# Assessment of Digital Literacy Skills of Librarians in Tertiary Institutions in Niger State

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### Abstract

The exponential growth of information sources, resources and the continued ICT sophistication of libraries all over the world call for capable and Information and Communication Technology compliant librarians in Nigeria, This article assesses the Digital literacy skills of librarians in tertiary institutions in Niger state. The survey research method was applied in the study using a random sampling technique to draw the sample. Fifty-eight copies of the questionnaire were administered while forty-nine copies were completed, returned and used in the study which represents 84% of the response rate. Two research questions were answered and data were analyzed using Statistical Package for the Social Sciences (SPSS). The finding uncovered that the librarians lack the requisite digital literacy skills to access the wealth of digital information resources available. The study recommends some steps to turn around the situations amongst; librarians must be empowered with all necessary digital literacy skills, embark on rigorous training and retraining programs, workshops, conferences and seminars, there should also be a coherent training policy for the librarians on a sustainable basis to increase their requisite digital literacy skills.

## Keywords: Digital, literacy, skills, librarians, institutions

#### Introduction

There are a growing number of Information and Communication Technologies (ICT) initiatives in the world. These initiatives are usually undertaken on the basis that they are important for social and economic development. However, one barrier to the efficient utilization of ICT in developing countries is the relatively low level of digital literacy. Without the ability to manipulate and use digital information effectively, investments in ICT for development projects may be unsuccessful. The significance of information to human society and its mode of communication can no longer be overemphasized. The society requires information on its day-to-day activities; education, management, mass communication, governance, teaching, learning, research and development (Osinulu 2011).

Despite the importance of information and communication technologies to the present day information delivery, most reports and studies ascribe low digital literacy skills to librarians in Nigeria. Ani, Atseye and Esin (2005) wrote, "Suitably qualified personnel are required for the application of information and communication technology in the library sector of the Nigeria economy in support of national development. Presently, there is a low level of information and communication technology Skills among librarians in the country: most librarians have little or no skills to work with computers and the internet".

Digital literacy is presently used everyday life and the digital literate is able to easily communicate, retrieve and disseminate information and use it to improve their lot in life. Librarians are more in dire need of these technological skills for every aspect of their jobs and daily lives. It is therefore very important that no matter the level, librarians should be encouraged to learn and grow in their career.

Digital Literacy skilled librarians enable institutions to use technology more effectively, leading to increases in productivity and competitiveness and ensuring that operational objectives are achieved more efficiently. According to Shaughnessy (2006), quite a few libraries are able to remotely access databases and maintain their own computerized databases. Since automation has become so common within libraries, it is important that librarians are skilled in database searching. Librarians are responsible for the development and indexing of databases as well as instructing patrons on how to efficiently search through and locate needed reference and information materials.

#### Literature Review

With the dramatic increase of articles found online, the ability to search for Digital information in databases rather than just on the shelf is critical. Understanding the difference between a keyword and subject search and the benefits of using truncation symbols, Boolean operators, and synonyms can mean the difference between a successful search and frustration. Doctoral students. especially those returning after years out of the academic environment benefit from instruction in these digital literacy skills.

Effective and efficient search for electronic

resources in Digital format is expected to enhance the quality of services rendered by librarians of any institution. In Nigeria, the use of computers in information searching is gradually gaining popularity and so the librarians need to be computer literate. Thus, many Nigerian university libraries are striving to be fully automated while some are still in the process of computerization. To derive maximum benefit from the increasingly electronic library use environment, the librarians need to be computer literate.

Khalid and Hafeez (2010) found that electronic information resources (online/offline) are used for the purpose of conducting scientific research, teaching and community development etc. Letchumanan and Tarmizi (2011) study found that factors such as easy access reduced physical visit to the library. The user-friendly features of electronic information resources offer a comfortable platform for participants to use e-books, e-journals, emagazine, e-newspaper, e-thesis, e-dissertation etc. Digital information resources can be used to enhance and improve several fields of study. In this way, Sivathaasan et al., (2013) focused on a research of demographic variables and usage of Digital information resources using a sample of 75 librarians, employed at the University of Jaffna library and identified a statistically significant difference between the mean number of usage of Digital information resources and gender (t = 5.099, p < 0.05) with the highest mean value of male university teachers using independent samples t-test. Further, they concluded that there are significant mean differences among the age group, teaching language and experiences on the usage of Digital information resources, whereas mean usage of Digital information resources does not differ significantly among five different faculties (F = 2.075, p > 0.05). In another study done by Sivathaasan and Velnampy (2013), on use of Digital information and academic performance resources university teachers, they jointly indicated that usage of Digital information resources has a strong positive association with academic performance (r = 0.623, p < 0.01) and it has an impact on academic performance at the rate of 38.8

#### Statement of the Problem

Many questions are raised by the implication of low digital literacy reports of librarians in Nigeria; how competent are these librarians in meeting the information needs of the users in an age where ICT has become a major tool of information delivery. Libraries are losing users (Whitchurch 2011) this is because these users are increasingly being drawn into a world of immediate online access to digital information. More so, users demand the latest

internet-based resources and services. For libraries to retain and better serve these users, they must be able to provide digital services.

