

**ADOPTION AND USE OF ICT TOOLS FOR EFFECTIVE SERVICE DELIVERY IN
FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA, LIBRARY.**

By

CHUKS-IBE, Prisca Oluchi

**Department of Library and Information Technology, Federal University of Technology,
Minna**

(pochuksibe@futminna.edu.ng 08039695496)

Abstract

This research investigated the adoption of and utilisation of ICT tools for effective service delivery in Federal University of Technology (FUT) Minna, library. The study population is comprised of 28 academic librarians in FUT Minna library. Questionnaire was used as the instrument for data collection. Data gathered was analysed using frequency counts and simple percentage. The findings revealed that, the availability of major ICT tools in FUT Minna library is very high, it also shows the high level of utilisation of these tools but pointed out the low or underutilisation of fax, audio and video tapes. It was concluded that ICT tools are available in FUT Minna library, and that they are highly utilised. It was recommended among others that the university librarian through the university management should make available other ICT tools like fax, video and audio tapes, telephone networks, and above all, constant power supply.

Keywords: Adoption, Use, ICT, Service, Delivery, University, Library.

Introduction

A university library is an academic library which is located in the universities. They can accommodate several branches within the university community but maintain one main library otherwise referred to as the university library. The primary aim of establishing university libraries are to support the university's learning process, serve as storehouses of knowledge, help in research development and to satisfy the information need of both the students and the faculty members. Before the emergence of Information and Communication Technologies (ICTs) in the university libraries, carrying out library services / library routines or information services were done manually. But the introduction of these ICTs has changed

the analogue handling of library services. This shift has broadly affected the acquisition, processing, storage and retrieval of library resources and even security. This is in line with the submission of Omekwu and Echezona (2008) that this shift is very important because, for an academic library to be on the same page with their users, they should take cognisance of the fact that the world is living in virtual realities where library services will be in the web and not affected by the traditional opening and closing hours of the library.

ICT is a universal term that has to do with all communication devices and its applications. ICT tools are the electronic gadgets which aids librarians in carrying out their library services, they include: computer and its networks, computer hardware and software, fax, printers and copiers, and many security gadgets as well as various services and applications associated with them which include: video conferencing, teleconferencing and many more. ICTs are often referred to in different context as; ICTs in education, sports, healthcare and other spheres of life (Rouse, 2005). Ebijuwa and ToAnyakoha in Saleem et al. (2013) sees ICTs as tools as well as means used for collection, capture, process, store, transmit and disseminate information.

Statement of the problem

The introduction of every human endeavour has brought about tremendous change in the services rendered by librarians to the patrons. These services include; the traditional information search system, borrowing of information materials and much more. However these ICT aided services cannot be carried out effectively if there are no adequate skilled manpower, maximum electricity supply and above all, adequate funds for purchase and maintenance of the existing ICT tools. It is against this backdrop that this research intends to investigate how adoption of ICT tools could enhance effective service delivery in the university library under study.

Aim and objectives of the study

The aim of this study is to investigate how adoption of ICT tools could enhance effective service delivery in the university library, and the specific objectives are to:

- i. Ascertain the availability of ICT tools in federal University of Technology Minna, Library.
- ii. Find out the types of ICT tools used for library services in Federal University of Technology, Minna.
- iii. Identify the challenges in utilising these tools for effective service delivery in Federal University of Technology, Minna.
- iv. Suggest strategies for solving these problems.

Literature review

Availability and types of ICT tools used for library services

The availability of information communication technology means the presence of its facilities in the provision of information resources in the libraries (Oriogu et al. 2014). They further stated that the use of ICT in information handling and processing has arisen because of information explosion. In most cases, availability of ICT tools varies according to the institutional mandate. Etebu (2010) studied availability of ICT in Niger Delta University libraries and identified the following ICT tools; computers, UPS, printers, antenna mast, VSAT, proxy server, electricity (power supply), internet connectivity, e-mail, CD-ROM, projectors, slides audio tapes, video tapes. The fact that ICT in libraries has brought significant changes in the library products and services cannot be over flogged. Etebu (2010) also maintained that ICT provides libraries with capabilities for the location of information,

storage, information retrieval and dissemination of information, pointing out that internet access enables librarians to locate information stored in other computers around the world.

Challenges in utilising ICT tools in the libraries

In a study, Awuor et al. (2013) noted that the adoptions of ICT in the higher institutions in Kenya are experiencing a lot of setbacks resulting from several factors but majorly inadequate funding. In line with this, Oghenetega et al. (2014) recommended that government should vote enough funds to education especially public and academic libraries. They further listed restricted access to users, poor maintenance culture, poor networking, lack of trained personnel, illiteracy, poverty (cost)lack of adequate infrastructure, erratic power supply, policy structure of the government, political, economic , cultural and technological factors as the major bottlenecks in utilising ICT in public libraries.

