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

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Abstract
This research investigated the adoption and use of ICT tools for effective service delivery in Federal University of Technology (FUT) Minna, library. The study population comprised of 31 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 was very high, as well as the high level of use of these tools but pointed out the low or under use of fax, audio and video tapes. It was concluded that ICT tools are available in FUT Minna library, and that they are highly used. The study 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 aims of establishing university libraries are to support the university's learning process, serve as storehouses of knowledge, help in research development and 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 physical library.

Information communication technology (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 ICTs toevery aspect of 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.

Research Questions
i.   What are the available ICT tools in Federal University of Technology, Minna libraryΩ
ii.   What types of ICT tools do you use for library servicesΩ
iii.   What are the challenges in utilising ICT tools in your libraryΩ
iv.   What are the strategies for solving these problemsΩ

Literature Review
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. 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.

In recent times, ICTs have been adopted and extensively used in different spheres of human endeavour. It is widely used in library and information services to reduce cost, enhance operational efficiency, and most importantly to improve service delivery and customer experience (Law, Leung and Buhalis in Bhoi 2017). In another study, Hussain Khan and Zaidi (2013) posited that ICTs have been a means to bring quality services pointing out that libraries and information centres at global level are able to provide access to online databases, comprehensive statistical data bases, and full text information sources with key word searching, the researchers further buttressed that the internet as an ICT tool has transformed the ways and means of information services.

In a study, Awuor et al. (2013) noted that the adoption of ICTs 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.

In another study, Echezona in Ani etal. (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 your library?
Table 1 Available ICT tools in FUT Minna library

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

Table 1 showed the high availability of ICT tools in FUT Minna library, indicating 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 types of ICT tools do you use for library services?
Table 2 Types of ICT tools used for library services

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

Table 2 revealed the level of use of ICT tools in FUT Minna library; it revealed that the use of internet networks, scanners, electronic books and electronic journals, computers, printers, projectors, telephone networks, photocopiers, bibliographic data bases, UPS and power supply is high. It also revealed that fax, both audio tapes and video tapes are not highly used.

Question Three: - What are the challenges of utilising ICT tools in your library?
Table 3 Challenges of utilising ICT tools

Challenges of ICT	Strongly Agree	Agree	Strongly Disagree	Disagree	Total
Erratic power supply	12	16	0	0	28
	42.9%	57.1%	0.0%	0.0%	100.0%
Inadequate skilled staff	4 14.3%	15	0	932.7%	28
		53.6%	0.0%		100.0%
Lack of continuous training and exposure	17 60.7%	11	0	0	28
		39.3%	0.0%	0.0%	100.0%
Insufficient funds	20	8	0	0	28
	71.4%	28.6%	0.0%	0.0%	100.0%
Lack of maintenance culture	16	8	00.0%	4	28
	57.1%	28.6%		14.3%	100.0%
Outdated tools	12	6	0 0.0%	10	28
	42.9%	21.4%		35.7%	100.0%
Technophobia	2	9	4	1346.3%	28
	7.1%	32.1%	14.3%		100.0%
Total	**83**	**73**	**4 2.0%**	**36**	**196**
	42.3%	**37.2%**		**18.4%**	**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	12	0	28
	57.1%	42.9%	0.0%	100.0%
Employing skilled manpower	14	12	2	28
	50.0%	42.9%	7.1%	100.0%
Continuous training and exposure	10	18	0	28
	35.7%	63.3%	0.0%	100.0%
Availability of fund	8	20	0	28
	28.6%	71.4%	0.0%	100.0%
Maintenance culture	8	20	0	28
	28.6%	71.4%	0.0%	100.0%
Updating ICT tools	14	14	0	28
	50.0%	50.0%	0.0%	100.0%
Total	**70**	**96**	**2**	**168**
	41.7%	**57.1%**	**1.2%**	**100.0%**

Table 4 showed 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.

Discussion of Findings
Research question one sought to find out the available ICT tools in FUT Minna library. Findings showed that there are ICT tools in the library except for some tools like fax machines, videos and audio tapes. These findings disagreed with the findings of Etebu (2010) who identified audios and video tapes as some of the ICT tools available in Niger Delta university libraries.

Research question two sought to find out the type of ICT tools that are used for library services in FUT Minna library. Findings showed that all the ICT tools including internet networks, scanners, e-books, e- journals, computers, printers, projectors, telephone networks, photocopiers, bibliographic databases, UPS and power supply are highly utilised for library services while fax, audio and video tapes are not highly used. This finding agrees with the findings of Hussain, Khan and Zaidi (2013) who stated that the internet has transformed the ways and means of information services.

Research question three discussed the challenges faced in utilising ICT tools in FUT Minna library. The results showed that the major problem hindering the effective use of ICT tools in FUT Minna is fund. The findings also pointed out other problems like; erratic power supply, lack of continuous training and exposure and lack of maintenance culture as other factors hindering the effective service delivery in the library. These findings are in line with the findings of Awuor (2013) who noted that the adoption of ICT in the higher institutions in Kenya are experiencing a lot of setbacks resulting from several factors but majorly funding.

Research question four sought to find out the strategies adopted to solve these problems. The findings showed that availability of funds and maintenance culture are the outstanding strategies to solving the problems of ICT use in FUT Minna library. It further revealed that continuous training and exposure, updating the ICT tools, constant power supply and employing adequate skilled manpower are also strategies to arrest the problems facing the use of ICT tools in FUT Minna library. These findings are in conformity with the positions of Echezona in Ani *et al.* 2016) and Chinwe *et. al.* in Awuor (2013) that updating the skills of the library staff and improving the funding of libraries to enhance the purchase and maintenance of ICT resources will go a long way in solving the problems use of ICT tools, and that the use of ICT for library operations and services requires library practitioners who are highly skilled both in traditional library practices and high level of computer literacy.

Summary of Findings
1.   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.
2.   Findings showed that the use of internet among other ICT tools in the library is very high.
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.

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