

THE USE OF INFORMATION COMMUNICATION TECHNOLOGY: A SURVEY STUDY IN SELECTED TERTIARY INSTITUTIONS' LIBRARY IN KADUNA STATE-NIGERIA

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Abstract

Information Communication Technology is those inventions which facilitate easy and speedy dissemination and retrieval of information on a large scale. These include radio, television, cable satellite, computer, telephone, Fax machines, and Internet. The various Information Communication Technologies can be used to encompass all forms of technology used in the process of acquiring, storing, processing, and distributing information by electronic means. This paper has conducted survey on Information Communication Technology in selected tertiary institutions' libraries in Kaduna state-Nigeria. Recommendations for functional I.C.T. use in tertiary institutions' libraries in Kaduna state-Nigeria have also been given.

Keywords: Use, Information, Communication, Technology, Survey, and Tertiary Institutions

Introduction

Information is an important commodity in any society whether primitive, developing or developed. Information like knowledge is a self propagating resource; the more organization create and use of information, the more they increase their capacity and ability to further generate and use more information. In this regard, the role of information managers in the society is of great significant. Information centers serves as a collection, preservation and dissemination center for information since the development of the society depends largely on accurate and adequate utilization of information, (Ayeni, 2000). Managing the information involves identifying what should be kept, how it should be organized, where it should be held and who should have access to it. The quality of this management will dictate the quality of the decisions being taken and ultimately the organization's survival

With the growth in the use of ICTs to support information handling within organizations, the political nature of information has come into sharper focus. In this regard, information professionals which librarians are one have become highly powerful and respected in the management of every organization. Today, information and records management has become a major issue in the 21st century in view of the fact that:

- Information whether stored on paper or magnetic tape or CD or even human brain become fundamental requisite for ensuring rationality; validity and coherence in decision making in the organization.
- Records are basic tools and instrument through which functions and processes are effectively carried out if only they are well arranged, managed and made accessible to the members of the organization; and

- Modern administrative systems, like other contemporary socio-economic, technological, political, educational systems etc. have become increasingly complex and sophisticated, the reason why information and records management should move along the same line. (Ayeni, 2000).

However, McGary (1993) argued that advances in information and communication technology have been very rapid in the last two decades. Its influence has been very pervasive to the extent that there is hardly any field of human endeavor that has not been touched. Since the mid-70s, mankind has witnessed a phenomenal growth in the number and variety of information products, services, systems and sources. The catalyst for the growth has been rapid innovations in information and communication technology for creating processing, communicating and using information, (Tiamiyu, 2000).

This technology rests on computer, computer components and telecommunications. Computer can be used for a number of different tasks. Use of the computer allows for a near perfect data-base management. It should be noted that data base management encompass information management. Extensive and comprehensive set of records collected can be organized electronically in a meaningful way for purposeful usage. There are software packages that can provide good records management services, they facilities the creation and maintenance of records in a database. Gookin (2000) observed that database management through the use of computer has helped immensely in maintaining order file.

Statement of the problem

According to Dafiaghor, (2012) explained that the use of information technology in Nigerian academic libraries has been profoundly affecting all aspects of information acquisition, storage, and transfer. Its magnificent development has dramatically changed the mode of library operations and information services. Hundreds of thousands of monographic materials, journals, learning resources, databases, etc. are now available in electronic formats, and these materials can now be accessed from the remote corner of any country, thereby increasing the use of information and literature and the efficiency of information services in Nigerian tertiary institution. Users are now more independent than before; they can access to these electronic formats from their home computers and search databases according to their information needs. Students, teachers, researchers, information professionals, and employees are the user categories in tertiary institutions.

The Nigerian institutions of higher learning have been compelled to bridge the gap in the provision and utilization of IT as is the case in the advanced countries. Consequently, various technological institutions have mounted different IT courses and programmes for better appreciation, literacy and adaptability by the students and the entire academic community. Surukat, I.F. (2011), explained that the introduction of the Internet technology has tremendously impacted on service delivery by tertiary institutions in the developed countries. In Nigeria, however, efforts are just being made to strengthen the use of Internet particularly in the institutions of higher learning. In addition, funding made by Governmental agencies such as the National Universities Commission (NUC) and the Education Tax Fund (ETF), some international bodies such as the World Bank/International monetary Fund, corporate bodies (e.g. MTN) and other Non-Governmental Organizations also provide support for ICT and Internet projects on campuses. Scholars, researchers and lecturers are also gradually embracing the Internet due to its numerous advantages.

