Library Philosophy and Practice (e-journal)   Libraries at University of Nebraska-Lincoln

Computer Self Efficacy And Use Of Information And Communication Technology For Service Delivery In Public University Libraries In Ogun State

Jemilat Iyabo Arilesere Mrs
Federal College of Animal Health and Production Technology, Moor Plantation, Ibadan, Nigeria,
arilesereiyabo@yahoo.com

Abubakar Hajarat Oyiza
National Centre for Genetics Resources and Biotechnology (NACGRAB)Ibadan,
oyizaabubakar@yahoo.com

Osunkoya Mojisola Yetunde
Federal College of Agriculture, Ibadan, osunkoyamojisola@yahoo.com

Follow this and additional works at: https://digitalcommons.unl.edu/libphilprac

COMPUTER SELF EFFICACY AND USE OF INFORMATION AND COMMUNICATION TECHNOLOGY FOR SERVICE DELIVERY IN PUBLIC UNIVERSITY LIBRARIES IN OGUN STATE

BY

ABUBAKAR, HAJARAT OYIZA , ARILESERE, JEMILAT I AND OSUNKOYA, MOJISOLA Y

Federal College of Animal Health and Production Technology, Federal College of Agriculture and National Centre for Genetics Resources and Biotechnology (NACGRAB)Ibadan

E-mail: oyizaabubakar@yahoo.com, arilesereiyabo@yahoo.com

ABSTRACT

The studies examine the computer self-efficacy of librarians and use of information communication technology for service delivery in three public universities in Ogun State, Nigeria. The main objective of the study is to identity the various types of information communication technology (ICT) facilities used to deliver library services to the community of users as well as to examine the level of computer self-efficacy of academic librarians in the use of ICT tools to deliver library services. The study equally examines the factors militating against the effective utilization of ICT in service delivery. The Descriptive survey research design was adopted for this study, while questionnaire was the instrument for data collection. The population of the study comprised of sixty (60) academic librarians in the three public universities of which fifty-one questionnaires were returned and valid for analyzing. Descriptive statistic tools such as simple percentage, tables were used in analyzing the data. The result revealed that ICT facilities such as printer, photocopy machine, computer system among others were available and used to deliver services like circulation services, access to electronic resources, email services among others. the computer self-efficacy of academic librarians is at moderate level while the major challenges were inadequate funding, erratic power supply, and low band width. Therefore, recommendations were made among which are that the university management should increase the funding of the library effective service delivery while academic librarians should put in more effect at improving their level of computer self-efficacy through capacity building.

INTRODUCTION

Public University libraries are institutions established by either the Federal or State Government to meet the educational objective of that institutions. Therefore, such libraries are referred to as academic libraries. Academic libraries are libraries attached to institutions of higher education to support the aims and objectives of the parent institutions. Eyi and Nkannu (2009) viewed university libraries as the kind of academic libraries that occupy prominent position with responsibility of providing information resources and services to enable the institutions achieve excellent in the discharge of her functions. However, the application of information communication technology has transformed the mode of operations in libraries and librarians in the discharge of information service delivery in academic libraries.

Information and Communication Technology has become a basic requirement for social, political, educational, and technology advancement. It has improved economics as well as aid in efficient management of organizations globally. Information and Communication Technology (ICT) as a concept has no single definition because of views and perspectives of different Scholars. For example, Ajayi (2015) defines information communication technology as any system that is designed to gather, process and distribute information through the use of computer. The American Library Association (1983) defines Information technology as the application of computers and other technologies to the acquisition, organization, storage, retrieval and dissemination of information. The computers are used to process and store data, while telecommunications technology provides information communication tools. Furthermore, Dewaterville, and Gilbert (2000) view ICT as equipment that are used for the acquisition, analysis, manipulation, storage and distribution of information; as well as the design and provision of equipment and software to serve these purposes.

The application of ICT in academic libraries has revolutionized the delivery of library services globally. It has contributed to the models and formats used by librarians in the discharge of their duties in term of rendering reference services, serial management, circulation control,

cataloguing and classification. Libraries in modern settings are no longer regarded as storehouse of knowledge and preservation, because the advent of ICT has given it a new face where by library activities and operations that were carried out manually before are being carried out effectively and efficiently with the help of ICT (Haliso, 2011).

