

AVAILABILITY AND UTILIZATION OF ICT FOR INFORMATION SERVICES RETRIEVAL IN FEDERAL UNIVERSITY OF TECHNOLOGY LIBRARY, MINNA. NIGER STATE

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ABSTRACT

This study examined the availability and utilization of ICT for information services retrieval in Federal University of Technology, Minna. In carrying out this study four research questions were posed. The study sample population comprised 482 students of the university. The instrument used for data collection in this study was questionnaire. Research questions were answered using frequency and percentages. The major findings of the study revealed that there was a written acquisition policy/practice in the surveyed library, the levels of utilization of the computers, CD-ROMS, internet, e-mail and that of information service retrieval were high. The major inhibitors or problems facing the library and its ICT unit were hardware failure, corruption of files/database and inadequate space. It was therefore recommended that more fund should be allocated to further enhance acquisition of information resources and ICT facilities, expansion of the current ICT System Unit for convenience of users and concerted effort be made to keep the level of ICT utilization in FUT Minna library.

INTRODUCTION

Information and Communication Technology (ICT) is a new concept that has transformed or shaped information storage and retrieval in libraries, businesses, schools, offices, homes, etc. Libraries, the world over, are now adopting ICTs to facilitate or enhance the provision of their range of services. Its evolution has brought about steady and effective services delivery. Many scholars and authors have given various definitions of ICT. For instance, Aina (2004) defines ICT as "an omnibus term that encompasses computers and telecommunication technology; it is concerned with the technology used in handling, acquiring, processing, storage and dissemination of information". Oketunji (2002) referred to ICT as "a term that encompasses the notion of application of technologies to information handling (i.e generation, production,

processing, storage, retrieval, dissemination etc). Lott (2010) sees ICT as "a technology that has overtaken information technology (IT) because of its appropriateness and relevance". He further stated that IT focused on computers and their application, while ICT emphasizes the use of technology for development, thus limiting the subject to the use of computers and other technologies such as software development, digital content and telecommunication.

Johnson (2010) states that ICT is applied to facilitate quick efficient access, integrate and repackage information to end users. Before the advent of computer, telephone services was commonly used the world over for communication purpose, then fax, telex, etc were introduced.. With the advent of computer and its capacity for networking, came the internet (IT). The fusion of the IT with that of communication has given rise to ICT. Aina (2004), on the other hand, asserts that: Information and communication technology (ICT) has radically transformed most of the services provided by a library. ICT is heavily utilized in the storage, processing and dissemination of information. It has made the organization of information very efficient, the delivery of basic information services more effective and the dissemination of information to users easier. It has eliminated allot of routine and repetitive tasks in a library. Any modern library and information professional must be knowledgeable in library automation, networking and internet surfing.

University libraries in Nigeria, according to Akintunde (2006), naturally display different stages of development in their structure and information services delivery to their clients in order to meet the millennium developmental target in the area of ICT as enunciated in West African Information System (WAIS) agenda. However, for the purpose of this research, ICT, is defined as electronic gadgets that are used to gather, process, store, retrieve and disseminate or transmit information for the purpose of teaching, learning and research.

The impact of ICT in Nigeria may be at infancy stage since much of these technologies are yet to diffuse to the majority. However, ICTs democratization of knowledge has stirred some rethinking about the importance of university libraries challenge to "change or die" directed at them (Grayton, 2008). As Aina (2004) puts it the use of ICT in information handling and processing arises because of the need to cope with information explosion that requires greater speed and accuracy than manual processing. Already, as reported by Dolphin (2008), university libraries in Europe and America have taken giant steps in ICT full application for computerization, digitization and provision of unlimited access to world knowledge. According to them, "many are already offering speedy state of the art information delivery services to patrons; on the other hand, Nigerian university libraries are lagging behind in this new task of exploiting ICT to revitalize the libraries"

Availability and utilization of ICT facilities means the user having first ,knowledge of the ICT tools/facilities and nature of services provided by a given library. Only after these can the user take full advantage of the facilities in order to enrich his/her knowledge and to meet the desired information needs. It has been established through Literature that ICT components such as computers, internet, e-mail and CD-ROMs are relevant in the delivery of information services in libraries and information centres .This study therefore assessed availability and extent of utilization of ICT for information service delivery and retrieval in the Federal University of Technology, Minna.

According to Wirsiy and Shaffak (2008), ICT embodies a variety of components that are complementary: The hardware and software. They asserted that the hardware components are the mechanical, electrical and electronic parts that make up the machine

That is used in collecting, processing, organizing and disseminating information e.g. typewriters, computers, telephone sets, audio and video recorders/players, cameras, projectors etc. The software components they described are the series of operations and applications that have been laboriously and monotonously written to enable the hardware function effectively and efficiently, stressing that if the hardware aspect of ICT is the physical (body), then the software is the spiritual (soul) component.

