

## **Acquiring Digital Skills for Effective Service Delivery of E-Resources by Library Professionals in Public Higher Institutions in Imo State, Nigeria**

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### **Abstract**

*Acquiring digital skills by librarians in public higher institutions for effective service delivery in Imo State, Nigeria were examined with the view to ascertain the various digital skills possessed by the librarians, determining the ways of acquiring the skills and the challenges to the acquisition of the skills. The study adopted descriptive survey design, the study covered four (4) public higher institutions in Imo State with population of 98 professional and para-professional librarians. Purposive sampling technique was used to select the 4 higher institutions in Imo State. Rating scale was adopted as instrument for data collection which was in line with the research questions. Data collected were analyzed using descriptive statistics. The result of the study revealed that the most digital skills possessed by the librarians is having knowledge of computer operation , creating new word process document and social networking. The results also showed that colleague's assistance is the most method of acquiring digital skills, followed by attending computer training, self study and use of diverse technologies. More so, the result showed that poor ICT infrastructures, lack of funds and lack basic skills in the use of ICT, poor internet connectivity and telecommunication, as well as non-digital library course in the LBS curriculum are seen as challenges in acquiring digital skills. The research therefore concluded that all librarians in institutions of higher learning should as a matter of necessity acquire different digital skills for effective service delivery. The study recommended that Government and management of higher institutions should provide funds for training and re-training of librarians for effective services delivery in institution of higher learning.*

**Keywords:** Digital Skills, Librarians, Services Delivery and Higher Institution

### **Introduction**

Today there is a global trend in information resources management among library staff with emphasis drifting from paper to e –resources as a result of advances in information technology. The fact that print forms of information resources are characterized by high cost , bulkiness , slow in delivery ,scarcity etc have made many libraries transform their resources through digitization processes from paper to electronic sources (Nwachukwu Asiegbu & Igwesi, 2010). Adegboire (2011) stated that academic librarians now use digital skills for better service delivery and for satisfying diverse user's needs as these skills have no physical boundary; More so, these skills have round the clock availability, multiple access e.g.; many users can access the same information at the same time, and can be reproduced without tear and wear as observed in paper resources.

Digital skills also have the advantage of networking ability, space saving, cost saving with very friendly user search and retrieved interface (Baro,Obaw and Aduba, 2019) . Therefore, librarians ought to develop their skills to enable them operate effectively in the digital environment hence , saving in storage devices, retrieving information saved



in a system, scanning and uploading data and images, printing data, sending and attaching e-mails, typesetting etc are various necessary basic skills needed by librarians to operate in a given digital environment

The acquisition of digital skills for e-resources have become more and more vital due to the paradigm shift from paper to online education. Although, Ambrose and Ogunbodede (2022 ) opined that e-resources have numerous advantages as it allows remote access to various online resources, it also have some disadvantages as it is computer-based and thus need information literacy skills for searching, retrieving and uses . Information literacy skill is an important skill that enables one to effortlessly search and critically evaluate the huge amount of information accessibility due to sudden increase of information (Adeleke, 2016).

Librarians are no longer just the guardians of books; they are information providers in an environment that is constantly changing where information needs to be gathered very quickly and effectively. The librarians that can survive in this environment are those that have acquired the digital skills effectively and proactively to a broad spectrum of contemporary challenges that focused on speed, cost and quality of information (Abbas, 2014). Acquisition of digital skills increases self efficiency which in turn influence ICT acceptance. The librarians are therefore expected to acquire additional skills to enable them work efficiently within the contemporary library world for qualitative service delivery to the library users. It was based on this assertion that this work acquiring digital skills by the librarians in public higher institutions for effective service delivery was embarked upon.

### **Statement of the Problem**

As a result of new and emerging technologies today, there is a fundamental shift from traditional information environment to e-environment. Library resources are now selected, organized, processed, accessed and disseminated to the user communities through various digital skills such as social networking, online cataloguing, printing of document etc.