The advancement of Information and Communication Technology in public university libraries has made it mandatory for library professionals to acquire necessary ICT skill and competency in order to provide effective and efficient services to the academic community. According to Aino (2004), as cited in Womboh and Abba (2008), ICT has become a major component of modern libraries. It has transformed the dissemination of information to users. Hence, the need for library professionals to be knowledgeable in ICT for tasks in internet surfing, networking, database management, statistical software package and many more.

STATEMENT OF THE PROBLEM

The application of ICT in institutions of higher learning has become a global phenomenon. It is now a peculiar tool used in academic libraries to deliver effective and efficient library services to students, lecturer and researchers. It is evident today that academic libraries can hardly function without the application of ICT. This is because ICT has brought about making information resources closer to their users. Thus, library resources can be accessed from remote locations. It is on this note that the study set out to investigate the various ICT facilities available, the type of services being offered with the use of ICT facilities, the computer self-efficacy of academic librarians in use of ICT, as well as the challenges faced in the use of ICT for service delivery in the three public University libraries in Ogun State.

OBJECTIVES OF THE STUDY

The specific objectives of the study are as follows:

1. To ascertain the kind of ICT facilities available in the three public University in Ogun State
2. To find out the type of services been rendered with the use of ICT facilities

3. To find out the level computer self-efficacy of academic librarians in the use of ICT to render services
4. To determine the challenges affecting the use of ICT in rendering library services

RESEARCH QUESTIONS

The following are the research questions for the study

1. What kind of ICT facilities available in the libraries under study?
2. What kind of services been rendered with the use of ICT facilities to deliver library services?
3. What is the level computer self-efficacy skill among academic librarians in use of ICT to deliver library services?
4. What are the challenges affecting the use of ICT in library service delivery?

LITERATURE REVIEW

University libraries were established for the purpose of providing information resources that will meet the information needs and aspiration of people within the university community. They are primarily established to play supportive role to the university education by providing necessary information resources and services to aid lecturers, students and researchers in teaching, learning and research purpose. Echezana et al (2015), viewed academic libraries to be the heart of higher institutions that is charged with the responsibility to acquire, organize and disseminate information resources and services to improve teaching, learning, research and community information service.

In recent time, the emergence and integration of information communication technology in academic libraries has changed the role in which library functions and services are been managed. This is because information communication technology has improved and promotes library services thereby closing the gaps in information search and retrieval. Therefore, information communication technology according to Womboh and Abba (2008) comprises of three important components of which the understanding of the three concepts gives meaning to the understanding of the term Information communication technology. According them, the term

Information simply means a processed data or information could also mean anything that aid in decision making. Communication according to them is the transfer of information from one person to the other or from place to place while technology refers to use of scientific knowledge to invent new ideas that would assist human beings to overcome environmental hazards as well as making life comfortable for living, such as television, computer, cell phone etc. Therefore, the term Information and communication technology involves diverse set of technologies tools used in order to facilitate the handling of information to ease communication between human and various electronic systems.   Gupta and Ansari (2007) view information and communication technology as combination of tools used in information- handling technology that required to convert, store, process, transmit and retrieve information; they further posited that information and communication technology is primarily hinge on four technologies: Computer hardware technologies (computers, midsize servers and large mainframe systems, and the input and output and storage devices that support them); software (web browsers software, productivity suits and software for business applications); telecommunication and network technologies (telecommunications, media processors and software needed to provide wire-based and wireless access and support for Internet and their networks); and data resource management technologies (database management systems, software for the development, access and maintenance of the databases of an organization). Obinyan and Unuabor, 2013) views Information and communication Technology in the library context as the application of computer and other telecommunication technology to the operation and functions of the libraries to ensure that service delivery is timely, accurate, precise and relevant; Foremost among the Information communication technology components that have offered these opportunities include; computers, Internet, tele facimile C.D ROM and electronic based-devices whose users depend largely on telecommunication facilities or gadgets. (Obinyan and Unuabor, 2013)

Today, the application of information communication technology in academic libraries for service delivery has become one of the greatest pivots in the promotion of research, teaching and learning process. It offers a better way of managing, storing and dissemination of information. Its benefits cut across every service and operation in the entire library system and sub-system (Echezona et al 2015). ICT has become a tool for collection, processing and dissemination of information in the library. It is one of the greatest technological advancement which libraries all

over the world have adopted to provide services with efficiency and effectiveness. According to Madu (2002) observed that the use of information communication technology in house hold keeping functions in libraries has become prominent, it has made acquisition of library materials easier; in circulation unit, ICT has made it job faster and accurate; in the cataloguing and classification unit ICT has made users of library to access the Online public access catalogue in their comfort homes.

