

*Review*

# Use of Information and Communication Technologies in Academic Libraries in Bayelsa and Delta States, Nigeria

<sup>1</sup>Oghenovo Kelvin Onoriode and <sup>2</sup>Basil Enemute Iwhiwhu

<sup>1</sup>ICT/Cataloging Librarian, Western Delta University, Oghara, Delta State.

Corresponding author's E-mail: [onosovo@yahoo.com](mailto:onosovo@yahoo.com)

<sup>2</sup>Lecturer at the Department of library and information science, Delta State University, Abraka, Nigeria.

E-mail: [Bices2006@yahoo.com](mailto:Bices2006@yahoo.com)

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This research was carried out to survey the use of information and communication technologies in academic libraries in Bayelsa and Delta States, Nigeria. The descriptive survey design was adopted for the study where 198 questionnaires were retrieved and used for analysis. It was found out that ICT are lowly used in the libraries studied as responded indicated that ICT used are desktop computers, laptop computers and the internet. It was also found out that ICTs not used in the libraries include Bar code readers, Projectors, radio frequency identifiers, etc. It was recommended that more fund should be made available by funding bodies to enable academic libraries deploy more up to date ICT facilities in their libraries.

**Keywords:** Information technologies, Usage, Academic Libraries

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## INTRODUCTION

Librarianship under the influence of information and communication technologies has witnessed transformation and improved professional practices; as library services now cut across geographical boundaries. Hence, Atkinson (1991), states that the emergence and development of the virtual library system in the 21st Century is redefining and extending the traditional definition of library; rendering those definitions with respect to a particular 'locality', or 'particular institution' or 'geographical region' outdated. Hence, Nigerian libraries must therefore, overcome the prevailing perspective of locality as libraries play key roles in providing the right

information in the context of the global village (Ali, 2015; Akanni, 2008). However, library services could be hindered by lack of information and communication technology (ICT) infrastructure thereby frustrating the effort of providing the right information to the right audience at the right time and with ease.

As such, libraries today are shifting from the traditional custodial role of information resources to the provider of service-oriented digital information resources (Williams & Channaveeraiah, 2008). Williams and Channaveeraiah (2008), Kadiri and Adetoro (2012) posit that the widespread use of computers has increased the reliance

on computer networks, rapid growth of the Internet and explosion in the quality and quantity of information has compelled libraries to adopt new means and methods for the storage, retrieval and dissemination of information and better library services. This has led to the development of digital libraries and application of innovative ICT facilities, which have tremendously increased the provision of enhanced user satisfaction, cost effectiveness, rapid responses, and easier operational procedures (Williams & Channaveeraiah, 2008). In other words, academic libraries have been employing ICTs and electronic information resources and services to satisfy the diverse information needs of their users. Hence, e-journals, CD-ROM databases, online databases, e-books, web-based resources, and a variety of other electronic media are fast replacing traditional (print) resources in libraries

In that regard, there has been a growing interest and concern over the application and use of information and communication technology to library operations and services in Nigeria since the 1970's (Bichi, 2008). Over the years, many academic libraries in Nigeria had made attempts to apply information and communication technology (ICT) to enable them manage their libraries and also to join the global information phenomena (Akinyotu, 1976; Agboola, 2000; Nok, 2006 and Bichi, 2008). Though individual efforts at using information technologies started in the mid 70s and 80s by the University of Lagos, University of Ibadan and Ahmadu Bello University, Zaria libraries, serious application of ICT to library processes started in Nigerian university libraries in the 1990s (Bichi, 2008).

## STATEMENT OF THE PROBLEM

In many academic institutions, students and researchers are increasingly becoming reliant on cybercafés instead of the library to satisfy their need for information. This problem may not be unconnected with the inability of academic institution to provide fund and making libraries to be ICT compliant. Consequently, this problem has resulted in diminishing patronage and even abandonment of traditional library resources. Being mindful of low budgetary allocations and the capability of the libraries to provide effective and efficient services, particularly with increasing availability of alternative means of securing such ICT based resources, has put more pressure on academic libraries in the Nigerian context and has resulted in reduction of the utility value of most academic libraries. Hence, this review on the use of ICTs to provide services in academic libraries in Bayelsa and Delta states, Nigeria.

## Research question

- i. To what extent are information and communication technologies used in academic libraries in Bayelsa and Delta States?

