

## Application of information and communication technology facilities in technical services operations at Bayero University library, Nigeria.

**Victoria Sokari**

*Bayero University, Kano*

**Umar Garba Gama**

*Bayero University, Kano*

**Zanaib Abba Haliru**

*Bauchi State University, Gadau*

**Kemi J. Olayemi**

*Bayero University, Kano*

**Oladimeji Eyitayo Yemi-Peters**

*Kogi State University, Anyigba*

### Information Impact:

Journal of Information and  
Knowledge Management  
2017, Vol. 8 (1) Pg 52 - 58  
ISSN: 2141 – 4297 (print)  
ISSN: 2360 – 994X (e-version)  
[www.informationimpact.org](http://www.informationimpact.org)

### Abstract

This paper examines the application of Information and Communication Technology (ICT) facilities to technical service operations of Bayero University Library, Kano. Qualitative research method was adopted for the purpose of the study. The population for the study comprised of the eleven (11) staff members of the technical service unit of the library, while the head of the unit was sampled to respond to the interview questions posed. The study revealed that ICT facilities that were used in the technical service unit of the library were computers, printers, mobile phones, Virtual Library Software, internet, cataloguing and classification tools such as Online Computer Library Center (OCLC) and Library of Congress Online Catalog. Findings also revealed that inadequate training of staff on ICT application to technical services; poor electricity supply and insufficient fund were some of the challenges plaguing the application of ICT facilities to technical unit of the library. The study recommends that there should be adequate training of staff, provision of sufficient funds and constant supply of electricity among others to boost ICT application in the technical service unit of the library.

**Keywords:** *ICT facilities, Technical service, Bayero University Library*

### Introduction

Almost every discipline and endeavor in the universe today has moved away from traditional ways of operations in the conduct of their activities. Libraries are not left behind in the transformation which information and communication technology (ICT) have brought in the conduct of their operations and service provisions. This has resulted in the introduction of concepts such as e-library, e-banking, e-governance, e-learning, e-business, e-publishing, e-

documents, e-journals and the likes (Whong, 2014).

Academic libraries being those attached to institutions of higher learning to support the teaching and research activities of the parent institution, renders several services among which technical service is one. Others include reference, circulation, serials, and computer/e-resource based services among others. The technical service, particularly cataloguing and classification involves the process of making available the library's collection to the users of the library by providing bibliographic information about the library materials such as author's name, title, publishers, call number etc, which will enable users identify and locate these materials easily and quickly (Badawi, 2009; Barkett, Ritchie & Standley cited in Badaru & Oyegun, 2012). Aina, Ayegunle, Ogunbo and Aribatise (2010) posited that the main purpose of any library is to provide access to information in all its forms and formats and to provide a multi-channel assistance to users in locating specific pieces of information.

In order to remain relevant in this era of technological revolution, transformation and advancement, technical service in academic libraries, have to incorporate ICTs to provide services effectively and efficiently that will satisfy users' information needs (Aina, 2004 cited in Olalude, 2011; Gama, 2013). Despite the significant role played by ICTs in revolutionizing and transforming libraries, it has been observed that ICTs have not been optimally utilized in the provision of technical services in some academic libraries in developing countries (Miraj & El-Hadi, 2012; Nkanu & Okoro, 2010 cited in Okiy, 2014). It is against this background that this study attempts to investigate the application of ICTs in technical services with particular reference to cataloguing and classification operations in Bayero University Kano.

### **Objectives of the study**

The objective of the study is to investigate the application of ICTs to technical service operations in Bayero University Library and the specific objectives are as follows:

1. To find out the types of ICTs utilized in the technical service operations of Bayero University Library.
2. To find out how ICTs are applied in providing technical services in the library under study.
3. To identify the challenges encountered in using ICTs to provide technical services in the library under study.
4. To suggest possible measures to be employed in order to overcome challenges.

### **Research questions**

The study was conducted to answer the following research questions:

1. What types of ICTs are utilized in the technical service operations of Bayero University Library?
2. How are the ICTs applied in providing technical services in the library under study?
3. What are the challenges encountered in using ICTs to provide technical services in the library under study?

