APPLICATION OF ICT FOR LIBRARY SERVICES AMONG PATRONS OF HIGHER INSTITUTIONS IN LAGOS STATE, NIGERIA

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ABSTRACT

The study sought to determine the ICT, resource support for library services among patrons of higher institutions with particular reference to the University of Lagos (UNILAG) and Lagos State University (LASU).Specifically, the study investigated the internet services most frequently use by patrons, purpose for which it is used and constraints encountered. The population for this study consisted of 400 respondents sampled in two universities in Lagos State during the 2008/2009 academic session. The respondent reacted to the ICT tagged Patrons used of Internet Questionnaire (PUIQ) constructed and validated by the researcher with a reliability coefficient of 0.68. Data collected were analyzed using frequency count and simple percentages. Result showed among others that the worldwide web (www) and e-mail services were the most preferred Internet Services enjoyed by library patrons. And that the most recurring purposes for which patrons use the library Internet Services are to search for journal and articles, to access reference materials, to conduct research activities and for e-mail among others. Constraints, possible solution(s) and recommendations were also discussed.
***Keywords:** ICTs, library services, retrieval tools, virtual library, information resources.*

INTRODUCTION

The use of information and communications technology (ICT) is rapidly advancing and taking wide and varied dimensions in many countries of the world including Nigeria. In education, ICT's have become tools for pedagogical practices, means of obtaining learning resources and personal development of users including the academic staff. Adejumo, (2007) Said that, Breakthrough and development in information and communication technologies (ICT have increasingly reshaped the way libraries and librarians' access, retrieve, store, manipulate and disseminate needed information to their actual and potential users. The use of CD-Rom, online databases, e-mail, facsimile, internet, OPAC and other technologies that facilitate virtual communication have contributed vastly to knowledge creation, development and access. "The whole universe of the global information super highway has become a human resource and heritage, including library which all that have the necessary infrastructure capabilities can tap for their development, this made possible only by consortia" (Idowu,2002).

The volume of data and information generated by the human race and the need to survive through the sharing of knowledge and ideas is simply too much for the class room environment to cope with. As a result, the traditional method of library service delivery can no longer meet the demand for education especially in Africa (Bank, 2001 in Afolabi, Adedapo and Adeyanju, 2005). ICT is a powerful tool for the management of information

explosion and has helped in shifting the role of the librarian from that of sole information provider for a veritable vehicle for service delivery in tertiary institutions. It can make library services more efficient and productive through provisions of variety of tools to enhance and facilitate patron activities in several ways. Edafiogho (2007) listed some of these ways as e-learning, on-line learning information literacy, digital literacy, digital virtual library and assessment.

Library being the nerve centre of any academic organization (for information process, storage, retrieval and dissemination) is charged with such responsibilities of making information available in any format both print, non-print and electronically to the wider and dispersed patrons irrespective of time, space and geographical location at this digital age. Today the concept of virtual libraries, referred to variously as digital library, network, or simply as library without walls made possible by ICT has become the in-thing that no library worth its salt can ignore. It is call 'virtual' because in a good electronic wide area network library user enjoy the euphoria of being in distance libraries and yet has not physical moved. Akintunde (2004) explains that the role of ICT in the library can be understood as the application of digital equipment to all aspects of library work or services. According to him, "the use of computer and other technologies such as telephone to process, transport and transfer voice and other data singularly or mix with least interference or distortion of content is of great importance".

Presently, there is a growing concern with how to make libraries relevant in the information age and at the same time sustaining their services especially in the universities where there are large bodies of scholars and patrons. Application of ICT resources in academic institutions library has its impacts, uses, drawbacks or constraints and this has been the experience of most university libraries in Nigeria, (Idowu, 2002). Affirms also that, academic libraries in Nigeria are at its best not to be left behind in this new trend. UNILAG and LASU managements have made concerted efforts at automating their operations and providing electronic library services. The achievements in this regard include:
- Provision of e-library consisting of state of the art facilities.
- Procurement of quality computer hardware and software resources.
- Catalogue of documents, text material and special collection using computers.
- Training of users on the use of library
- Provision of uninterrupted power supply, and
- Procurement and installation of library software.

It is worrisome that, many library users enter the library without having an idea or basic knowledge of what ICT resource support services are available. The internet is consulted by various users, and while there has been research attempt at showing how patrons in universities use this facility (Jagboro, 2003). There seems to be very scarce research efforts at determining the uses, purpose and constraints encountered by patrons for information retrieval, processing and dissemination in Nigerian universities. This scarcity form the background and rational for this study. Thus the following questions guided the study. - *What ICT resource support(s) are available for library services in the sample universities? - What are the most preferred internet services enjoyed among patrons*

in the selected universities? - What purpose do patrons use the library Internet services for in the sample schools? and - What constraints are encountered in the use of Internet services by patrons of the sample universities?