According to Ali (2005), a sizeable number of users (almost 60%) are facing numerous problems while using electronic information resources, such as lack of knowledge about the resources, lack of trained staff and inadequate terminals. He also identified four barriers to the effective provision of electronic resources in those libraries, namely: lack of strategic planning, lack of adequate or reliable funding, lack of use of Internet to provide

information services to users and a lack of consistent training for users in new information and communications technology (ICT) services. Further, Wills (1990) also concur to these problems when he identified insufficient number of terminals available for use despite high demand and inadequate electricity supply; lack of information retrieval skills for exploiting electronic resources, thus making the level of usage of resources by students very low. In his study, he found that 57% of students sampled could not use a computer, that the use of database was poor, due to lack of awareness, lack of access to computers, insufficient training and the high cost of provision.

It is against this background that this research was designed to survey the use of Information Communication Technology in selected tertiary institutions' library in Kaduna state-Nigeria.

Objective of the Study

The purpose of research is to discover answers to questions through the application of scientific procedures. The main aim of research is to find out the truth which is hidden and which has not been discovered as yet. Though each research study has its own specific purpose, we may think of research objectives as falling into a number as undertaking in line with the following objectives:

- 1) To find out the Information Communication Technology facilities available in selected tertiary institutions' libraries in Kaduna State-Nigeria
- 2) To ascertain the ways in which Information Communication Technology is utilized in selected tertiary institutions' libraries in Kaduna State-Nigeria
- 3) To outline the problems encounter in use of Information Communication Technology resources and services in selected tertiary institutions' libraries in Kaduna State-Nigeria

Research Question

The following research questions will be answered

- 1) What are the Information Communication Technology facilities available in selected tertiary institutions' libraries in Kaduna State-Nigeria?
- 2) What are the ways in which Information Communication Technology is utilized in selected tertiary institutions' libraries in Kaduna State-Nigeria?
- 3) What are the problems encounter in use of Information Communication Technology resources and services in selected tertiary institutions' libraries in Kaduna State-Nigeria?

Methodology

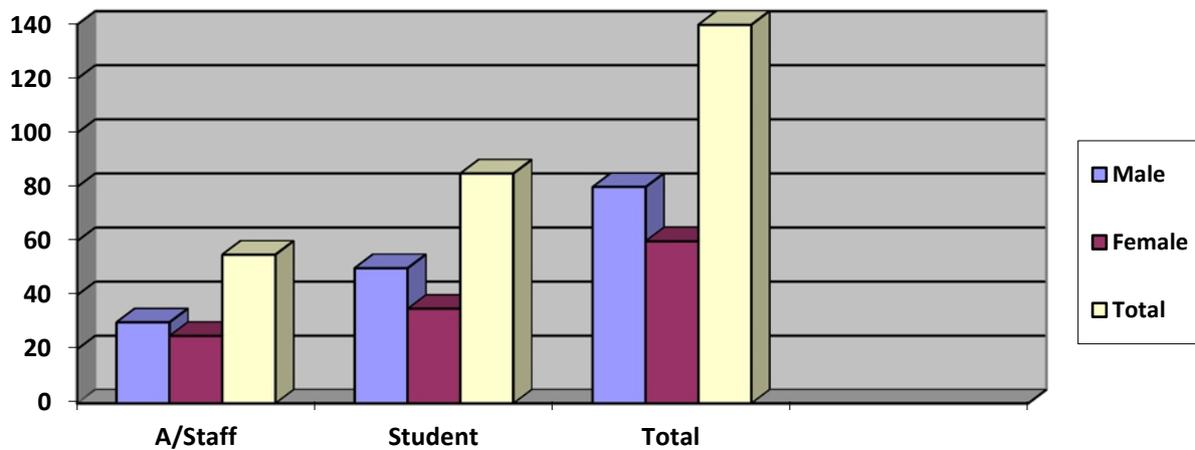
The survey study was carried out in four selected tertiary institutions' libraries in Kaduna State-Nigeria. The institutions are: Kaduna state University Library, Nuhu Bamali Polytechnics' library, Zaria; Federal College of Education' Library, Zaria, and Kashim Ibrahim Library, Ahmadu Bello University, Zaria. The staff and student have been used as sample for the study (random sampling); the data gathered were analyzed using tables, frequencies and percentages for better understanding and interpretation of findings. The paper is also organized according to the research questions and objectives of the study. Out of 150 questionnaires 140 were returned successfully by the respondents, Basic details about the participants in the survey are shown in bellow Tables. The demography of respondents revealed that the ages between 15 – 30 had the highest percent distribution of 50(35.71 %) respondents; followed by ages 31-40 with 39 (27.85 %). Ages 41-50 is represented by 30(21.42 %) respondents and the least representation were the 51 and above years with 21(15 %) respondents. In terms of marital status, most of the respondents, i e. 81(57.85 %)

