

The Use of Information and Communication Technology (ICT) in Academic Libraries in Nigeria: A Case Study of Covenant University Library Ota, Nigeria.

Esther Opeola Lawal – Solarin

Centre for Learning Resources

Covenant University Library, Ota, Ogun State

Nigeria

Abstract

Information and Communication Technology (ICT), has added value to the services provided by Nigerian libraries. This study employed a survey research method on the use of ICT in Nigerian libraries: a case study of Covenant University library. The respondents were students and faculty of the university. The findings show that Covenant University library, has an abundance of computers connected to the internet with web based Millennium software. The students and faculty make use of online public access (OPAC) to locate materials on the shelves. The study reveals several reasons for using the internet by both faculty and student respondents. But the lowest ICT usage was electronic databases. The faculty respondents with the highest frequency of 40 (80%) use the internet to up-date knowledge while the highest student respondents 177 (76.7%) use the internet to complete projects. However, adequate training of library staff would boost the use of electronic databases.

Keywords: Communication, Covenant University, Faculty, Students, Libraries, Nigeria, Information, Technology.

Introduction

The effectiveness of a library as an instrument of education is determined by the success with which the library is able to provide and satisfy user's information needs. The 21st century is regarded as an era of information revolution. Advances in information technology have led to far-reaching developments in higher education sector; an example of which is the application of digital information in learning. Libraries and information centres in Nigeria are not only equipped with materials that are in traditional format but also in electronic formats: they offer users a vast selection of information resources.

Before the emergence of ICT, the functioning of libraries in Nigeria has been cumbersome, time-wasting, without giving any room for flexibility. But with the introduction of ICT in Nigeria, particularly at the higher educational institutions there is simultaneous access for many users at the same time and it helps to close the global information gap and create brighter future for students (Omagbemi, Akintola and Olayiwola, 2004).

Information and communication technology, usually abbreviated as (ICT) is often used as an extended synonym for information technology (IT). Wirsiy and Shafack (2002) in Bappah (2010) defined "ICT as a broad-based term that encompasses the gathering (acquisition) organization (packaging), storage and retrieval (dissemination) of information that can be in textual or numerical (books, documents), pictorial and vocal forms (audio-visual) or a combination of all the above (multi-media), using a combination of computers and telecommunications telephony distance learning".

Literature Review

Academic libraries are experiencing greater improvements in the areas of teaching, learning, research and communities activities. Iwu and Yusuf (2010) affirmed that 61.9% of students at Covenant University use OPACs to locate materials on the shelves. In a similar study by Ilo and Ifijeh (2010), 94% of final year students at Covenant University indicated that the internet had greater impact on their projects. Also, Nwezeh (2010) in a study on the use of ICT in Nigerian Universities finds that 78% of staff and 85% of students at Obafemi Awolowo University use the internet for their projects. Furthermore, Krubu and Osawaru's (2011) findings identified ICT resources and the use of the resources available at John Harris and Benson Idahosa University libraries as search engine, internet, CD-Rom, Online database, and World Wide Web. These resources are used to acquire, store, process, retrieve, and disseminate information. ICT has made it possible for Nigerian academic libraries to use the internet for search engines such as Yahoo, Google, e-mail etc and to access online digital resources such as Amazon, Wikipedia etc.

Both academic and public libraries play major roles in the manpower development of any Nation. Public libraries are to serve the general public information needs. But Emojorho (2010) in a study on ICT and collection management in public libraries, finds that only a few public libraries in the south-south, Nigeria are computerized and do make use of internet. Moreover, they are not adequately funded. Computers are not available and the libraries lack developed manpower. But the Special libraries in Nigeria realise the economic value of ICT in the growth and development of their business hence, they acquire computers that are connected to the internet. Abubakar (2010) in a study on availability and use of ICT in six Nigerian university library schools; notably identified availability of computers, internet, CD-ROMS, e-mail,

microfilm, microfiche, videotapes, and slide projectors as resources available and that they use the resources notably for education and training.

Africa university libraries being the hub and research activities for development require internet connectivity to be viable in this age of ICT. Etim (2004) in Okon (2005) observes that technological development have created a shift from traditional information environment to an e-environment such as CD-ROMs, online services, as well as online database. Bandwidth, according to Alhasan and Adepoju (2007), is the amount of data that a computer network can transfer in a certain amount of time. Omekwe and Echezona (2008) noted that the north-south digital divide is proportionately skewed against Africa, thereby making information global access faster, broader and diverse in the Europe and America than in Africa. Kamba (2008) discovered the problem of IT especially internet use in Nigeria libraries to include inadequate and poor information infrastructure.