4. What measures can be employed to overcome the challenges?

### **Methodology**

Qualitative research method was employed for the purpose of this study. The population of the study comprise of the eleven (11) staff of the technical service unit (cataloguing and classification) of Bayero University Library. Purposive sampling technique was used to select the respondent, which is the head of the unit. The instrument for data collection was the interview and unstructured interview in particular. The unstructured interview was used to collect on the sport response from the respondent. Narrative analysis was used to analyze the data generated. Narrative analysis is an approach of analysis that entails description of events through interviews and observations in which the researcher synthesizes the events into narratives or stories (Gay & Mills 2006).

### **Findings and discussion**

Findings obtained from this study were discussed below as follows:

#### **Types of ICTs utilized in the technical service operations of Bayero University Library**

Based on the data collected, the study revealed that considerable levels of ICTs application have been achieved in the operations of technical services (cataloguing and classification) of the library under study. It was revealed that ICT facilities such as computers and their peripherals, such as mouse, monitors, keyboards etc; laptops; GSM phones; printers; barcodes; internet and; staplers are used in the technical unit of the library. Others are cataloguing and classification tools such as Online Computer Library Center (OCLC), Library of Congress Online Catalog as well a Library Management Software, which is the VTLS. This implies that the library have made a head way in incorporating ICTs to the work of technical service thereby taking the advantage of these facilities to boost the operations of the technical unit and providing effective and efficient services. This is corroborated by the findings of Arinola *et al* (2012) who, observed that many academic libraries in Nigeria have adopted the use of ICT in the technical service of their library.

#### **Methods of applying ICTs to provide technical services in the library**

The study further discovered that computer based and online cataloguing tools are used to perform the work of cataloguing and classification in the library under study. For cataloguing, computers are used to input the bibliographic information of library materials into the MARC tags of the VTLS that is used in the library. This is used to create the OPAC for the library. This corroborates Yakubu (2012) who asserted that bibliographic information/description such as, statement of responsibility, ISBN or ISSN , title, edition, publication description (publishers and year of publication), classification type, call mark, series, target audience/location of materials, barcode number are entered into the MARC and saved to build up the OPAC. Also revealed in the study was that Barcoding of library materials is also

done at this level of data entry and that the cataloguing tools used are OCLC and Library of Congress Classification Online, where the classifier in the library usually log on to via internet, in order to classify materials in the library under study. It was however discovered that other helpful cataloguing and classification tools such as classification web and cataloguing calculator are not used in the library. The reason may be because these facilities are usually subscribed and not free.

### **Challenges encountered in using ICTs to provide technical services in the library**

Findings revealed that the challenges affecting the application of ICTs in technical service operations of the library were inadequate training programs for cataloguing and classification staff to move with trends in ICT application in their job. Some of the computers used in the technical service unit of the library are old and with low memory capacity. There is also the problem of epileptic electricity supply and inadequate provision of ICT facilities. The problem of inadequate power supply affects the smooth running of the unit, since power fluctuations have negative effect on the computers and also interrupts the work of the staff of the unit. This further confirms the findings of Nkanu and Okoro (2010) cited in Okiy 2014, that absence of ICT training programs, provision and installation of obsolete ICT facilities in libraries, inadequate provision of funds and poor electricity supply among others are the challenges affecting the application of ICTs in libraries.

### **Measures that can be employed to overcome the challenges**

Further findings obtained from the study revealed that there should be adequate training and retraining of cataloguing and classification staff in areas of ICTs that directly affects their work in order to provide effective and efficient services to the users. This is because constant training exposes the staff to new trends in cataloguing and classification which they will acquire and translate into their routine work. It was discovered from the study that the library should be provided with latest and up-to-date ICT facilities in order for the staff to be able to carry out the work of cataloguing and classification smoothly. Findings also revealed that there should be adequate provision of funds for ICTs in libraries and constant electric power supply.

### **Conclusion**

ICTs have brought about enormous changes in the way service is provided in libraries. Operations and services that were hitherto performed manually are now carried out using various ICT facilities, which have increased effectiveness and efficiency of library services, particularly in cataloguing and classification. These facilities comprise of a variety of information and communication technologies such as computers and their peripherals, internet, online cataloguing and classification tools such as library of congress catalog online, OCLC, classification web, web calculator etc. One of the greatest achievements of computer application to cataloguing and classification is the development of the OPAC, which have

enabled libraries to build up their holdings using computer networks and library soft ware applications (VTLS, KOHA, X-LIB etc) and sharing with other libraries in form of consortium.