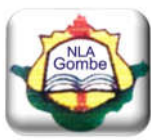
It is unfortunate that despite the fact that we are in a digital era of information, most librarians lack the requisite expertise to maneuver the current ICT facilities available with the view to navigating into the wealth of information resources available everywhere on the web and other specialized databases. The librarians therefore do not utilize the available facilities to deliver, provide and disseminate information resources to the end users.

The use of educational software, digital gadgets and resources are now being made available to the librarians hence the influx of information globalization and the use of digital technology has made the world a global village where access and use of digital skills has become a common practice. Despite all these, there is still lack of utilization of digital literacy skills by librarians as most of them lack skills on how to operate and manage the available digital facilities hence the need for this research.

### **Purpose of the Study**

The main purpose of this study is to examine digital skills acquired by the librarians in public institutional libraries in Imo State for effective service delivery. The study specifically intended to:

1. To ascertain various digital skills possessed by librarians in public higher institution in Imo State.
2. To determine ways of acquiring digital skills by the librarians for services delivery, and
3. To identify the challenges to the acquisition of digital skills by librarians.



## **Research Questions**

The following research questions were posed to guide the study:

1. What are the various digital skills possessed by the librarians in public institutions in Imo State?
2. What methods can be adopted in acquiring digital skills by the librarians for effective service delivery?
3. What are the challenges in acquiring digital skills by the librarians?

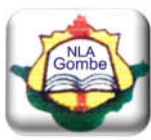
## **Review of Related Literature**

The use of digital information resources has been increased by the information users, as well as librarians who are greatly acquiring skills for the growth of the libraries. Abid (2023) stated that digital skills have evolved significantly due to increase in integration of technologies in library service delivery. With the introduction of Information and Communication Technology (ICT) in the libraries especially academic libraries, all the areas in librarianship such as cataloguing, circulation services, collection development etc has changed and the new technological environment in academic libraries demands digital skills from academic librarians to play an effective role in providing digital information to the library users (Eyerinmenen & Onuh, 2022). Khan and Bhatti (2020) and Bawden, (2008) opined that digital skill is a set of attitudes, understanding and skills to handle and communicate information and knowledge effectively in a variety of media and formats. Bell and Shank (2008) also stated that digital skill is the ability to use digital technology, communication tools or networks to locate, evaluate, use, manage and create information. It is the ability to understand and use information in multiple formats from a wide range of source when presented through the computer. It has to do with person's ability to perform tasks effectively in digital environment. The skill includes the ability to read and interpret media, to reproduce data and image through digital manipulation and to evaluate and apply new knowledge from digital environment (Mulat and Natarajan, 2020).

Digital skills are therefore important component to librarians which enable them to locate, organize, understand, evaluate and analyze information using digital technologies. It provide the librarians with a lot of advantages such as reduction in physical footprints of the library documents making information available 24 hours making office equipment available on the user's desktop irrespective of location, inclusion of documents in digital format, provides the users with the ability to load text, often allows multiple simultaneous users, less laborious and access to more extensive contents in a structured manner (Mohammed and Elvis, 2021). Baro, Obaw and Aduba (2019) emphasized that digital skill are characterized by a collection of multimedia and other types of resources , availability of materials in a computer processable forms, use of digital technology to acquire, store , preserve and retrieve information ,global access to the entire collection through an electronic means.

For effective service delivery, digital skills have several advantages over the traditional methods of information delivery as it have the advantage of absence of physical boundary, round the clock availability and multiple access. Ugwuany (2009) opined that digital skills for effective services delivery provides better access, ease of retrieval, space and cost saving with ability to provide link to similar or related resources etc.

Amkpa and Abba (2009) stated that effective library delivery through digital skill possessed and required adequate planning and implementation of programs, sufficient funding and realistic infrastructure, adequate power supply, position attitude of library staff and appropriate technical knowledge. Amkpa and Abba (2009) went further to say that digital Skill required for operation and functioning include; having knowledge of computer operation, mastery of



the use of application software such as creating a new word processor document, printing of documents, ability to use world wide web, etc. Choi (2006) opined that in traditional library skills and knowledge, digital librarians are expected to possess additional knowledge and skill to work within the digital information world. Therefore, educating digital librarians who are competent to work in the dynamic and complex digital environment has become a high priority (Ezema, Ugwuanyi & Ugwu, 2014). Although Honey, Culp and Speilvogel (2005) is of the view that librarians required digital skills that will encourage them to communicate effectively using online platforms, analyze and interpret data, understand computational modeling, engage in problem solving and ensure security etc. Librarians should possess skills that are appropriate to support their intellectual ability for effective services delivery.