METHODOLOGY

The design adopted in the study is a descriptive survey research design while the sample population comprised of 400 respondents male and female at the rate of 200 per-schools were selected for the study. In the census conducted, the subjects responded to the patron use of Internet questionnaire (PUIQ), which was constructed by researcher and validated by senior colleagues in the area of information processing and research. Using Kuder Richardson formula 21, reliability co-efficient of 0.68 was established for the instrument, 400 questionnaires were issued out to the respondents' library patrons through their respective heads. The same channel was used for retrieval of the 400 questionnaire. Hundred percent of return rate was thus recorded. Simple frequency count and percentage were used to compute the data and the results are as shown below.

RESULTS AND DISCUSSION

Table 1: ICT Resource Support Availability in UNILAG and LASU Libraries

SO&D	Comp	LAN	Int Serv.	Printer	T.V	PMac.	Sftware
FOR UNILAG							
U.L Office	6	6	6	3	2	1	
DUL Office	-	-	-	-	-	-	
Admin. Dept.	4	-	4	1	1	1	
Acquisition Dept.	3	3	3	1	1	-	
Technical Dept.	10	10	10	1	1	2	Glass for windows
Readers Dept.	20	20	20	1	2	4	
E-library/Automation	123	123	123	2	-	1	
Branch libraries	7	7	7	1	-	1	
Total	**173**	**169**	**173**	**10**	**7**	**10**	**2**
FOR LASU							
U.L Office	12	-	5	1	2	1	
DUL Office	2	-	-	1	1	1	
Admin. Dept.	2	-	-	1	-	1	Alice for windows
Acquisition Dept.	1	-	-	1	-	-	
Technical Dept.	5	2	2	1	1	-	
Readers Dept.	4	6	-	-	-	2	
E-library/Automation	92	-	92	-	-	-	
Branch libraries	8	2	-	2	2	2	
Total	**126**	**10**	**99**	**6**	**6**	**6**	**1**

Source: Survey 2011

SO&D = Section, Offices and Deparment; Comp. = Computer; LAN = Local Area Network; Int. Serv. Internet Service; T.V = Televion; PMac = Photocopy machine; Sftware = Software

It is evident from table 1 above that University of Lagos (UNILAG) has a total of 173 computers with 169 local area network (LAN) and 173 internet ready system (WAN) was recorded alongside with 10 numbers of printer of various sizes and capacities, 7 colour television set, 10 printers and glass software was in used to coordinate the library services rendered. However, appreciable level of ICT resource support was also revealed

in Lagos State University (LASU) in term of ICT resource support with 126 computer system of various sizes and capacities with 10- local area network (LAN), 99 internet connection (WAN) and 6 printers, 6 colour television sets, 6 photocopiers all of various size and capacity depends on purpose of its use. Both libraries have ICT resource support for their operations. The level of ICT resource greatly depend on the available space and place for students' enrolment and the level of patrons attendance and need to support teaching learning and research purposes among other needs.

LASU and UNILAG managements in its awareness and quest for ICT for library services, Lasu management recently established a 92 seatters capacity e-library section, and provides computers with internet services in all departments, sections and offices within the library with the state of the art ICT driven equipment system to facilitate on line searching, cataloguing, readers services among other purposes to boost the level of its ICT resource support. UNILAG has 123 internet ready systems at the automation library, with over 40 systems dedicated for on-line public assess catalogue (OPAC), and ICT resource support systems at the distance learning library section, with internet services in all the departments and offices of the library.

Table 2: Preferred internet services used by library Patrons in UNILAG and LASU

PIS	LASU Freq	%	UNILAG Freq	%	Total TN	%
www	114	71.3	124	51.6	228	57
E-mail	27	16.8	38	15.8	65	16.3
Chatting	15	9.4	41	17.1	56	14
Telnet	-	-	03	1.3	03	0.75
Frequently ask questions	02	1.3	03	1.3	05	1.3
List Server Discussion	11	6.9	11	4.6	22	5.5
File Transfer (FTP) service	01	0.6	04	1.6	05	1.3
Total	**160**	**100**	**240**	**100**	**400**	**100**

Source: Survey 2011. *PIS = Preferred Internet Service*

It is seen from the table that the most preferred library internet service used by patrons in sampled schools is the World Wide Web (www), because 228 out of the total respondents sampled representing 57% preferred it. This is followed by e-mail respondents internet chatting, and list servers discussion with 22 population. Telnet and others follow this with 05 each. As observed, the least preferred library Internet service is Telnet and file transfer protocol. The result of this study may be as a result of the opinion that Internet services are relatively new in the Nigeria society especially the application into library services such that most users take the internet to be World Wide Web (www) without knowing that there are other services on the internet.