OBJECTIVES OF THE STUDY

1. To determine the level of utilization of computers for information service retrieval in FUT Minna Library.
2. To determine the level of utilization of CD-ROM (Compact Disc Read Only Memory) for information service retrieval in FUT Minna Library
3. To determine the extent of utilization of Internet for information service retrieval in FUT Minna Library.
4. To determine the extent of utilization of e-mail (electronic mail) for information services retrieval in FUT Minna Library.

RESEARCH QUESTIONS

The following research questions guided the study

1. What is the level of utilization of computer for information service retrieval in FUT Minna Library?
2. What is the level of utilization of CD-ROM for information service retrieval in FUT Minna Library?
3. To what extent is the Internet utilized for information services retrieval in FUT Minna Library?
4. What is the level of utilization of e-mail for information services retrieval in FUT Minna on Library?

LITERATURE REVIEW

Many authors have written on availability and utilization of ICT. Authors like:- Aina (2004) stated that the Utilization of ICT in information handling and processing has arisen because of the need to cope with information explosion. In order to keep pace with handling the increasing number of information, computers and telecommunication are utilized to handle information processing with greater speed and accuracy than manual processing. Library services, as pointed out by Unagha (2004), could be enhanced by the use of computers, that computers have been able to help in overcoming increasingly the library work load as a result of increase in the amount of published literature. Computer also assist library staff in offering improved and new services in areas such as current awareness service (CAS), selective dissemination of information (SDI), among others, It is important to note more and better manage information system is made possible by the use of computers.

Aguolu and Aguolu (2002) highlighted that computers have created great potential for use in the library, they are well-established feature of modern library in developing countries. The application of computers to library function, he asserted offers quick and easier way of performing increase workload to library task with greater efficiency in library services and functions (e.g instant and up-to-date request and over dues), as well as networking and operative activities among libraries can be carried out routinely and faster with computers. In view of the benefits that computers bring to libraries, the user and the nation at large are tremendous, it should not be ignored. He further asserted that: computer is a well-established feature of many modern libraries though the age of total electronic, libraries is yet to materialize. Since 1960s, computers have been used, to good effect, to perform many library functions from clerical house keeping activities such as ordering, cataloguing, serial control, and circulation of books and journals to reference and information service.

Olatokun (2002) asserted that: the contribution that personal computers make to the success of a library cannot be exhaustively comprehended. The personal computers (PCs) can be used in many facets of the library activities such as word-processing cataloguing, information retrieval systems, interlibrary loans, etc, it is also the basic tool needed to be hooked on to the internet. Olatokun (2002) further explained that: A digital library is such that every operation is done electronically with the aid of computers, often networked and other requisite hardware and software. Oketunji (2002) stated that: There are many functions in the libraries that computers can be made to handle effectively; these may be grouped into three categories:

- i. House keeping function, which encompass four sub-systems as follows cataloguing, acquisition, serials and circulation.
- ii. Information storage and retrieval, which entails SDI services.

iii. Management functions, which might cover areas like management of work performance or user habits.

The utilization of computers eliminates the keeping of many files in paper jackets. This is true since a book is recorded only once either during acquisition or cataloguing, thus charging in and charging out of books would only add to a removal from existing records. The correspondence in the form of instance, overdue notices, can be generated automatically by the computer in the form of letters, printed and dispatched to concerned individuals. Omekwu (2002) stated that various forms of ICT can be deployed in notable areas of serials management; they include: internet, online system, E-mail, Browsing, publishing, selection, acquisition, money transfer, electronic copying, CD-ROM technology, Database management libraries Technology, consortium.

Olatokun (2002) highlighted that the "CD-ROM application has found its relevance in library operations due to its very delivery medium, light capacity storage, ease of making duplicate copies of large volume of data.

According to Agboola (2000), various ICTs can be deployed in notable areas of serials

management. They include; CD-ROM, internet, online searching, e-mail, browsing, publishing, selection, ordering, acquisition, money transfer, electronic copying, database management and library technology consortium. Serials constitute an indispensable part of research and development management of serials is equally of great concern to librarians. ICT he said has no doubt increased and created scope for innovation in the human machine/interface. It could help detect, solve or avoid fault in serial management, thereby increasing interest in librarianship and library patronage. Also, Lee (2001) is of the view that re-engineering library services can be achieving CD-ROM databases when bound in various subjects and disciplines. Based on the need of a library, they can be acquired, using the large available online for commercial and international purposes, Ogunsola and Aboyade (2005)' on their part, postulated that: many Nigeria libraries in the year 5-10 years have either computerized some of their own libraries while other have added CD-ROM drives so as to take advantage of published database in that format.