Based on the challenges identified in the study, the following recommendations were made:

- There should be regular and adequate training and retraining of technical services staff in ICTs in order to keep them abreast of new knowledge and skills of cataloguing and classification using ICT facilities. This will in turn result to the provision of effective and efficient service and high productivity.
- ICT facilities in the technical service should be regularly upgraded. Old and worn-out facilities should be replaced with new ones for the smooth running of the unit.
- There should be alternative and regular supply of electricity to allow the work of the unit to run uninterrupted.
- There should be adequate provision of funds because fund is necessary for the provision of all other requirement of the technical unit relating to ICT, such as replacement of old and obsolete ICT facilities, Maintenance of existing ones, staff training in form of in-house workshop etc.

#### References:

- Adedibu , L. O. , Akinboro, E. O. & Abdussalam , T. A. B. (2012).  
*Cataloguing and Classification of Library Resources in the 21st Century*.  
Retrieved from  
<http://www.igi-global.com/chapter/cataloguing-classification-library-resources-21st/60814>
- Abdul-Maliq, Y. O. (2006). *Research Methodology in Business and the Social Science*.  
Abuja: Al-Maliq and Company.
- Adeleke, A.A. and Olorunsola, R. (2010). ICT and library operation: More on the Online Cataloguing and Classification Tools and Techniques in Nigerian Libraries. *The Electronic Library*. vol. 28.no. 3
- Afolabi, A.F & Abidoeye, J.A (2012). The Integration of Information and Communication Technology in Library Operations towards effective library services. *Proceedings of the 1st International Technology, Education and Environment Conference African Society for Scientific Research (ASSR)*. Retrieved from <http://hrmars.com>
- Arinola, A. A., Adigun, O. & Oladeji, B. O. (2012). Impact of ICT on Cataloguing & Classification of Library Materials; Case Study of Some Selected University Libraries in South-West Nigeria *American International Journal of Contemporary Research* 2(6) Retrieved from

[http://www.aijcrnet.com/journals/Vol\\_2\\_No\\_6\\_June\\_2012/15.pdf](http://www.aijcrnet.com/journals/Vol_2_No_6_June_2012/15.pdf)

- Badaru Ayo & Oyegunle John (2012). *Impact of ICT on Technical Services*  
Retrieved from <http://jdapo220.blogspot.com.ng/2012/11/impact-of-ict-on-technical-services.html>
- Badawi, G. (2009). *Library Cataloguing for Students*. Zaria: Amadu Bello University Press. P 6
- Ebunuwele E. G., Ola, O. S & Uduebor A. (2014). Application of Information Communication Technology in Academic libraries in Nigeria. *International Journal of Education and Research* 2(12) Retrieved from <http://www.ijern.com/journal/2014/December-2014/36.pdf>
- Gama, U. G. (2013). Application of Information and Communication Technology (ICT) Facilities to Reference and Information Service (RIS) Provision in University Libraries in north West Zone of Nigeria. *Information Impact: Journal of information and Knowledge Management* 3(1), 1-17.
- Gay, L.R. and Mills, G.E (2006). *Educational Research: Competencies for Analysis and applications*. New Jersey: Pearson. P. 435.
- Joint Steering Committee for Development of RDA (2014). "RDA: Resource Description and Access". Background.
- Katsina, M.N. (2004). The university Library. In Jega, A., Abba, I.A.and Wakili, H. (Eds) *Kano:Consolidating the Citadel: Bayero University, Kano1994-2004*. Center for Democratic Research and Training.
- Krubu, D.E. and Osawaru, K.E. (2011). The Impact of Information and Communication Technology (ICT) in Nigerian University Libraries. *Library Philosophy and Practice Journal(e-journal)* paper 583. Retrieved from <http://digitalcommons.unl.edu/libphilprac/583>
- Ladan, M. T. (2015). *CyberLaw and Policy on Information and Communication Technology in Nigeria and ECOWAS*. Zaria: Amadu Bello University Press. P. 12
- Lawal –Solarin, E. O. (2015). *The Use of Information and Communication Technology (ICT) in Academic Libraries in Nigeria: A Case Study of Covenant University Library Ota, Nigeria*. Retrieved from