Prior to the use of information and communication technology in academic libraries, librarians used traditional methods of information delivery. However, traditional library processes and functions could no longer satisfy and respond fast enough to an environment that is already saturated by technology; hence it becomes important to adopt information communication technology to deliver effective information services. Ivala & Gachago, (2014). Posited that academic libraries have used Information communication technology tools in their walls to announce programs of the library to inform their new and current users of new acquisition and recent additions to their collections.

Furthermore, the rapid advancement in Information communication technology has brought tremendous changes in library operations and services. It has open up new way in which library professionals are communicating and providing access to information resources in diverse format. Libraries irrespective of type are using information and communication technologies to process acquisitions of library materials, payment of bills, classification and cataloguing for easy retrieval, user's education, reference service, circulation service, document delivery service, electronic resources, bibliography services, photocopying services, electronic messages and the use of web 2.0 tools for discussion. (Gulati, 2004; Ramzan and Singh, 2009; Adeleke and Olorunsola,2010) as cited in Qutab, Bhatti and Ullah (2014).

Similarly, Bhoi (2017) identified eight ways in which information and communication technology could be used to render effective and prompt services in libraries. These includes: On –line Public Access Catalogue which enable users to access library holdings irrespective of their location; Reference services on the hand ensures that users quarries are answered promptly through the use of telephone and other electronic facilities; Reprography services enables library users to make photocopying of library materials; Selective dissemination of information(SDI)

enables library professionals to deliver prompt services based on the need and interest of the users; Document delivery services enables sister libraries to share library resources through the use of internet for the purpose of satisfying users demand; Bibliography services computer have made it easy for users to compile bibliography references with ease; translation services enables users to translate numerous online document from one language to the other through the use of various ICT and data based searching has become very usefully for user to access various data based through their website.

In recent times, the emergence of Information communication technology in libraries has revolutionized the format and style by which information services are delivered. Today, libraries have taken advantages of information communication technology tools as a platform to deliver their services to users. However, the concept of libraries as physical place where one can visit to get information is rapidly changing to a virtual space where users can access, communicate and contribute to existing knowledge (Buhari, 2013). Ezeani and Eke (2011) & Jain and Jorosi (2015) list some of the technology tools popularly used in libraries globally to meet the information needs of their users:

- Facebook: It is most popular now because it is library- friendly, with many applications like JSTOR search, World Cat, and much more. Librarians in academic libraries use this too to interact with users to know their information need and disseminate information. Libraries try to link some of these specialized library applications to Facebook.

- MySpace: In academic institutions where the students are; libraries have taken advantage of this site to improve their presence.

- Ning: Librarians in academic libraries used this tool to get connected with users, library associations, and more. Many world leading association like International Federation of Librarianship (IFLA), American Library Association (ALA) utilizes this platform to discuss topical issues among the members.

- Blogs: Here, librarians in academic libraries can periodically post messages; share information on a particular subject or issue, and allow users to contribute to content. They can write articles, news on topical issues and expect an instant reaction from their users.

- Wikis: This is a free online encyclopaedia that gives background knowledge and definition of concepts. It offers a platform for users to access, edit and contribute to content. This is a collaborative web page for developing web content and participation.

- LinkedIn: Librarians in academic libraries can use this tool to get patrons connected with specialists in their particular field of interest via LinkedIn. Librarians can use this platform to render specialized services such as Strategic Dissemination of Information (SDI). In addition Librarian can equally, use it as a platform to get connected with her professional conterpat around the world for the purpose of sharing information.

- Twitter: this is a micro blogging application tool that keep staff and patrons updated on daily activities. Librarians use this platform to give users current information, users can send Instant Messages (IM) on complaints or ask questions on particular issues and get feedback on the spot using twitter.

- YouTube: Academic libraries used the tool to show events such as important highlights of inaugural lectures, conferences and workshops via the YouTube. It is also used as instructional aides to inform students, and other library patrons on the utilization of library resources.

- Flickr: Librarians in academic libraries make use of this tool to share and distribute new images of library collections. Cover page of new arrivals of both books and journals can be disseminated to users via Flickr. It can also be used to enlighten users on topical issues.