were married while 59(42.14 %) were single. The response on gender type revealed that there were 80(57.14 %) male respondents whereas female respondents were 60(42.85 %).

Analysis and interpretation of data

Table 6.1: Status of gender Distribution (participants)

Gender	Staff		Student		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Male	30	21.42	50	35.71	80	57.14
Female	25	17.85	35	25	60	42.85
Total	55	39.28	85	60.71	140	100



As the above table shown that 30 respondents (21.42 %) were male staff, 25 (17.85 percent) were female staff, 50 (35.71 %) were male students, while rest of the respondents were female students, 35 (25 %).

Table 6.2 Adequacy of acquiring Information Communication Technology facilities in selected tertiary institutions’ libraries in Kaduna State-Nigeria

Adequacy	Staff		Student		Total	
	Freq.	%	Freq.	%	Freq.	%
Very adequate	15	10.71	21	15	36	25.71
Adequate	32	22.85	52	37.14	84	60
Not adequate	8	5.71	12	8.57	20	14.28
Total	55	39.28	85	60.71	140	100

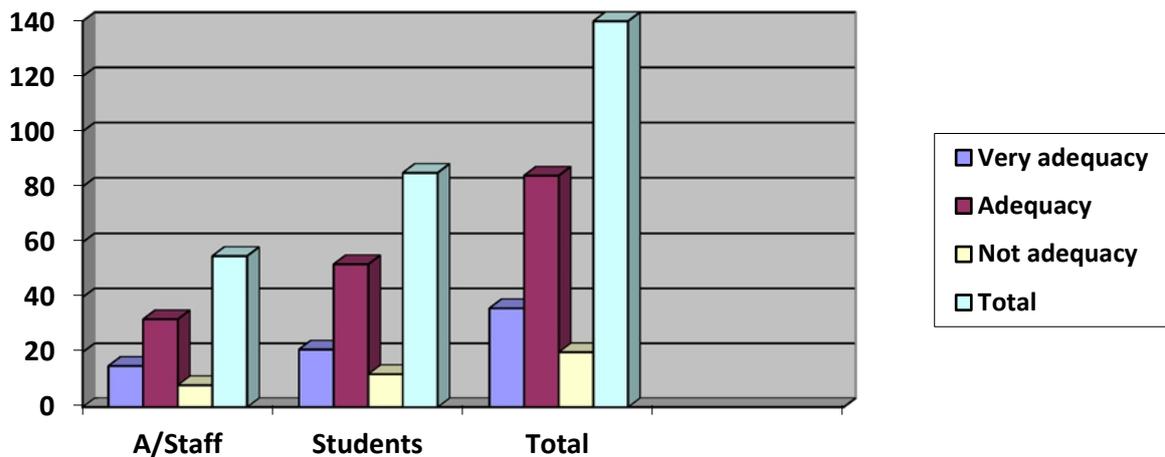
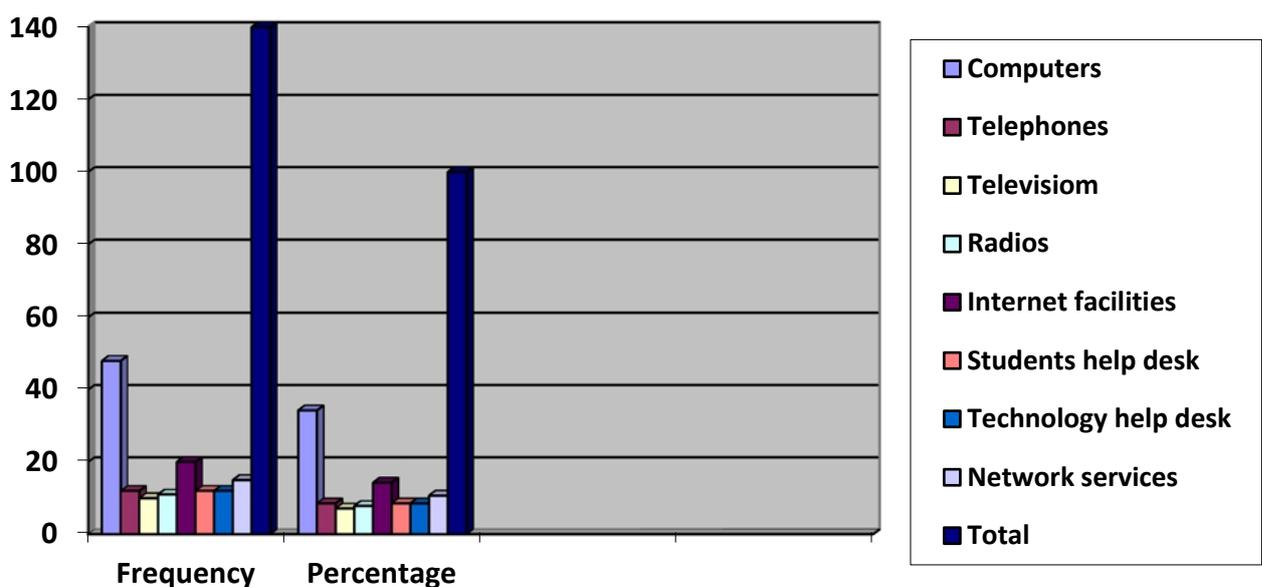