Strategies for solving the problems of using ICT tools

In another study, Echezona in Ani et al. (2016) pointed among others that updating the skills of the library staff to enable them help users and improving the funding of library to enhance the purchase and maintenance of ICT resources will go a long way in solving the challenges posed by the use of ICT tools. Today's library activities require highly competitive individuals who have acquired the various skills about the current trends in librarianship which is imbedded in ICT and its components. Chinwe et al. in Awuor (2013) posited that ICT use for library operations and services requires library practitioners who are highly skilled both in the traditional library operations and high level of computer literacy.

Methodology

Survey research design was adopted for the study. The population of the study was 28 librarians who have acquired at least a first degree in the library. Purposive sampling technique was used for the study. Questionnaire was used as instrument for data collection. Data was analysed using frequency and simple percentage.

Question One:- What are the available ICT tools in you library?

Table 1

ICT tools	Available	Not Available	Total
Computers	25 89.3%	3 10.7%	28 100.0%
Scanners	21 75.0%	7 25.0%	28 100.0%
Fax	6 21.4%	22 78.6%	28 100.0%
UPS	19 67.9%	9 32.1%	28 100.0%
Printers	25 89.3%	3 10.7%	28 100.0%
Photocopiers	24 85.7%	4 14.3%	28 100.0%
Internet networks	24 85.7%	4 14.3%	28 100.0%
Projectors	21 75.0%	7 25.0%	28 100.0%
Audio tapes	11 39.3%	17 60.7%	28 100.0%
Video tapes	8 28.6%	20 71.4%	28 100.0%
Telephone networks	11 39.3%	17 60.7%	28 100.0%
Power supply	13 46.4%	15 53.6%	28 100.0%
Bibliographic data bases	16 57.1%	12 42.9%	28 100.0%
E-books	23 82.1%	5 17.9%	28 100.0%
E-journals	26 92.9%	2 7.1%	28 100.0%
Total	273 65.0%	147 35.0%	420 100.0%

Table one shows the high availability of ICT tools in FUT Minna library showing their level of availability, they include; E-journals, computers, printers, photocopiers, internet networks, E-books, scanners, projectors, UPS, bibliographic data bases. It also indicates inadequacy or unavailability of some tools like fax machine, video and audio tapes, telephone networks and power supply.

Question Two:- What are the types of ICT tools you use for library services?

Table 2

Name of ICT Tools	In use	Not in use	Never used	Total
Computers	27 96.4%	1 3.6%	0 0.0%	28 100.0%
Scanners	28 100.0%	0 0.0%	0 0.0%	28 100.0%
Fax	2 7.1%	9 32.1%	17 60.7%	28 100.0%
UPS	19 67.9%	1 3.6%	8 28.6%	28 100.0%
Printers	25 89.3%	2 7.1%	1 3.6%	28 100.0%
Photocopiers	22 78.6%	5 17.9%	1 3.6%	28 100.0%
Internet networks	28 100.0%	0 0.0%	0 0.0%	28 100.0%
Projectors	22 78.6%	4 14.3%	2 7.1%	28 100.0%
Audio tapes	8 28.6%	9 32.1%	11 39.3%	28 100.0%
Video tapes	7 25.0%	10 35.7%	11 39.3%	28 100.0%
Telephone networks	21 75.0%	4 14.3%	3 10.7%	28 100.0%
Power supply	18 64.3%	3 10.7%	7 25.0%	28 100.0%
Bibliographic data bases	20 71.4%	4 14.3%	4 14.3%	28 100.0%
E-books	26 92.9%	1 3.6%	1 3.6%	28 100.0%
E-journals	26 92.9%	0 0.0%	2 7.1%	28 100.0%
Total	299 71.2%	53 12.6%	68 16.2%	420 100.0%

Table 2 reveals the rate of ICT tools utilisation in FUT Minna library; it shows extreme utilisation of internet networks, scanners, electronic books and electronic journals, computers, printers, projectors, telephone networks, photocopiers, bibliographic data bases, UPS and power supply. It also indicated that fax, both audio tapes and video tapes are not highly utilised.

Question Three:- What are the challenges of utilising ICT tools in your library?