- Google Scholar: librarians make use of this tool to assist users in searching for academic literature published in various field of endeavour and on various topical issues. Google scholar provides current and up-to-date information on scholarship.

The advancement of information and communication technology has transformed the role in which library professionals are operating in art of delivering services; ICT has made it mandatory for academic librarian to acquire necessary skill that will assist them in effective service delivery. According to Okewale and Adekunmisi (2017), posited that Information and communication technology competencies of academic librarians would assist them to effectively use library resources to offer proactive services in the digital age. However, the concept of computer self-efficacy can also be referring to s self-efficacy which is derived from self-efficacy construct based on social cognitive theory. According to Bandura (1977) as cited in Fabummi and Awoyemi (2017) viewed self-efficacy as the ability and believed of people in carrying out specific task that result in a specific outcome. In addition, he identifies three component of self-efficacy which are strength, magnitude and generalizability. According to him Strength is the ability and confidence that an individual possesses in carrying out different computing task; magnitude refers to people with high computer self-efficacy, while generalizability means the level to which judgement is limited to a specific computing task. In another development Bandura (1986) viewed self-efficacy as the judgement of people in their ability and capability to organized and execute certain tasks of action which require to achieve designated type of performance. He further explains that self-efficacy deals not only with the skill one possesses but with judgement or ability to utilized that skill to achieve performance.

On the other hand, the concept of computer self -efficacy is the ability of someone to use the computer effectively in other to accomplished a task. According to Compeau and Higgins (1995) give the definition of computer self -efficacy as the judgment of people's capability to make use of the computer in the execution of tasks. Librarians and library professionals are regarded as the custodian of knowledge responsible for providing and dissemination of information in diverse form; the use of information communication technology in academic library has improved and enhanced service delivery. Therefore, it has become imperative for library professionals to acquire computer self-efficacy skill in other to deliver expected service to users in the digital age. According to Diamond (2011) posited that with the application of information communication technology in library services delivery, it has become necessary for librarians to keep abreast with the technology advancement in other to acquit themselves with the technological competence in effective service delivery.

CHALLENGES OF USE OF INFORMATION COMMUNICATION TECHNOLOGY FOR SERVICE DELIVERY IN ACADEMIC LIBRARIES

Information and communication technology as an agent of change offers a wide range of professional tools that are used by academic libraries for effective service delivery. These tools facilitate resource sharing, improves productive, library cooperation, communication etc. Despite the numerous benefits of ICT, many academic libraries in Nigeria are still facing the challenges of using ICT to offer effective services.

According to Ezeani & Igwesi (2014) one of the challenges academic libraries face in providing information service with ICT has to do with apathy, lack of awareness and technophobia. Ezeani & Igwesi (2014) assert that insufficient bandwidth and obsolete ICT facilities are inhibiting factors in using the Internet in academic libraries as well as poor funding.

Erratic power supply negatively affects the utilisation of ICT tools. Ajayi, Shorunke and Aboyade (2014) bemoaned that erratic nature of electric power supply in Nigeria is another problem that confronts academic libraries. These situations adversely affect the use of electronic information resources and other ICT-based resources.

In addition, according to Echezona (2015), connectivity in Africa is poor, unreliable, scarce and very expensive. He further maintains that the Internet services are almost never dedicated and users have to contend with frequent service outages at very slow speed. Asogwa., Ugwu, and Ugwuanyi (2015) attributed the high cost of Internet connectivity in Africa to limited availability and capacity of national fibre backbones

RESERCH METHOLOGY

Research Design

The research design adopted for the study is the descriptive survey research method. This design was adopted because the study seeks to provide information on existing situation in about the use of ICT in selected institutions.

Population of the Study

The population for this study comprised the academic librarians in the three public universities in Ogun State: Olabisi Onabanjo University, Ago Iwoye; Tai Solarin University of Education, Ijebu-Ode and Federal University of Agriculture, Abeokuta.

Sampling Technique and sample size

The sampling technique adopted for this study was the random sampling technique. Library personnel was selected at random to obtain the sample size required for the study.

Instrumentation

The research instrument for this study was a questionnaire designed following the rigorous review of literature. The questionnaire comprises three sections that are used to elicit data on respondents' demographic data, ICT facilities available in the library, services rendered with ICT in the library, computer self-efficacy of academic librarians, and challenges to the use of ICT for library services in the institutions.