The issue of skill competence in the use of ICT is significant, particularly in the information age. Librarians must acquire skills to be relevant in their profession, in which nearly all library services are performed digitally. There are still librarians who are not digitally literate, and who are deficient in the use of needed skills to operate a digital environment. Librarians in many libraries in Nigeria still carry out library routines and functions manually. This paper explores computer skill and competence among librarians in tertiary institutions in Niger State adopting the digital literacy skills checklist of The Open University of Dundee 2012 Questionnaire.

#### **Research Questions**

This study provides answers to the following questions:

- 1. How proficient are librarians in Niger state in finding Digital information?
- 2. How proficient are librarians in Niger State in Using Digital information?

Significance of the Study

This study is expected to provide a basis for comprehensive information on digital technology literacy as a factor of accessing digital information resources among professional librarians through curriculum changes and policy decisions. The study establish the existing gaps in the adoption of digital technology by professional librarians as a factor or means of accessing digital information resources. The output of this study will serve as a blueprint for professional librarians and policy makers to chart the right course of action for the use of digital technology literacy in furthering education

### Methodology

This study uses a questionnaire. The focus of the study was to assess the digital literacy skills of librarians in Niger state. Six tertiary institutions in Niger state are selected for the study which includes Federal University of Technology Minna, Ibrahim Badamasi Babangida University Lapai, The Federal Polytechnic Bida, Niger State Polytechnic Zungeru, Federal Collage of Education Kontagora and Niger state college of education Minna were selected out of fourteen (14) tertiary intuitions across the state. Fifty-eight copies of the questionnaire were administered to respondents in the institutions under study. The population consisted of librarians, and random sampling technique was used to distribute questionnaires. Forty-nine copies of the questionnaires were filled and returned, representing an 84 per cent return rate. The data were analyzed with frequency count and simple percentages. The designed questionnaire used was adopted from the digital literacy skills checklist of

## Data Analysis and Discussion

Table 1: Distribution of respondents

Institutions	Distributed	Returned	Damaantaga 9/
FUT Minna	25	Actui neu	Percentage%
IBB University, Lapai	15	21	36
Federal Polytechnic,		14	24
Bida	6	5	9
Niger State Polytechnic	5		_
Zungeru	,	4	7
Federal College of	4		-
Education kontongora	•	3	5
Niger State College of	3		2
Education, Minna	J	2	3
	58	49	84

Table 1 above shows that there is variation in the response rate from Librarians. The variations in the response rate are due to the fact that the population size of librarians from the various institutions under

study is not of equal proportion. The table indicates that the Federal University of Technology Minna has more population than other institutions in Niger State.

**Table 2 Gender Distribution Table** 

Gender of Respondent FUT Minna		Name of Library								
	IBB Universit y, Lapai	Federal Polytechnic, Bida	Niger State Polytechnic Zungeru	Federal College of Education Kontangora	Niger State College of Education, Minna	Total				
	14	2	4	2	1	2	25			
Male	56%	8%	16%	8%	4%	8%	51%			
	7	12	1	2	2	0	24			
Female	29%	50%	4%	8%	8%	0%	49%			
· ·····	21	14	5	4	3	2	49			
Total	43%	29%	10%	8%	6%	4%	100%			

Table 4.2 showed that the male respondents (25: 51%) were slight above female of (24: 49%). These indicate that both male and female respondents are almost equally distributed across the surveyed Institutions. Figure 1 further showed the gender distribution among the institution.

Table 3. Proficiency in finding digital Information

ITEMS :	1	1000		2		3	Mean
know how to find information on the	3	6%	14	29%	32	65%	2.6
web I know how to find information i n the	3	6%	11	22%	35	71%	2.7
Online library.  I can use advanced search options to limit	7	14%	1	2%	41	84%	2.7
and refine a search I can use keywords commonly used in my	7	14%	5	10%	37	76%	2.6
discipline to search for information online.				00.0			
I can use and engage with social	5	10%	4	8%	40	82%	2.7
networks, e.g. Facebook, Twitter I know when I need to change my search	5	10%	10	20%	34	69%	2.6
strategy or when my search is complete I can use scanning/skimming techniques	9	18%	26	53%	14	29%	2.1
to quickly access the key relevant information on a web page.  Key: 1 = Very Confident 2 = Quite Confident 2	nfident	3 = N	ot Conf	ident			
-3. 1 – Very Confident 2 – Quite 5		25	<b></b>				

Table 4.4.1 revealed that 84% of the respondents indicated that they could not use advanced search options to limit and refine a search, while 82% indicated they were not confident in the use and engagement with social networks such as

Facebook, Twitter. Similarly, 71 %(53+18) were confident in the use of scanning/skimming technique to quickly access key relevant information on a webpage.