## REVIEW OF RELATED LITERATURE

Several authors have written about the use of ICTs in academic libraries. In this direction, Anunobi (2007) carried out a study to identifying the ICT facilities available in Nigerian university libraries. The study employed the use of questionnaire for data collection which was administered to 25 university librarians during Committee of University Librarians of University (CULNU) 75<sup>th</sup> meeting held in Port Harcourt from 26<sup>th</sup> – 27<sup>th</sup> April, 2001 to which 19 responded. The study revealed that most of these libraries (73.7%) use ICT facilities for administrative purpose, (57.9%) for cataloging and classification, (42.1%) for acquisition. Only (21.1%), (31.6%) and (36.3%) use the facilities for circulation, serials and reference respectively. This goes to show that ICTs are being deployed in libraries.

Krubu and Osawaru (2011) surveyed the impact of information and communication technology (ICT) in Nigerian university libraries. The result showed that the ICT resources mostly used by respondents, were CD-ROM, online database, World Wide Web and the Internet. The major reason attached to the use of ICT resources by the respondents are storage and retrieval of information. They concluded that ICT have great impact on the effectiveness of the Nigerian university library. Jange and Sami (2006) evaluated the use of the Internet as an information source by libraries of the National Institutes of Technology in India. The study revealed that Internet services, email, online databases and World Wide Web (WWW) were the most frequently used services by librarians. The results indicated that the libraries made use of the Internet mainly for identifying latest books and journals for acquisition and serials control activities of the library. Search engines were the ultimate mode of searching information and colleagues assist in getting the desired information. The results indicated that the libraries accept the significance of the Internet in library activities and services. The librarians have to reorient themselves, and adopt the technology to generate services and resources where skills of structuring and organizing resources were put to their best use.

Siddiqui (1997) reported on the use of information and communication technology in seven university libraries in Saudi Arabia. The survey results show that academic libraries are using information technologies to provide excellent services to library users. In addition, all seven

**Table 1.** on use of ICTs in academic libraries in Bayelsa and Delta States

To what extent are the ICT facilities in your library used?	Highly Used	Moderately Used	Lowly Used	Not Used	Mean (M)	Standard Deviation (SD)
Desktop computers	20(10.1%)	178 (89.9%)	0 (0%)	0 (0%)	3.1	±1.2
Laptop computers	6(3.0%)	30(15.2%)	100(50.5%)	62 (31.3%)	1.9	±0.7
I-Pads, I-Phone, Android Phone, Blackberry	0 (0%)	0 (0%)	81(40.9%)	117 (59.1%)	1.4	±0.5
Tablets computers	0 (0%)	0 (0%)	0 (0%)	198 (100%)	1.0	±0.3
Servers	10(5.1%)	15 (7.6%)	49(24.5%)	124 (62.6%)	1.6	±0.6
LAN Network	62(31.3%)	65 (32.8%)	30 (15.2%)	31(15.7%)	2.7	±1.0
WAN Network	0(0%)	0 (0%)	40(20.2%)	158 (79.8%)	1.2	±0.5
Internet connectivity	38(19.2%)	130 (65.7%)	16(8.1%)	14(7.1%)	3.0	±1.2
CD-ROM	16(8.1%)	140 (70.7%)	40(20.2%)	2(1.0%)	2.6	±1.0
Bar Code readers and RFD technologies	0 (0%)	0 (0%)	0 (0%)	198 (100%)	1.0	±0.3
Library management software (LMS)	18(9.1%)	33 (16.7%)	47(23.7%)	100 (50.5%)	1.8	±0.7
Scanners	0 (0%)	120 (60.6%)	78 (39.4%)	0 (0%)	2.6	±1.0
Printers	0 (0%)	123 (62.1%)	75(37.9%)	0 (0%)	2.6	±1.0
Photocopiers	0 (0%)	138 (69.7%)	50 (30.3%)	0 (0%)	2.6	±1.0
Digital camera	0 (0%)	18 (9.1%)	60 (30.3%)	120 (60.6%)	1.5	±0.5
Overhead projectors	0 (0%)	0 (0%)	0 (0%)	198 (100%)	1.0	±0.3
Opaque projectors	0 (0%)	0 (0%)	0 (0%)	198 (100%)	1.0	±0.3
CD/VCD/DVD player	15(7.6%)	23(11.6%)	160 (80.8%)	0 (0%)	2.3	±0.9
Television	35(17.7%)	65 (32.8%)	40(20.2%)	58(23.3%)	3.1	±1.2
Projector screen	0 (0%)	0 (0%)	0 (0%)	198 (100%)	1.0	±0.3
Modem	0 (0%)	0 (0%)	30 (52.2%)	168 (84.8%)	1.2	±0.5
<b>Weighted Mean</b>					<b>40.2</b>	<b>±0.7</b>

academic libraries are using information and communication technology in performing their day-to-day work of processing and services.