Ways of acquiring digital skill for services delivery cannot be overemphasized. The efficiency of any library no matter the types depends to a large extent on the competency of its staff. Adomi and Famola (2013) pointed that Professional development is an important component of ongoing librarian's education and is very critical to performance of their roles. He continued by saying that one of the ways is by continuation of acquisition of knowledge that has been met by either formal education or on-the-job training and off-the-job training based on where the training is taking place. On-the-job training is in form of demonstration, lecture, simulation, mentoring, discussion, regular staff meeting, literature research etc while off-the-job training takes place outside the normal working environment in form of further education and career development, conference and seminars, short course, professional contribution, experimentation etc. Eke (2011) further identified that digital skill for services delivery can be acquired through conference, workshop, and seminars attendance, on-the-training, mentoring, formal professional education, publications, on-going postgraduate programmes etc.

Furthermore, American Library Association (2012) stressed that librarians should possess the variety of skills – technical and cognitive, having the ability to communicate, evaluate, and create digital information in a wide variety of formats, able to use diverse technologies appropriate and effective to information, interpret results, and judge the quality of that information. Khan and Bhatti (2020) stated that there is need for continuing education in the modern information environment, stressing that education and training must become a continuous life long process to keep abreast with change a professional which is becoming increasingly complex and specialized. Also, Srivastava (2004) pointed out that Librarians need opportunities for higher education and opportunities for attending conferences.

Challenges to the acquisition of digital skills include poor development of technology, infrastructure, poor attitude of librarians, poor internet connectivity and telecommunication infrastructure, lack of competent trainers for digital skills, none availability of digital library course, lack of funds, and lack of commitment from management to send staff for further courses. Tanawade (2011) stated that incompetence on the side of Librarians, many of them lack self-reliance in the face of growing information technology for services delivery, this problem slows the delivery of services and also delays productivity. Sahabi and Elvis (2021) stated that lack of basic skills in the use of information technology has become bottleneck for better library services, Anira (2011) added that librarians who do not have advanced ICT skills cannot provide effective office services, based on that any librarian who do not have skills especially ICT skill has a problem in providing digital library services in this digital age. The strength of any library lies on the information resources provided by both printed and online. Sahabi and Elvis (2021) opined that funds are needed to manage the services in the library but the level of Government support to education sector is totally not enough. That is why Nawalu (2000) emphasized that the problems with computer application in African libraries include



indifference and inadequate Government funding. He emphasized that funding is an important tool to library service delivery.

### Methodology

The study adopted descriptive survey research design. The study was carried in Imo State and covered four (4) public higher institutions in Imo State. The population of the study is 98, this is made of 47 Professional and 51 Para-professional librarians from Imo State University Owerri, Alvan Ikoku College of Education Owerri, Federal Polytechnic Nekede, and Imo State Polytechnic, Omuma. Purposive sampling technique was used to select the 4 higher institutions out of 8 higher institutions in Imo State. A structured questionnaire rated with the four point designed in line with research questions and validated by experts was used for data collection. The administration and collection of the questionnaire was personally done by the researcher in other to enhance high return rate and it lasted for 3 working days. Data collected was analyzed using descriptive statistics ie frequencies, percentages and mean scores. In order to effectively analyze responses , nominal values were assigned to response categories in the scale and computation carried out , while decisions on the cut off points were based on Gregory and Ward (1978) formula for deterring the lower and upper limits in means (x) thus: 0.50 - 1.49=strongly disagree; 1.50-2.49 = disagree; 2.50 -3.49 =agree; 3.50-4.49 =strongly agree. The lower limit ranging from 0.50 -2.50 is considered as negative response while the upper limit ranging from 2.50-4.49 are considered as positive response.