Table 4: Proficiency in using digital Information

ITEMS		1	2		3		Mean
ITEMS	0	1/0/	19	39%	22	45%	2.76
Using information in different media, for	8	16%	19	3970	22		
example, podcasts or videos		- Alicia Sansa		4507	20	41%	2.73
3	7	14%	22	45%	20	41/0	2.75
web page, blog, wiki, video, podcast,							
academic journal article) or person is							*
credible and trustworthy				23000		0.607	2.70
Using other people's work (found online)	5	10%	2	4%	42	86%	2.78
without committing plagiarism							• • • •
Keeping a record of the relevant details of	4	8%	5	10%	40	82%	2.80
the information you find online							78 95518
Using social bookmarking to organize and	2	4%	7	14%	40	82%	2.71
share information							
Sharing files legally with others	1	2%	8	16%	40	82%	2.82
Citing a reference to an online resource	1	2%	12	24%	36	73%	2.71
(e.g. in an assignment) using the correct							
format						2:	1

Key: 1 = Very Confident 2 = Quite Confident 3 = Not Confident

Table 4.4.2: revealed that 86% of the respondents indicated that they could not use other people's work (found online) without committing plagiarism while 82% of the respondents also indicated they could not keep record of the relevant details of information they find online, same 82% indicated that they were not confident in sharing files legally with others and also 82% indicated they could not use social bookmarking to organize and share information, however, 59% (14+45) of the respondent were confident in assessing whether an online resource (e.g. web page, blog, wiki, video, podcast, academic journal article) or person is credible and trustworthy.

#### **Findings**

This study was carried out to investigate the Assessment of Digital Literacy skills of Librarians in tertiary institutions in Niger State. To do this, a cross-sectional survey research design was adopted and guided by two (2) research questions. Reviews of relevant literature were also conducted.

Random sampling techniques were used to select the primary and secondary population of the study which comprised the Institutions and librarians. A set of questionnaire was administered to the 58 sampled respondents to elicit responses on proficiency in finding, using and creating digital information and also evaluation of digital information. The data collected for the study were collated, presented and analyzed using descriptive and statistical tools. Frequencies and percentages were used to answer the research questions.

Based on the data analysis the following are the major findings of the study:

- 1. Most librarians in Niger state are not very confident in finding digital information resource on the web, online library, using advanced search options, using keywords to search, engage with social networks, search strategies and using scanning/skimming techniques. A few numbers of the librarians are quite confident and very minimal numbers of the librarians are very confident of finding particular digital information web, online library.
- Majority of the librarians under the area of study are not confident in using digital information resources either for learning, teaching and research, only a few and minimal numbers of the librarians are quite confident and very confident in using digital information resources.

### Conclusion and Recommendations

Based on the findings of the study, the researcher concluded that librarians in tertiary institutions in Niger State have a very low skill in accessing digital information generally. However, Digital literacy skills are essential for information professionals. Librarians have a lot to offer users through ICT in the current dispensation. It is therefore imperative

that they have commensurate skills in the use of these technologies. Many past reports assign low digital literacy to librarians in Nigeria. increased skills recorded in the present research could be a result of increased awareness and diffusion of ICT in many areas as witnessed in the last few years. Although the findings of this research indicate an improvement of digital literacy levels over previous studies, some percentages of librarians still rated themselves as deficient in vital areas of digital literacy skills. The target should be that every librarian in Nigeria should be equipped with all the necessary skills to enable them function effectively in the present age. This is highly expected considering that ICT is the current tool for information delivery and librarians can only harness these by equipping themselves with the necessary skills and competencies.

### The study recommended that:

- 1. For librarians to fulfil their primary aim of meeting the information needs of users and the institutions, librarians must be empowered with all necessary digital to accomplish literacy skills mission of teaching, learning, research and community building, the librarians should, as a matter of urgency embark rigorous training and retraining programs, workshops, conferences and seminars as no librarian can thrive and his/her discharge effectively responsibilities without digital literacy and knowledge in this Century information society.
- 2. The librarians must be sophisticated, flexible and well-grounded in manipulating and exploring the potentials of digital literacy skills to deliver information resources in various forms and format, the librarians should strive to become experts and have the skills to effectively use technology tools to access information in a variety of ways and format and to deliver information resources to the users.

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