Procedure for data collection

Data was collected personally by the researcher. The questionnaire was administered to the respondents in their various Universities and collected after the completion of the questionnaires.

Data analysis

The data analysis methods used for this study was the descriptive statistics, including frequencies, percentages, and tables, these were used to summarize the data as obtained from respondents

Response Rate of Respondents

Table 1: Response Rate of Respondents

S/N	Name of University	No. of Questionnaires Distributed	No. of Questionnaires Retrieved
1	Olabisi Onabanjo University (OOU)	20	16
2	Tai Solarin University of Education (	18	15
3	Federal University of Agriculture, Abeokuta (FUNAAB)	22	20
	Total	60	51
	Percentage	100%	85%

Table 1 shows that a total of sixty (60) questionnaires were distributed among the three (3) public universities libraries in Ogun State Nigeria. Fifty-one (51) copies of the questionnaires were retrieved, dully filled and valid for analysis which constituted 85% of the response rate.

Demographic Information of Respondents

Table 2: Demographic Information of respondents

S/N	Items	No.	Percentage (%)
A	Age Bracket (years)		
1	20-30	6	11.8
2	31-40	10	19.6
3	41 and above	35	68.6
	Total	51	100.0

B	Marital status		
1	Single	9	17.6
2	Married	42	82.4
	Total	51	100.0
C	**Gender**		
1	Male	27	52.9
2	Female	24	47.1
	Total	51	100.0
D	**Academic Qualification**		
1	Master Degree	46	90.2
2	PhD Degree	5	9.8
	Total	51	100.0

Table 2 revealed that majority of the librarian involved in the study were 41 years and above which constituted 68.6%, this is followed by 31- 40 years representing 19.6% while 11.8% constituted 20-30 years of age.

Furthermore, table 2 revealed that 82.4% of the respondents were married while 17.6% were single. Gender distribution shows that 52.9% were male while 47.1% were female Information on academic qualification shows that 90.2% of the respondents have master degree while 9.8% have PhD degree.

Research Question 1

Table 3: Types of ICT facilities available in the library

S/N	Facilities	Available Functional		Available Not functional		Not Available		Total	
		N	%	N	%	N	%	N	%
1	Computer System	48	94.1	3	5.9	-	-	51	100
2	Printer	45	88.2	6	11.8	-	-	51	100

S/N		No	%	No	%	No	%	No	%
3	Projector	41	80.4	3	5.9	7	13.7	51	100
4	Photocopier	44	86.3	7	13.7	-	-	51	100
5	Interactive board	-	-	-	-	51	100	51	100
6	Scanner	30	58.8	15	29.4	6	11.8	51	100
7	Digitizer	15	29.4	-	-	36	70.6	51	100
8	Digital camera	15	29.4	11	21.6	25	49.0	51	100
9	Television set	38	74.5	13	25.5	-	-	51	100
10	Fax machine	11	21.6	12	23.5	28	54.9	51	100
11	Mobile Apps	30	58.8	6	11.8	15	29.4	51	100
12	Internet connectivity	46	90.2	5	9.8	-	-	51	100
13	CD ROM	40	78.4	11	21.6	-	-	51	100

Table 3 revealed that the ICT facilities that are available in the public university libraries in Ogun State are the computer system with 94.1% of the respondents indicating that it is available and functioning, this is followed by the internet facility with 90.2% of the respondents, the next facility is the printer with indication of 88.2% of the respondents and photocopy machine indicating 86.3%. Other facilities that are available and functioning include projector, scanner, television, CDs and mobile application, while facilities such as interactive board, digitizer, digital camera and fax machine were no available in most cases.

Research Question 2

Table 4: kind of services been rendered with the use of ICT facilities to deliver library services

S/N	Services	Delivered		Not Delivered		Total	
		No	%	No	%	No	%
A	**CICULATION SERVICES**						
1	Registration of user community	51	100	-	-	51	100
2	Charging of library materials	42	82.4	9	17.6	51	100
3	Discharging of library materials	42	82.4	9	17.6	51	100
4	Sending overdue notice	34	66.7	17	33.3	51	100