Krubu and Osawaru (2011) reveals some factors hindering the impact of ICT in Nigerian university libraries as lack of search skills, epileptic power supply, expensive software and hardware, and huge amount of money spent to fuel generators. Oketunji (2004) affirms that the Internet and other ICTs provide a golden opportunity for the provision of value-added services by libraries. Indexing, abstracting and publication of local research and their digitization are means of facilitating learning. Aina (2004) identified the negative laissez-faire attitude of lecturers, students, and libraries as other factors militating against the development and use of ICT in university libraries in Nigeria. Furthermore, Aina admits the high cost of ICT training but opined that library staff and users should do something on their own to improve their IT skills.

Finally, Allison (2007) suggests continue information literacy programmes, because he found out that users are not aware of the information resources available in libraries or they do not know how to access them.

Objectives of the study

To find out:

1. Availability of ICTs in Covenant University Library
2. The ICT resources used by the staff and students of the library
3. How often they use the resources
4. The purpose for which they use the ICT resources
5. Problems encountered in the course of using the ICT resources.

Methodology:

Survey research methodology was used for the study. The population of the study consisted of 4104 library users. (3200) registered students and 904 faculty of Covenant University. 300 library users (230 students and 70 faculty staff) were sampled from this population using random sampling technique. 300 questionnaires were administered out of which 280 were duly completed. Out of the 280 questionnaires completed, 230 representing (82%) and 50 representing (17%) are students and faculty respectively. The instrument adopted for the study was a 2 part questionnaire which was administered to the respondents within the library premises. Section A of the questionnaire collected background information while section B contains availability, use, and ICT services provided to students and faculty members by the university library. It was

validated and tested for face validity and administered personally by the researcher with the assistance of the library staff. The data was analysed using frequency tables and percentages.

Findings and Discussions

Table 1: Respondents by status

Respondent	Frequency	Percentage
Faculty	50	17.9%
Students	230	82.1%
Total	280	100%

Table 1 shows that 50 (17.9%) of the respondents are faculty members while the remaining 230 (82.1%) respondents are students.

Table 2: Availability of ICT Resources in CU

Variables	Faculty		Students	
	Freq.	(%)	Freq.	(%)
The library provides internet service	28	56%	130	56.5%
Library subscribe to electronic databases	26	52%	80	34.8%
Online public access catalogue (OPAC) is available in the library and campus network	27	54%	182	79.1%
Provision of adequate computers for staff and students	40	80%	160	69.6%
Library provides photocopying services	35	70%	140	60.9%
Laminating and scanning services are provided	30	60%	180	78.3%
Library provides binding & printing services	37	74%	190	82.6%
Audio & Video services are available for staff and students	-	-	100	43.5%
Television is available for relaxation	-	-	120	52.2%

Table 2 indicates that both students and faculty use all the resources at the covenant university library. Faculty respondents indicated provision of adequate computers as the highest with a frequency of 40 representing 80%. While the student respondents indicated provision of binding and printing services as the highest with a frequency of 190 representing 82.6%. The faculty respondents indicated internet usage in the library with a frequency of 28 representing 56% while the student respondents indicated internet usage with a frequency of 130 representing 56.5% this is expected because only final year students are permitted to use the library multi-media. The lowest ICT usage for both faculty 26 (52%) and Students 80(34.8%) was the use of electronic databases the library subscribed to. The reason could be lack of awareness by both faculty members and students. A notable number 182 (79.1%) of student respondents indicated the use of OPAC which is the holding of the library. This affirms the study by Iwu and Yusuf (2010) on means of locating library materials at covenant university library; the study reveals that 61.9% of the students used OPAC.

Table 3: Purpose for using the Internet service

Variables	Faculty		Students	
	Freq.	(%)	Freq.	(%)
To prepare for examination	30	60%	132	57.4%
Browsing the web	25	50%	150	65%
To up-date knowledge	40	80%	130	56.5%
For in depth research work	26	52%	140	60.87%
Up-dating lecture notes	28	56%	125	54.35%
For communication	35	70%	142	61.74%
To complete project	15	30%	177	76.96%
To consult reference materials	26	52%	120	52.2%
For leisure / recreation	-	-	100	43.5%

Table 3 reveals reasons for using the internet by both faculty and students. The faculty respondents, with the highest frequency of 40 representing (80%) use the internet in the library to up-date knowledge, while the highest students respondents 177 (76.96%) use the internet to complete project. This is followed by 35 (60%) of the faculty respondents use the internet for communication. while 150 (65%) students respondents use the internet to browse the web.