Table 3

Challenges of ICT	Agree	Strongly Agree	Disagree	Strongly Disagree	Total
Erratic power supply	16 57.1%	12 42.9%	0 0.0%	0 0.0%	28 100.0%
Inadequate skilled staff	15 53.6%	4 14.3%	9 32.1%	0 0.0%	28 100.0%
Lack of continuous training and exposure	11 39.3%	17 60.7%	0 0.0%	0 0.0%	28 100.0%
Insufficient funds	8 28.6%	20 71.4%	0 0.0%	0 0.0%	28 100.0%
Lack of maintenance culture	8 28.6%	16 57.1%	4 14.3%	0 0.0%	28 100.0%
Outdated tools	6 21.4%	12 42.9%	10 35.7%	0 0.0%	28 100.0%
Technophobia	9 32.1%	2 7.1%	13 46.4%	4 14.3%	28 100.0%
Total	73 37.2%	83 42.3%	36 18.4%	4 2.0%	196 100.0%

Table 3 revealed that insufficient fund is the major bottleneck hindering effective utilisation of ICT tools in FUT Minna library. It also indicated erratic power supply, lack of continuous training and exposure and lack of maintenance culture as challenges in utilising ICT tools in the library.

Question Four:- What are the strategies for solving these problems?

Table 4

Strategies to solve the problems	Agree	Strongly agree	Disagree	Total	
Constant power supply	16 57.1%	12 42.9%	0 0.0%	28 100.0%	1. The availability of major ICT tools in FUT Minna library is very high
Employing skilled manpower	14 50.0%	12 42.9%	2 7.1%	28 100.0%	
Continuous training and exposure	10 35.7%	18 63.3%	0 0.0%	28 100.0%	It also shows the high level of utilisation of these tools but pointed out the low or
Availability of fund	8 28.6%	20 71.4%	0 0.0%	28 100.0%	
Maintenance culture	8 28.6%	20 71.4%	0 0.0%	28 100.0%	It also shows the high level of utilisation of these tools but pointed out the low or
Updating ICT tools	14 50.0%	14 50.0%	0 0.0%	28 100.0%	
Total	70 41.7%	96 57.1%	2 1.2%	168 100.0%	

underutilisation of fax, audio and video tapes.

Table 4 shows that availability of funds and maintenance culture among others are the outstanding strategies to solving the problems of ICT utilisation in federal university of technology Minna library, followed by continuous training and exposure, updating the ICT tools, constant power supply and employing adequate skilled manpower.

Summary of findings

2. The study
3. The study also revealed that erratic power supply, lack of continuous training and exposure and lack of maintenance culture are the problems hindering the effective utilisation of ICT tools but points out insufficient funds as the major problem.
4. It was also found that availability of funds and maintenance culture are the major strategies to solve the problems of ICT utilisation In FUT Minna library.

Conclusion

Based on the findings, it was concluded that ICT tools are available in FUT Minna library, and that they are highly utilised. Insufficient fund is the major problem that hinders the utilisation of ICT tools in the library. Availability of funds and maintenance culture are the strategies for solving the problems of ICT utilisation

Recommendations

Based on the findings of this study, the following recommendations were made:-

1. The university librarian through the university management should make available other ICT tools like fax, video and audio tapes, telephone networks, and above all, constant power supply.
2. The library management should ensure that all ICT tools in the library are adequately utilised.
3. The university management should as a matter of urgency, provide sufficient funds to enhance power supply, continuous training and maintenance culture among others.
4. The library management should ensure the updating the ICT tools and also, the university management should ensure that there is employment of adequate skilled manpower that could help in facilitating adequate use of ICT tools in the library.

References

- Ani, V. A., Ani Emmanuel Onyeka, U. C., & Obianuko, J. C. (2016). Strategies for enhancing the utilisation of information and communication technology (ICT) based library resources in research. *Library philosophy and practice (e-Journal)*
<http://digitalcommons.unl.edu/libphilprac/1310>, 1-26.
- Awuor, F. M., Rabah, K., & Bernard, M. M. (2013). Hinderance of ICT adoption to library services in higher institutions of learning in developing countries. *Computer science and information technology*, 1(4), 252-256.
- Etebu, A. T. (2010). ICT Availability ion Niger Delta university libraries. *Library Philosophy and Practice* <http://digitalcommons.unl.edu/libphilprac/138>, 1-4.
- Oghenetega, L. U., Umeji, E., & Obue, C. N. (2014). Challenges associated with the use of ICT facilities in public libraries of Nigeria. *Developing country studies*, 4(22), 1-5.
- Omekwu, C., & Echezona, R. (2008). Emerging challenges and opportunities for Nigerian libraries in a global information system. *compendum of papers presented at the 46th Annual National Conference and AGM, NLA Kaduna*, 63-72.
- Oriogu, C. D., Ogbuji, U. S., & Ogbuji, C. D. (2014). Availability and accessibility of ICT in the provision of information resources to undergraduate students in Babcock University Library. *REsearch on Humanities and Social Sciences*, 4(1), 29-33.
- Rouse, W. B. (2005). A theory of enterprise transformation. *Systems Engineering*, 8(4), 279-295.
- Saleem, A., Shabana, T. S., & Batcha, M. S. (2013). Application and uses of Information Communication Technology (ICT) in Academic libraries: an overview. *international Journal of Library Science.*, 2(3), 49-52.