No	Item	Yes	%	No	%	Total	%
5	Fines	28	54.9	23	40.1	51	100
B	**Social Media Tools**						
6	Face book	39	76.5	12	23.5	51	100
7	Blog	36	70.6	15	29.4	51	100
8	WhatSapp	39	76.5	12	23.5	51	100
C	**Electronic Information Resources**						
9	Subscribed database	43	84.3	8	15.7	51	100
10	Open access database	45	88.2	6	11.8	51	100
11	Institutional database	21	41.2	30	58.8	51	100
D	**Electronic Reference Services**						
12	E-mail	33	64.7	18	35.3	51	100
13	Telephone	10	19.6	41	80.4	51	100
14	Online instruction/ users' orientation	46	90.2	5	9.8	51	100
15	Photocopying	48	94.1	3	5.9	51	100
16	**LIBRARY OPERATIONS AND MANAGEMENT**						
17	Online cataloguing	43	84.3	8	15.7	51	100
18	Online classification	46	90.2	5	9.8	51	100
19	Online section/Acquisition	39	76.5	12	23.5	51	100

Table 4 revealed the different types of services been delivered by public universities with the use of ICT tools. Respondents indicated that under the circulation services, application of ICT is fully utilized for the registration of community of user with 100% service delivery, this is followed by charging and discharging of library resources having 82.5% of the respondents while respondents indicated 66.7% of the use of ICT to deliver over due notices, and least service delivered with ICT is charging of fine with 54.9% indication of the respondents.

The analysis shows that the social media tools used for service delivery as indicated by respondents were Facebook (76.5%), blog (70.6), and WhatsApp (76.5), also the use of ICT tools to provide access to information content were delivered as follows: subscribed database with

84.3%, open access data base with 82.2% while institutional database was not delivered with 58.8% of respondents' indication.

In addition, e-mail services with 64.7%, online instruction/user orientation with 90.2 and photocopying with 94.1 were delivered with the use of ICT, while telephone service is not delivered with 80.4% of the respondents. Other services that were also delivered using ICT facilities were the use of online cataloguing with 90.2%, online classification with 90.2% and 76.5% of online section and acquisition of library materials.

Research Question 3

Table 5: Computer self-efficacy of Library personnel in the use of ICT for service delivery in public University in Ogun State

S/N	Items on computer skill (I fill confident to)	Low		Moderate		High		Total	
		N	%	N	%	N	%	N	%
1	Work with computer system	-	-	35	68.6	16	31.4	51	100
2	Communicate with user using e-mail	5	9.8	40	78.4	6	11.8	51	100
3	Communicate with user using telephone	-	-	5	9.8	46	90.2	51	100
4	Communicate with user using social media platform	10	19.6	28	54.9	13	25.5	51	100
5	Use Word processing to accomplish a task	-	-	30	58.8	21	41.2	51	100
6	Use computer hardware facilities to accomplish a task	3	5.9	41	80.4	7	13.7	51	100
7	Facilitate training section on effective utilization of digital resources	-	-	12	23.5	39	76.5	51	100
8	Internet surfing	-	-	4	7.8	47	92.2	51	100

Table 5 revealed that the computer self-efficacy of the respondents that is rated high in the use of ICT facilities to render services are internet surfing with 92.2%, communicating with users by telephone (90.2%) and facilitating training section on effective utilization of digital resources

with 76.5%, while the computer self-efficacy of the respondents that is rated moderate are using the computer hard to accomplish a task with 80.4%, communicating with user using e-mail with 78.4%, working with computer system with 68.6%, using word processing to accomplished a task with 58.85% and communicating with users using social media platform with 54.9%.

Research Question 4

Table 6: Challenges affecting the use of ICT for service delivery

S/N	Challenges Affecting the use of ICT for service Delivery in Public University	Strongly Agree		Agreed		Strongly Disagreed		Disagreed		Undecide		Total	
		Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%
1	Inadequate funding	34	66.7	17	33.3	-		-		-	-	51	100
2	Inadequate ICT facilities	20	39.2	17	33.3	9	17.6	3	5.9	2	3.9	51	100
3	Lack of ICT technical competence	18	35.3	13	25.5	9	17.6	11	21.6	-	-	51	100
4	Low bound width	14	27.5	32	62.7	-		5	9.8	-	-	51	100
5	Erratic power supply	28	54.9	23	45.1	-	-	-	-	-	-	51	100
6	High cost of ICT maintenance	18	35.3	23	45.1	6	11.8	4	7.8	-	-	51	100
7	Lack of regular training	15	29.4	24	47.1	6	11.8	4	7.8	2	3.9	51	100

