), irregular power supply (4.62) and poor Internet connectivity (4.61) the lowest of the mean rank. The decision is based on the average mean of the total mean (2.08). The result shows that the most pressing challenge faced by the academic librarians includes; technophobia, lack of personal interest, inaccessibility to digital facilities, and no time given to librarians due to their working hours. Others are: lack of support from authorities for implementing ICT applications in the library, high cost of digital skill training, inadequate information and communication facilities, inadequate training, irregular power supply, and poor internet connectivity is the least of all.

Discussion of Findings

More than eighty percent of the respondents indicated that they acquired their digital literacy through self-practice, conferences/ workshop/ seminars) and colleagues/ friends which means that the mentioned sources above are the major sources through which the librarians acquired their digital skills. This might be because these are the easiest sources to reach involving less cost and stress. This agrees with the finding of Emiri (2015) and Mulat and Natarajan (2020) that librarians acquired digital literacy skills through colleague's assistance and IT workshops.

The study also revealed that the information literacy competence level of the respondents is high. This indicates that the respondents can identify, locate, access, and use information acquired to solve users' information needs and also can use OPAC to retrieve information materials. The finding of this study is in agreement with the findings of Okiki, and Mabawonku (2013) which showed that academic

librarians possessed high information literacy skills which include the ability to recognize a need for information resources, distinguish potential information resources, construct strategies for locating information, compare and evaluate information obtained from different sources, locate and access information resources, organize, apply and communicate information, and ability to synthesize and build on existing information.

The result shows that the challenges are both on the part of the library management for not making the digital facilities accessible to the librarians and also not giving them the time for training due to the working hours; respondents lacking interest in acquiring digital skills. This may be because both the library management and librarians have not fully value, appreciate and embrace digital technologies. Also on the part of the librarians, they are technophobic, and anxious in operating digital technology, this is in agreement with the findings of Okeji, Nwankwo, Anene, & Olorunfemi (2020). As such library management should encourage librarians to update and acquire digital skills by giving training leave to substitute the working hours that do not give room for digital training.

Conclusion

The acquisition of digital literacy skills by librarians has been discovered to enhance individual service delivery and career progression. For librarians to fulfill their primary aim of meeting the information needs of users and the institutions, the librarians must be empowered with all necessary digital literacy skills to accomplish their mission. Librarians of this present age have very low knowledge of digital literacy skills in the sampled states with a little level of use and proficiency in the skills. Skills have been acquired through informal means like through colleagues, and sometimes through assistance from friends. Librarians are an asset to libraries, therefore training and development of digital literacy skills will enhance productivity.

Recommendation

- (i). Librarians are advised and encouraged to put up a positive attitude towards updating their digital skills;
- (ii). Library management should work hand in hand with the librarians in encouraging them to update and acquire digital skills by giving training leave to substitute the working hours that do not give room for digital training, and also reduce the workload.
- (iii). Library schools should put more effort into teaching digital skills practically; take the practical aspect of the library school curriculum as important as the theoretical so that the librarian will have the digital skills from library school and build on them in their various working environments.
- (v). More training and awareness should be given on visual literacy, to increase visual literacy awareness and as a part of digital literacy among academic librarians.

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