The least number, 15 representing (35%) of the faculty respondents use the internet to complete project while the least number 100 representing (43.5%) of the students respondents use the internet for leisure/recreation. Table 3 reveals that 76.96% of the student respondents use the internet to complete project.

Table 4: Frequency of ICT use in CU Library

Period	Faculty		Students	
	Freq	(%)	Freq	(%)
Very often	11	22%	80	34.8%
Sometimes	30	60%	130	56.5%
Seldom	5	10%	20	8.7%
Never	4	8%	-	-
Total	50	100%	230	100%

Table 4 indicates that majority of faculty 30 (60%) and students 130 (56.5%) of covenant university sometimes use ICT in the university library, while 11 (22%) faculty respondents use ICT very often and 80 (34.8%) students respondents use it very often, 5 (10%) faculty respondents seldom use ICT in the library and 20 (4.3%) student respondents seldom use it, but 4 (8%) faculty respondents never use ICT in the university library while none of the student respondents never use it.

One could deduce from table 4 that students use ICT in the library most. This is expected because faculty members have limited time. Moreover, they have PCs in their offices that are connected to the internet. Nwezeh (2010) in a similar study on the use of ICT at Obafemi Awolowo University reveals that 71% of faculty use the internet in their offices.

Table 5: What are the problems encountered by faculty and students

Problems	Faculty		Students	
	Freq.	(%)	Freq.	(%)
Epileptic power supply	20	40%	120	52.2%
Insufficient availability of resources	-	-	-	-
Time constraint	35	70%	-	-
Space constraint	-	-	-	-
Uncooperative attitude of library staff	-	-	160	69.6%
Cost of utilization of the resources	-	-	125	54.4%
Obsolete equipment	-	-	-	-
Inadequate training of library staff	30	60%	130	56.52%
Lack regular cooling environment	26	52%	152	66.1%

Table 5 above revealed the problems encountered by both faculty and students. 35 respondents representing 70% of faculty has the highest challenge for the use of the library. while 160 (69.6%) of the student respondents indicated uncooperative attitude of library staff. A notable number 30(60%) Of the faculty respondents indicated inadequate training of library staff. 152 (66.1%) of student respondents indicated lack of regular cooling environment as problem.. The least number 20 (40%) and 120 (52.2%) of the faculty and student respondents indicated epileptic power supply as one of the challenges. This is in line with the findings of krubu and Osawaru (2011) that reveals some factors hindering impact of ICT in Nigeria university libraries as lack of search skills, epileptic power supply, expensive software and hardware, and huge amount of money spent on fuel generators.

Table 6: Assessment of library resources and services

Assessment Rating	Library Resources		Library Services	
	Freq	%	Freq	%
Excellent	28	10%	7	2.5%
Very Good	185	66.1%	48	17.1%
Good	67	23.9%	157	56.1%
Fair	-	-	63	22.5%
Poor	-	-	5	1.8%
TOTAL	280	100%	280	100%

Table 6 shows the assessment of the library resources and services by both faculty and student respondents. The resources were rated very good by faculty and students, with a frequency of 185 representing 66.1% while 10% rated it excellent. Library services were rated badly compared to the rating for library resources. 7 of the respondents representing 2.5% rated library service as excellent while 48 representing 17.1% rated the service as very good. The highest rating for the library services was 157 representing 56.1% and it was rated while that of library resources was 185 representing 66.1% and it was rated very good. This implies that the library services rendered at CU library should be improved upon.

Discussion of findings

According to findings on availability of ICT resources and services for uses by both faculty and students, it gathered that CU library has very good ICT resources and Internet service has greater usage. This is in line with the findings of Ilo and Ifijeh (2010), that 94% of final year students at Covenant University found internet usage useful for their projects. These findings also corroborated the findings of Nwezeh (2010) in a study on the use of ICT in Nigerian Universities which found that, 78% of staff and 85% of students at Obafemi Awolowo University use the

internet for their projects. Also, finding reveals that 60% of faculty and 56.5% of student respondents at CU sometimes use ICT in the University library.

Furthermore, 60% of faculty indicated inadequate training of library staff as problem encountered for the use of the library while 69.6% of student respondents indicated uncooperative attitude of the library staff. However, what the students see as uncooperative attitude of the library staff cannot be separated from some inadequacies manifested by the library staff. In essence both the students and faculty saw inadequate training of the library staff as a hindrance in their quest to avail themselves of the services provided by the library. This collaborated the findings of Krubu and Osawaru (2011) that identified some factors hindering the impact of ICT in Nigerian libraries as lack of search skills, epileptic power supply, etc.