### Results

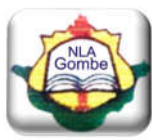
The interpretation and results of the data collected in line with research questions earlier formulated to serve as guide to the study is as follows:

**Research Question One:** What are the various digital skills possessed by the librarian?

**Table 1: Various digital skills possessed by the Librarians**

							(N-98)
S/N	Items Statements	SA	A	D	SD	MEAN	REMARKS
1	Knowledge of computer operation	72(288)	26 (78)	-	-	3.7	Positive
2	Creating a new word process document	28(112)	66(198)	-	-	3.2	Positive
3	Printing of document	30(120)	53(159)	10(20)	3(3)	3.1	Positive
4	Ability to use world wide web	22(88 )	47(141)	19(38)	10(10)	2.8	Positive
5	Record management	13 (52)	37(111)	48(96)	-	2.6	Positive
6	Social networking	20 (80)	78(234)	-	-	3.2	Positive
7	Online cataloguing	12 (48)	23 (69)	40(80)	23 (23)	2.2	Negative
8	Library software installation	-	14 (42)	53(106)	31 (31)	1.8	Negative
9	Creation and maintenance of database	17 (68)	10 (30)	29(58)	42 (42)	2.0	Negative
10	Online searching	37(148)	15 (45)	33 (66)	13(130)	2.7	Positive
11	Scanning of document	13 (52)	27 (81)	33 (66)	25(25)	2.3	Negative
12	Preservation by electronic means	34(136)	29 (87)	20 (40)	15 (15)	2.8	Positive
13	Web design	-	10 (30)	52(104)	36 (36)	1.7	Negative
<b>Grand mean</b>						<b>2.7</b>	

The result of the data in table 1 above reveals that the most digital skills possessed by the librarians is knowledge of computer operation. This ranked first with the mean score of 3.7



followed by creating a new word process document and social networking which ranked second with 3.2 each, other important digital skills possessed by the librarians are printing of document, ability to use World Wide Web, record preservation by electronic means, online searching, and record management with mean scores above 2.50 each.

**Research Question Two:** What methods can be adopted in acquiring digital skills by librarians for effective services delivery?

**Table 2: Methods of Acquiring Digital Skills**

S/N	Item Statements	SA	A	D	SD	MEAN	REMARKS
1	Continuation of knowledge (formal education)	28(112)	38(114)	20(40)	12(12)	2.8	Positive
2	Self study /informal education	34(136)	40(120)	24(48)	-	3.1	Positive
3	Ability to communicate	-	15 (45)	40(80)	43(43)	1.7	Negative
4	Interpretation of result	-	29 (87)	43(86)	26(26)	2.0	Negative
5	Use of diverse technologies	43(172)	29 (87)	16(32)	10(10)	3.0	Positive
6	Technical and cognitive methods	24 (96)	29 (87)	25(50)	22(22)	2.5	Positive
7	Trial and error method	26(104)	40(120)	12(24)	20(20)	2.7	Positive
8	Attending workshops/conferences /seminars	-	20 (60)	43(86)	35(35)	1.8	Negative
9	Attending computer training	49(196)	39(117)	10(20)	-	3.3	Positive
10	Colleague's assistance	50(200)	44(132)	4 (8)	-	3.4	Positive
<b>Grand mean</b>						<b>2.57</b>	<b>Positive</b>

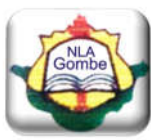
Table 2 above shows results on methods of acquiring digital skills by librarians, the result reveals that continuation of knowledge which is formal education, self- study informal education, use of diverse technologies, technical and cognitive methods, trial and error method, and colleague's assistance ranked above 2.5 each. From the table colleague's assistance is the most method for acquiring digital skills, followed by attending computer training, self-study /informal education, use of diverse technologies etc.