<http://eprints.covenantuniversity.edu.ng/1654/1/The%20Use%20of%20Information%20and%20Communication%20Technology.pdf>

- Mairaj, Muhammad Ijaz & El-Hadi, Widad Mustafa (2012). Applications of Information and Communication Technologies in libraries in Pakistan *J Med Lib Assoc* 100(3). Retrieved from doi: <http://dx.doi.org/10.3163/1536-5050.100.3.013>
- Mishra, L. & Mishra, J (2014). ICT Resources and Services in University Libraries. *International Journal of Digital Library Services* 4(3), 243-250. Retrieved from <http://ijodls.in>
- Olalude, F.O. (2011). Work Values, Achievement Motivation and Job Burnout as Determinants of Technostress Among Library and Information Science Personnel in the Automated Federal University Libraries in Nigeria (Doctoral thesis) Department of Library, Archival and Information Studies, Faculty of Education, University of Ibadan. P. 71
- Oketunji, I. (2002). Application of Information Technologies in Nigeria: Problems and Prospects: *Paper presented at 10<sup>th</sup> Biennial Conference of the National Association of Library and Information Science Educators.*
- Okiy, R.B. (2014). *History of Libraries.* Benin: Ambik Press. p415-45
- Pandita, R. & Singh, S. (2012). Need and importance of library Classification in ICT Era. *Journal of Indian Library Association* 48(4) 25-30. Retrieved from [https://www.researchgate.net/profile/Ramesh\\_Pandita/publication/](https://www.researchgate.net/profile/Ramesh_Pandita/publication/)
- Whong, F. M. (2014). Application of Information and Communication Technologies (ICT) to Management of Library Information Resources in Selected Nigerian Federal University Libraries (Master's Thesis, Ahmadu Bello University, Zaria, Nigeria). Retrieved from <http://kubanni.abu.edu.ng:8080/jspui/bitstream/12345>
- Yakubu, Hajara (2014). Library automation in Federal University Dutsin-ma Library, Katsina State, Nigeria. *Nigerian Libraries:* 47(1), 91-101.

**Sokari, Victoria:** Currently the Faculty Librarian in the Faculty of Education, Bayero University, Kano. She is specialized in information organization and retrieval, ICTs and Academic libraries. **E-mail:** [vickysokari@gmail.com](mailto:vickysokari@gmail.com)

**Gama, Umar Garba, Ph.D:** An Associate Professor in the Department of Library and Information Sciences, Bayero University, Kano. His area of research interests are ICTs in Library and Information services, Reference and Information services, Bibliography and citation techniques, etc. **E-mail:** [uggama2000@yahoo.co.uk](mailto:uggama2000@yahoo.co.uk)

**Yemi-Peters, Oladimeji Eyitayo:** He is an astute Librarian/ Lecturer in the Department of Library and Information Science, Kogi State University, Anyigba. His area of interests are Information Resources and Services with bias in Electronic Information Resources EIRs, Information Literacy Skills, ICTS in Libraries and Information Services among others. **E-mail:** [yemi-peters.oe@ksu.edu.ng](mailto:yemi-peters.oe@ksu.edu.ng)

**Olayemi, Kemi J.:** She is a Certified Librarian, working with the University Library, Bayero University, Kano. She is currently undergoing her Ph.D in Library and Information Science. Her area of specialization is in information organization and retrieval, ICTs in Library and Information Services, etc.

E-mail: [prettym1006@yahoo.com](mailto:prettym1006@yahoo.com)

**Abba Haliru, Zainab:** working with the University Library, Bauchi State University, Gadau. She is the Head of Unit, Electronic Library, a Certified Librarian and currently pursuing her Ph.D in Library and Information Science and her interest is in Information organization and retrieval and ICTs. E-mail: [zahalirui963@gmail.com](mailto:zahalirui963@gmail.com)