Aina (2004) posited that, the internet is a solution to the inadequate provision of information to decision makers in Africa. It is a universal encyclopedia, which will make the traditional library obsolete within the nearest future. Jackson (2000) opined that, in increasingly electronic environment, libraries' reports in circulation, statistics of printed materials and increase on site usage is enhanced. This trend could be as a result of readily available internet and access to full image databases and the level of convenience. Similarly, in support of this, Abolaji (2000) discussed about the circulation control of Kenneth Dike Main Library, University of Ibadan that

module, he researcher claimed, provides access to updating all the loans and reservation records through it and the users are able to ascertain the loan status of terms borrowed. To that end, steps and time have been taken for the code labels of the books.

Also, Omekwu (2002) stated that various forms of ICT can be deployed in notable areas of serials management. They include: Internet, online system, e-mail, browsing, publishing, selection, ordering, acquisition, money transfer, electronic copying, CD-ROM technology, database management, library consortium. The rate at which ICT is gaining acceptance internationally is alarming. Omekwu (2002) reported that it took 38 years for radio to reach 50 millions people and 13 years of television to achieve the same result. The same number of people adopted the internet in just 5 years. According to him, there were 50 pages on the www in 1993, but today the pages have increased to 1.5 billion with almost two million pages added daily. By the end of the year 2001, he asserted that, the number of Internet users end of 1999 was expected to reach about 70 million.

Olatokun (2002) stated that the Internet has found important application in the following contexts:

- (i) Remote logging and file transfer protocol (FTP). Remote logging refers to the Internet facility whereby a person can use a computer to access and work on another (remote) computer. Working on the remote computer means using any of the software and files on the remote computer much in the same manner as local users of the remote/computer may be used to edit a report or a statistical package used to computer may also be browsed.
- (ii) World Wide Web (www): This represents the most exciting application of the internet browsing facility which libraries can use to visit various www pieces of information, data files or software. One might even register for additional information and other services by completing a form online. The exciting aspect of www sites is that they provide both multimedia and hypermedia features. That is such sites often provide not only textual information, but also images and sound clips along with the text thereby enhancing the visitor's understanding and appreciation of the provided information (multimedia) and usually permit a visitor to browsed parts of documents in any of different sequences as desired (hypermedia).
- (iii) The development of internet and more particularly World Wide Web (www), drew even more organizations including libraries to publish information in electronic form. In the late 1990s, those local authorities that had developed view date system before abandoning them in favour of this more sophisticated

medium beside the advantage of improved display and organization of information, the new users sites could be accessed by much larger section either at home or in work place (Sharp, 2000). Oketunji (2002) stated that E-mail is an important tool in the library; inter library loan services are provided with it. Similarly, Olatokun (2002) explained that: The E-mail utilization in the library environment has been found in the following contexts:

- (I) Fast and cheap information service: E-mail is the next fastest means of communication, after fax. However, e-mail is much cheaper than fax, moreover, fax communication requires that both fax machines must be active simultaneously for a message to be sent and received. For e-mail communication however, the message may be sent by the originating computer to an intermediary computer on the internet. The intermediary computer may then store the message, pending forwarding when the intended recipient computer connects to the internet.
- (ii) Document delivery and data exchange: In the library environment just like in others, an important e-mail facility is the ability to send any computer created documents or file as an attachment to an e-mail message. Hence, large documents containing formatted texts, numeric data and images (e.g logos, photo graphics, signatures, etc) can be sent as it is by e-mail much faster than post or courier and much cheaper than fax.
Bulletin boards: Bulletin boards are computers on which electronic notices may be pasted by other computers by e-mail. Other computers may then visit and browse the notices and information periodically. Alternatively, such notices may be automatically distributed also on e-mail by bulletin boards to the list of subscribed computers on the internet. Libraries can
- (iii) use this facility to pass across information to users of the library or subscribers of their services.
- (iv) Computer conferencing: This represents an application of e-mail for the purposes of sending and receiving contributions to a topic. The contributions are sent to a designated" moderator computer which collates and summarizes all contributions and distributes them to all computers participating in the conferences. Such computer conferences often last for a specific period, say three months.

RESEARCH METHODS

Survey research method was used to carry out this study because of its large population. Nworgu (2006) attested that a survey research is one in which a group of people or items is studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group. The target population was the registered library users in Federal University of Technology, Minna Library. There were 1520 registered library users (FUT Minna library users registration statistics 2011/2012).

were 1520 registered library users (FUT Minna library users registration statistics 2011/2012).