**Research Question Three:** What are the challenges in acquiring digital skills by the librarians?

**Table 3: Challenges in acquiring digital skills by the Librarians**

S/N	Item Statements	SA	A	D	SD	MEAN	REMARKS
1	Poor internet connectivity and telecommunication	60(240)	22(66)	14(28)	4 (4)	3.4	Positive
2	Lack of funds	56(224)	39(117)	3(6)	-	3.5	Positive
3	Poor ICT infrastructures	67(268)	19(57)	12(24)	-	3.6	Positive
4	Lack of commitment from the management to send staff for further course	7(24)	40(120)	19(38)	32(32)	2.2	Negative
5	Lack of basic skills in the use of ICT	55(220)	37(111)	7(14)	-	3.5	Positive
6	Irregular power supply	-	18(54)	8(16)	72(72)	1.4	Negative
7	Non- digital library course in LIS curriculum.	48(192)	32(96)	11(22)	7 (7)	3.2	Positive
8	Poor development of technology in Nigeria	30(120)	26(78)	22(44)	20(20)	2.7	Positive
<b>Grand mean</b>						<b>2.9</b>	

Table 3 shows the results analysis of challenges in acquiring digital skills by the librarians. Poor ICT infrastructures with mean score of 3.6 ranked the highest followed by lack of funds and lack of basic skill in the use of ICT with 3.5 each, poor internet connectivity and



telecommunication, non-digital library course in LIS curriculum, poor development of technology in Nigeria and others are the challenges in acquiring digital skills by the librarians in public higher institutions in Imo State.

### **Discussion of the Findings**

The findings of the study revealed that knowledge of computer operation, creating a new word process document, ability to create World Wide Web, record management, social networking, online searching and presentation of electronic means are the various digital skills possessed by the librarians in public higher institutions in Imo State. These findings are in agreement with Amkpa and Abba (2009), who opined that digital skills required for operation and functioning include, having knowledge of computer operation, mastery of the use of application software such as creating a new word processor document, ability to use www etc. Choi (2006) corroborated with the findings and pointed out that digital librarians are expected to possess additional knowledge and skills to work within the digital information world.

The findings of the study also reveals that continuation of knowledge (formal education) self – study (informal education) , use of diverse technologies , Technical and cognitive methods , Trial and error method, attending computer training and colleagues assistance are the methods employed by the librarians in public higher institutions in Imo State in acquiring digital skills. These results are in line with American Library Association (2012) which stated that librarians should possess variety of skills through technical and cognitive methods, ability to use diverse technologies appropriate and effective to information and judge the quality of that information. The findings corroborated with opinion of Eke (2011) who identified that digital skills for effective services delivery can be acquired through attending conferences. However, Adomi and Famola (2013) discovered and identified some of the ways of acquiring digital skills as continuation of acquisition of knowledge either through formation education or on-the –job training and off –the –job –training.

Finally, on the challenges faced in acquiring digital skills by the librarians, poor internet connectivity and telecommunication, lack of funds, poor ICT infrastructures, lack of basic skills in the use of ICT, non –digital library course in LIS Curriculum and poor development of Technologies in Nigeria are identified as the challenges. These findings are in consonance with that of Sahabi and Elvis (2021) who emphasized that lack of basic skills in the use of information technology has become bottle neck for better library services. The findings further agreed with that of Anira (2011) who opined that librarians who do not have skills especially ICT skills will have a problem in providing digital library services in this digital age. Nawalu (2000) concord and stated that government has failed in providing fund to the libraries for service delivery, hence lack of fund has made it impossible for the acquisition of different digital skills by librarians in higher institutions not only in Imo State for effective services delivery.

### **Conclusion and recommendations**

In conclusion, all librarians in higher institutions should as a matter of necessity acquire different digital skills for effective services delivery to the library users in their respective higher institutions, as it will help to ascertain the various digital skills possessed by the librarians.

Furthermore, acquisition of different digital skills will enhance the efficiency and productivity of librarians in public institutions; it will also expose the various ways of acquiring the digital skills and equally expose the challenges to acquisition of digital skills. The findings will



definitely close the gap of non acquisition of digital skills and hence lead to effective services delivery.

### **Way Forward**

From the outcome of the findings, the following way forward are made:

1. The various higher institutions in particular and indeed the government in general should make funds available to librarians for digital development.
2. Librarians in higher institutions should be proactive in acquiring digital skills for effective services delivery
3. All the stakeholders should make concerted efforts to minimize the challenges faced in the acquisition of digital skills for library services delivery.

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