8	Obsolete ICT equipment	21	41.2	27	52.9	-	-	3	5.9	-	-	51	100

Table 6 revealed that majority of the respondents constituted 66.7% agreed that inadequate funding is the major challenge confront public university libraries, this is followed by low bound width with 62.7%, next is the erratic power supply with 55%. The research result also shows that other challenges been face by public university library are obsolete ICT equipment, lack of regular training, high cost of ICT maintenance, Inadequate ICT facilities and least Lack of technical ICT technical competence. The analysis of result shows that majority of the respondents quite agreed with the listed problems confronting public universities libraries.

DISCUSSION OF FINDINGS

The findings on research question one revealed that computer system, photocopy machine, internet access, printer were among the ICT facilities available and functioning in the three public universities in Ogun State, these This find is in support of the research output of Obinyan and Unuabor (2013) that academic libraries in Nigeria acquire ICT tools in form of computer, printer, mobile devices and photocopier for the purpose of rendering effective service to the community of users.

Also, the findings of this study revealed that the computer self-efficacy/ computer competency of librarians in the use of ICT tools for service delivery are moderate. This is in line with the research findings of Uwaifo (2009) that the computer self- efficacy of librarians in Nigeria universities were fairly or moderately self-efficacious about computer use in service delivery. This implies that librarians need to work harder in acquiring all necessary technology skill to enable them perform their job with advance in information and communication technology.

The findings further revealed that quite a number of services is been delivered with use of ICT in pubic university libraries which include registration of community of users/ circulation services, access to electronic resources, communicating with users through electronic media among others.

Finally, on the challenges militating against the use if ICT for services in the selected academic libraries, the study revealed that inadequate funding, lack of ICT equipment, high cos of ICT maintenance and erratic power supply were highlighted as the major challenges as indicated by respondents. This is in line with Oketunji (1999), Aliche (2009) opine that the major problems associated with the use of ICT in libraries were equally what is listed above. This is to say that no library exists without a problem, however, the lesser the challenges the better the services that is delivered to the community of users.

CONCLUSION

The essence of use of information communication technology (ICT) in academic libraries for service delivery is to make sure that information delivery is timely, accurate, precise and relevant. Therefore, the study concludes that the libraries used one form of ICT or the other to provide essential services to the community of users. A such academic librarians should keep abreast of the trend and development in ICT facilities as well as acquire necessary skill to meet and be able to deliver quality services with the use of information communication technology.

RECOMMENDATION

Based on the findings of this study the following recommendation are hereby proffered:

1. Library professional should put in more efforts at improving their computer self-efficacy through training such as conferences, seminars, workshops and their like. These skills will add value to the librarian thereby fast track improve and effective service delivery

2. The university libraries should communicate with the University Management to realized the importance of use of information communication technology tools for service delivery, this will ensure adequate funding as well as equipped the library with state-of-the-art ICT facilities for effective service delivery.

3. Library Management should device means of providing alternative power supply to support that of the national grid. This is because ICT facilities cannot be effectively utilized without steady power supply.

REFERENCES

Aggarwal, N. & Buggarapu, G. (2013). Using social media to improve efficiency and productivity in IT organizations.www.ca.com/us/~/media/Files/About%20Us/CATX/using-social-media-to-improve-efficiency-and-productivity-in- it-organizations.pdf Retrieved on 15th August, 2018

Ajayi, A.S. (2015). Information technology in academic libraries. *Journal of information Technology*, vol.2, No.1, 25-39.

Aliche, A.U. (2009). The Economic importance of information technology and information communication technology. Aba: University publisher and consults.

American Library Association, (1983). Definition of information communication technology. Retrieved from https://www.goggle.com/search?q=definition+information+communication+technology on 18th November, 2018.

Asogwa, B.E., Ugwu, C.I. and Ugwuanyi, F.C. (2015), Evaluation of electronic service infrastructures and quality of e-services in Nigerian academic libraries. *The Electronic Library*, Vol. 33 No. 6, pp. 1133-1149.

Bandura, A. (1986). *Social foundation of though and action.* NJ: Prentice hall.

Bhoi, N.K. (2017). Use of information communication technology (ICT) and operation: An overview. *Proceeding of international conference on future Libraries from Promises to Practices.*p.1-12. Retrieved from eprints.rclis.org/32231/1/use of information communication technology on 10th October, 2018.