A total of 510 respondents were selected out of the total population. The stratified random sampling technique was used to select respondents across the six schools in the University. These schools are School of Science and Science Education, School of Agriculture and Agricultural Technology, School of Engineering and Engineering Technology, School of Environmental Technology, School of Information and Communication Technology, School of Entrepreneurship and Management Technology. The instrument used for data collection in this study was questionnaire. Questionnaire was used for collecting data for this research because Cohen and Morrison (2012) is of the view that the questionnaire is widely used and it is a useful instrument for collecting survey information providing structured, often numerical data, being able to be administered without the presence of the researchers and often comparatively straight forward to analyze.

The instrument before use was face validated by presenting it to three senior colleagues in the field of library and Information Science. These experts were requested to examine the clarity of expression used as well as the appropriateness of language. The researcher administered and collected the questionnaire from the respondents. Thus there was 94.5% rate of return distributed. The data for the study was presented in tables analyzed using simple statistics like frequencies and percentages.

DATA ANALYSIS AND DISCUSSION

Out of 510 copies of the questionnaire that were administered to the library users, 482 (94.5%) were retrieved. The data from the retrieved questionnaire are hereby analyzed using simple statistics like frequencies and percentages.

Table.1: Level of Utilization of Computer in FUT Minna Library

S/NO	Level of Utilization	Frequency	Percentage
1	High	384	79.7
2	Moderate	96	19.9
3	Low	02	0.4
4	Very Low	00	0.0
	Total	482	100%

Results in Table.1 show that 384 (79.7%) of the respondents strongly opted for high level of computer utilization for information service retrieval, 96 (19.9%) for moderate and only 2 (0.4%) for low. It is therefore concluded that there is high level of information service retrieval in FUT Minna.

Table.1: Level of Utilization of Computer in FUT Minna Library

S/NO	Level of Utilization	Frequency	Percentage
1	High	222	46.1
2	Moderate	164	34.0
3	Low	85	17.6
4	Very Low	11	2.3
	Total	482	100%

The analysis in Table 2 shows that 222 (46.1%) of the respondents indicated that their level of utilization of CD-ROM in the library was high, 164 (34.0%) moderate, 85 (17.6%) low, while 11 (2.3%) maintained that it was very low. Based on this analysis, it could be concluded that the users' level of utilization of the CD-ROMs for information service retrieval in the surveyed library was still high

Table 3: Level of Utilization of Internet in FUT Minna Library

S/NO	Level of Utilization	Frequency	Percentage
1	High	281	58.3
2	Moderate	192	39.8
3	Low	09	1.9
4	Very Low	00	0.0
	Total	482	100%

The results in Table 3 revealed that 281 (58.3%) of respondents asserted or claimed that their level of utilization of the internet was high, 192 (39.8%) felt was moderate, while only 9 (1.9%) indicated that it was low. It can conveniently be concluded that majority of the users utilized the internet very well for information retrieval.

Table 4: Level of utilization of e-mail in FUT Minna Library

S/NO	Level of Utilization	Frequency	Percentage
1	High	276	57.3
2	Moderate	193	40.0
3	Low	13	2.7
4	Very Low	00	0.0
	Total	482	100%

The data in Table 4 shows that 276 (57.3%) of the respondent stated that their level of utilization of e-mail in FUT Library was high, 193 (40.0%) held the view that it was moderate, while 13 (2.7%) were of the opinion that the level was low. By implication, the level of utilization of e-mail was high.

CONCLUSION AND RECOMMENDATIONS

From the outcome of the findings, it is established that there exist a written acquisition policy/practice in AUN library and that the levels of utilization of the identified ICT components relevant in retrieval of information service were high. Consequently, this research concludes that the levels of utilization of computers, CR-RÖMs, internet and e-mail was high, possibly because most bonafide students of the Federal University of Technology, Minna have a laptop computer to facilities quick retrieval of needed information. The implication of these findings is that if relevant ICT components are made available, it is expected that they will, to some extent, be utilized.

Based on the above findings of the study, the following recommendations are made.

1. The ICT/ system unit of FUT Minna Library be expanded to accommodate more users at a time
2. More funds be provided to enable the library keep pace with cost of equipment, their maintenance and information explosion.
3. The University management and library management should try all that is humanly possible to keep the current high level of ICT utilization in FUT Minna library.
4. The major problems of ICT utilization in FUT Minna library which are hardware failure and corruption of files/ data base can, to some extent, be tackled through training and retraining of the staff and if need be, entire students. This can be in form of workshops, seminars, symposia, lectures etc.

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