Also, Al-Qallaf and Al-Azmi (2002) surveyed the availability and utilization of information and communication technology in public libraries in Kuwait. The survey showed that the factors impeding the application of information and communication technology and its utilization in libraries were planning, funding, human resources, and building structure. Udoh-lomechine (2009) found out in his investigation into the factors associated with computer procurement among librarians in 5 selected university libraries in Edo and Delta State South-South, Nigeria, that the computers are used to train library staff; typing official document and data processing.

Ramzan and Singh (2009) carried out a study on the status of ICT application in Pakistani libraries. The study focused on the status of computers and other commonly used hardware, e-mail, Internet, library software, automated user services and online resources available

in academic libraries of Pakistan. The data collected through questionnaire method shows that there is low level of IT utilization especially with the absence of computers, e-mail and Internet in the libraries. Chisenga (2004) studied 5 university libraries in Ghana and 5 universities in the united Kindom (UK) to know the level of ICT use. The study revealed that there is low level of ICT use in Ghana unlike in the UK were there is high level of ICT use.

## RESEARCH METHOD

This study employed the descriptive survey design. This Design was adopted because it would enable the researcher to explore the current status of use of information and communication technologies to services in academic libraries in Bayelsa and Delta States and variables were not manipulated. The population of this study is made up of 237 librarians and library officers drawn from twenty academic libraries in Bayelsa and

Delta States which have been observed to have deployed ICT facilities. Out of the 237 questionnaire administered, 198 were retrieved and used for analysis.

### Data Analysis:

From Table 1 above, 20 (10.1%), 178 (89.9%) with mean (M) 3.1 and standard deviation (SD)  $\pm 1.2$ , stated that desktop computers available in the libraries are highly and moderately used while 38 (19.2%), 130 (65.7%) with mean (M) 3.0 and standard deviation (SD) 1.2 also stated that Internet connectivity were highly and moderately used in their libraries respectively. It is also revealed that 81 (40.9%), 117 (59.1%) with mean (M) 1.4 and standard deviation (SD)  $\pm 0.5$  stated that I-Pod, I-Phone, Android, Blackberry, tablet computers are lowly and not used respectively in the academic libraries, Also 198 (100%) with mean (M) 1.0 and standard deviation (SD)  $\pm 0.3$  opined that Bar Code Readers, radio frequency identifiers (RFID) technologies, digital cameras, opaque and overhead projectors and projector screens were not used in the academic libraries. The weighted mean (M) = 1.9 and standard deviation (SD) =  $\pm 0.7$  from Table 1 above revealed that there is low level of usage of available ICTs in academic libraries in Bayelsa and Delta states.

The findings from table 1 are in agreement with the findings of Krubu and Osawaru (2011), who found out that the use ICTs in academic libraries they studied, is low. The implication is that academic libraries in Bayelsa and Delta states are not effectively applying ICTs to services probably due to lack of availability of ICTs or lack of knowledge on how to apply the few available ones.

### CONCLUSION

It is however concluded in this study that information and communication technologies (ICTs) are lowly used in academic libraries in Bayelsa and Delta State as internet connectivity is moderately used on desktop computer and laptops. But I-Pod, I-Phone, Android, Blackberry, tablet computers, Bar Code Readers, radio frequency identifiers (RFID) technologies, digital cameras, opaque and overhead projectors and projector screens are not used. This will affect adequate services in the library especially now that information is now available in diverse format.

### RECOMMENDATION

In the light of the above finding the following recommendations are made

1. Funding bodies, agencies and non governmental organization should make funds available to academic libraries to purchase modern ICT equipment for better services.
2. Librarians in Bayelsa and Delta State should expand the use of ICT to other ICT devices for better library services especially in this era of social network.
3. Librarians are advised to get adequate training on the application and use of ICTs to positions themselves as driving force in the networked information era.

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