Buhari, S. R. (2013). Internet access and use by academic staff and students in a Nigerian Polytechnic. International Conference on Communication, Media, Technology and Design. 02-04 May, Fannagusta- North Cyprus

Compeau, D.R. and Higgins, C.A. (1995) Computer self- efficacy development of measure and initial test. Mis Quarterly, 19 (2), 189-212.

Dewaterville, A. and Gilbert, L. (2000). *Advance information and communication technology*. Oxford: Heinemann educational publishers.

Diamond, A. (2011). The information needs of users. Retrieved from www.ideals.illinois.edu on 10th October, 2018.

Echezona, R, I., Ibegbulem, I.J. and Nwegbu, M.U. (2015). Bring back the users in academic libraries in digital age. paper presented at the 53rd National Conference and Annual

General Meeting of Nigeria Library Association (NLA), Oshogbo, Ogun state of Nigeria, 26-31 July.

Eyo, E.B. and Nkanu, W.O. (2009). Assessment of librarians' education and leadership potential in the management of human resources in Nigeria university libraries. *Heartland Journal of Library and information Science*, 3 (1 & 2), 28-46.

Ezeani, C. N., & Eke, H. N. (2011). *Transformation of Web 2.0 into Lib 2.0 for driving access to knowledge by academic libraries in Nigeria*. In the 48th National Conference and Annual General meeting of the Nigerian Library Association Theme: Knowledge management for national development. Ibadan: HEBN Publishers

Ezeani, C.N. and Igwesi, U. (2012). Using social media for dynamic library service delivery: the Nigeria experience. *Library Philosophy and Practice*, Paper 814, available at: http://www.digitalcommons.unl.edu/libphilprac/814 accessed on 24/11/2016.

Fabummi, F.A. and Awoyemi, O.O. (2017). Computer efficacy as determinant of undergraduates' information communication technology competence in state owned university in south- west Nigeria. *International Journal of Library Science,* Vol.6, No. 2, 29-36. Retrieved from http://creativecommonc.org/licenses/by/4.0/. On 10th October, 2018.

Haliso, Y. (2011). Factors affecting information communication technology (ICTs) used by academic librarian in southwest Nigeria.

Ivala, E. & Gachago, D. (2014). Social media for enhancing student engagement: The use of Facebook and blogs at a University of Technology. South Africa J. of High. Educ. (SAJHE), 2012, 26(1), 52-67.

Jain, P. & Jorosi, B. N. (2015). LIS education in Botswana: a case of DLIS at the University of Botswana. Available at http://creativecommons.org/licences/by/3.0/ . Retrieved on 15th August, 2018.

Madu, E. C. (2002). Computerized reference services and traditional printing reference sources. A comparison of the old and new in library services. In information science and technology for library schools in African. Madu, E.C. etal (ed.) Evi-Cohaman publication.

Obinyan, G.A and Unuabor, S.O. (2013). *Interrogating the contribution of ICT acquisition and application to effective library services delivery in Nigeria*. Library philosophy and practice (ejournal). Retrieved from http://digitalcommons.unl.edu./libphilpra/1010 on 18th October, 2018.

Oketunji, I. (1999). Application of information technologies in Nigeria libraries: problems and prospect. Paper presentation at the 10th biannual conferences of library and information science education (NALISE), at University of Ibadan, 4th-7th August.

Qutab, S., Bhatti, R. and Ullah, F.S. (2014). Adoption of ICTs for library operations and services: A comparison of public and private University libraries of Pakistan. Library philosophy and practice (ejournal). Retrieved from http://digitalcommons.unl.edu/libphilprac/1106 on 10th October, 2018.

Roger, L. (1996). *Information technology*. Oxford: Oxford University press

Uwaifor, S. (2009). Computer self-efficacy as predictor of libraries perceived ease of use of automated library system in Nigeria university libraries. African Journal Online, Retrieved from https://www.ajol.info/index.php/ict/article/view/52698 on 10th October, 2018.

Womboh, B. S and Abba,T. (2008). *The state of information and communication technology (ICT) in Nigeria university libraries: The experience of Ibrahim Babangida Library, Federal University of Technology*, Yola. Library philosophy and practice (journal).224. Retrieved from http://digitalcommoms.unl.edu/libphil/prac/224 on 10th October, 2018.