This may also not be connected to the low internet skills of library patrons. This study contradicts the findings of Jagboro (2003), ogunsola, (2004) who both established from the study of Internet usage at Obafemi Awolowo University Ile - Ife and Engineering College of Pinjab respectively that e-mail was the most used internet service by the respondents. This research however established the World Wide Web as the most preferred internet service by the sampled respondents.

Table 3: The purposes for which patrons' uses Library Internet service

	LASU		UNILAG		Total	
PIS	Freq	(%)	Freq	%	TN	%
To find articles for instructional/academic purposes	20	8.3	11	6.9	31	7.8
To exchange ideas with colleagues.	18	7.5	04	2.5	22	5.5
To access reference materials	47	19.5	30	18.8	29	19.8
To conduct research activities	23	9.6	12	7.5	35	8.8
To e-mail friend and colleagues	18	7.5	14	8.8	32	8
To download materials	42	17.5	28	17.5	70	17.5
To search for journals and articles.	72	30	61	38.1	133	33.3

Source: Survey 2011

It is observed from the table that library patrons used Internet services mostly to search for journals and articles in the library. "To access reference materials" and "To download material for teaching and learning process were rated second and third respectively. The purpose of 'to conduct research activities and 'to e-mail friends, and colleagues and 'To find article textbooks for instructional/academic purposes' were rated forth, fifth and sixth respectively while the purpose to exchange ideas with colleagues was in seventh position.

The result of this research may be due to the fact that one of the major criteria for academic excellence is the promotion of reach, recent, quality and adequate scholarly materials for pedagogy of instruction and research purposes. It is therefore, not surprising at all that the use of the internet by patrons to search for journal and articles for teaching learning process and for research purposes was the top-most rated item. This research study supports the earlier studies of Ogunsola (2004), Becker (2000) Balogun, (2008) find out also that using Internet to access journal and write academic articles for publication and research was an important Internet usage.

Table 4: Constraints Encountered in the use of library Internet Services by Patrons.

Constraints	**UNILAG**		**LASU**		**Total**	
Lack of Internet services.	39	16.25	11	6.87	50	12.5
Lack of adequate knowledge of the use of internet.	68	28.3	56	35	124	31
Difficulty in finding relevant information and time available.	43	17.91	33	20.6	76	19
Inadequate power supply.	46	19.16	26	16.3	72	18
No adequate ICT resource support	44	18.33	24	15	68	17

Source: Survey 2011

From the table, it can be observed that the most inhibiting factor was lack of adequate knowledge of the use of internet resources for information sourcing. This was followed by the difficulty in finding relevant information. Other inhibiting factors are inadequate power supply inadequate ICT resource support. Lack of internet services was also indicated by respondents another inhibiting factor.

The result of this study can be attributed to the fact that the use of ICT for library services is not yet widespread in educational institutions in Nigeria. The situation is made worse by the erratic power supply by Power Holding Company of Nigeria and inadequate

knowledge or competency skill among patrons is another impediment. This research study is in consonance with the earlier studies of Okebukola (1997). Amao (2003) who indicated that the computer and internet are not yet part of school/classroom technology in 90% public schools in Nigeria not to talk of their library. Again, few out of over sixty Nigeria universities are linked to the Internet and using ICT for educational purposes. The result of this study also supports the earlier work of balogun, (2008) who indicated that the major constraints that limited Internet usage roughly ranked in order of severity were: Availability of Internet connections, Speed of the connections, Telephone cost and Internet subscriptions.

CONCLUSION AND RECOMMENDATIONS

Based on the findings of this study, the following conclusions were drawn:
1. The most preferred Internet library services by patrons are World Wide Web (www) and electronic mail (e-mail).
2. Internet library services for patrons are mainly for accessing reference materials, down load reference materials, for pedagogy of instruction and for research purpose.
3. The major constraints to the use of internet by library patrons are lack of internet services, inadequate knowledge of the use of internet to source information, difficulty in finding relevant information, poor power supply and inadequate ICT resource support.

Based on the findings of this study, the following recommendations were proffered:
1. All academic libraries in Nigeria must provide patrons access to library data bases (internet). And to ensure that information from data base flow from Nigeria institutions to the global database for accessing through the internet.
2. Library management should continue to put pressure on organizational management and NGO's to invest more on the latest advancement of ICT equipment, that will promote library services in this millennium i.e. alternative and independent means of access to information super highway, through such means as millennium library complex quality, hard ware and software equipments, satellite communication, uninterrupted power supply, and training programs for users/patrons.
3. Libraries should mount e-awareness campaigns on their campuses.
4. A short (2 mins) internet usage proficiency text should be designed and used by libraries to gauge the need requirements and capability of their potential clients.

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