Power supply is the least challenge with a frequency of 20 (40%) by faculty and 120 (52%) by students respondents. This shows that despite the general challenge of interrupted and unreliable electricity supply in Nigeria, the CU library has achieved a feat of uninterrupted power supply, thus ensuring unhindered access to its ICT resources. However, training and re-training of both librarians and library assistants are essential to make them serve library users better.

Conclusion

It is obvious from the study that ICT has brought Nigerian libraries into a larger pool of resources. The use of the internet and its resources being an integral part of ICT has added values to the services provided by Nigerian libraries. Acquisition of current and usable information services through the use of ICT is expected to facilitate community development. That community development can only be enhanced through the elimination of all inhibitions to and provision of ICT facilities in all the existing libraries in Nigeria.

Recommendation

In the light of the above, the following recommendations are proffered:

1. Although the Federal Government should be commended for integrating ICT into the mainstream of the education system it should equally strive to ensure uninterrupted power supply throughout the country. This is the only way by which the Government can guarantee the use of ICT in Nigerian libraries.

- 2 The problems encountered by both students and faculty in using the ICT resources show that Library users need to be further encouraged to use the library by serving them better. Hence, it is recommended that the library management should undertake a regular Appraisal of the performance of every library staff so that the incidence of users' dissatisfaction with service delivery is reduced to the minimum. Weaknesses, strength, and potentials of library staff would thus be identified with a view to strengthening them for better performance.

3. Finally, regular training and talk on the use of ICT resources available in Nigerian libraries and their benefits for both academic and other library users are recommended.

Reference

Aina, L.O. (2004). Coping With the Challenges of Library and Information Services: The Need for Institutionalized Professional Development. Nigerian Library Association Conference Proceedings 2004, p.4.

Alhasan, J.K. and Adepoju, S.A. (2007). An Evaluation of Internet Connectivity of Information Technology Firms in Minna Metropolis. *Information Technologist* 4(1): 96-103.

Alison, A.K. (2007). The effect of information literacy on the utilization of electronic information and resources in selected Academic and Research Institution in Uganda.

<http://www.emeraldinsight.com/journals.htm?issn=02640473&volume=25&articleid=1610818&show=abstract>. (Accessed March 13, 2013).

Bappah, M.A. (2010). Availability and use of Information and Communication Technology (ICT) in six Nigerian University Library Schools. Available at www.webpages.uidaho.edu/~mbolin/bappah-abubakar.htm. (Accessed January 16, 2013).

Ilo, Promise and Ifijeh, Goodluck (2010). Impact of the Internet on Final Year Students Research: A Case Study of Covenant University, Ota, Nigeria. Available at <http://www.webpages.uidaho.edu/~mbolin/ilo-ifijeh.htm>. (Accessed January 10, 2013).

Iwu, Juliana and Yusuf, Felicia (2010). Use of Academic Library: A Case Study at Covenant University, Nigeria. Available at www.white-clouds.com/iclc/cliej/cl30YI.pdf (Accessed December 25, 2012).

Kamba, M.A. (2008). The Changing Role of Researchers in Nigeria: The Internet as an Alternative Future Modernity. Available at digitalcommons.unl.edu/cgi/viewcontext.cgi?article=1231&context=libphilprac. (Accessed January 17, 2013).

Krubu, Dorcas E and Osawaru, Kingsley E (2011). The Impact of Information and Communication (ICT) in Nigerian University Libraries. Available at digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1614&context=libphilprac. (Accessed January 17, 2013).

Nwezeh, C (2010). The Use of ICT in Nigeria Universities: A Case Study of Obafemi Awolowo University, Ile-Ife. Available at www.webpages.uidaho.edu/~mbolin/nwezeh.htm. (Accessed January 11, 2013).

Oketunji, I (2004). Library development and the role of Information and Communication Technology, being a paper presented at National Workshop on Strategies for Managing Technology Services in Libraries and Information Centres, NLA Cataloguing, Classification and Indexing Section, held at Stella Obasanjo Complex, Lokoja, 17th-24th October.

Okon, H.I. (2005). Effective Communication and Smooth Administration of Academic Libraries in 21st Century: A New Paradigm in Nigeria. Available at www.webpages.uidaho.edu/mbolin/Okon.htm. (Accessed March 2013).

Omagbemi, C. O., Akintola, B.A., and Olayiwola, I.B. (2004). Academic Libraries, the Internet and its Potential Impact on Teaching and Learning in Nigerian Tertiary Institutions. *Journal of Library and Information Science* 1 (1&2): 38-39.

Omekwu, C.O and Echezona, R.I. (2008). Emerging Challenges and Opportunities for Nigerian Libraries in Global Information Environment: A paper presented at the 46th annual NLA conference June 1 2008, Kaduna.