Table 5.2 makes it clear that 84 (60 %) respondents say there is adequacy of acquiring ICT Facilities followed by the very adequacy 36 with (25.71 %) respondents, while the respondents say not adequacy 20 with (14.28 %).

Table 6.3 Information Communication Technology facilities available in selected tertiary institutions’ libraries in Kaduna State-Nigeria

Facilities	Frequency	Percentage
Computers	48	34.28
Telephones	12	8.57
Television	10	7.14
Radios	11	7.85
Internet facilities	20	14.28
Student help desk	12	8.57
Technology help desk	12	8.57
Network services	15	10.71
Total	140	100



In terms of Information Communication Technology facilities are used in management of information Resources and Services participants were asked and made the appropriate answer, the result reveal that computers had the highest respondents with frequency 48 (34.28%), followed by internet facilities 20 (14.28%) respondents, network services score 15 (10.71%) respondents, telephones, student help desk and technology help desk each score 12 (8.57%) respondents, television score 11 (7.85%) respondents, and radios score 10 (7.14%) respondent.

Table 6.4 the ways in which Information Communication Technology is utilized in selected tertiary institutions' libraries in Kaduna State-Nigeria

Reason	Yes	No
Data Processing	√	
Publications	√	
Communication	√	
Circulation	√	
Cataloguing	√	
Research	√	
Bibliography	√	
Serial control	√	
Acquisition	√	
Preparing database	√	
CD-ROM Searching	√	
Online Searching	√	
Online Networking	√	
E-Learning		X
Online Information Service	√	
Email/Social Media	√	
Scanning Service	√	
Online Reservation Services	√	
Lesson preparation	√	
Database Searching Service	√	
News	√	
Current Awareness Services (CAS)	√	
Selective Dissemination of Information (SDI)	√	
On-line databases	√	
Online public access catalogs (OPAC)	√	
Full- text databases	√	
Scholarly websites	√	
Entertainment	√	
Photocopy & print	√	
Directories	√	

Key:

√= Applicable

X=Not Applicable

In order to understand the ways are Information Communication Technology is utilized in selected tertiary institutions' libraries in Kaduna State-Nigeria participant were asked and made the appropriate answer, the result reveals that Information Communication Technology is utilized purposely for the data processing, communication, circulation, bibliography, cataloging, serial control, Publications, research, acquisition, Preparing database, CD-Room searching, Online Searching, online information services, online database searching, news, current awareness services, selective dissemination information, Lesson preparation, online database, online public access catalog, directory, Online Networking, Full- text databases, Photocopy & print scholarly website, email/social media, entertainment, online reservation services, and Scanning Service. E-learning participants are

not included it as the ways Information Communication Technology is utilized in selected tertiary institutions' libraries in Kaduna State-Nigeria.

Table 6.5 the problems encounter in use of Information Communication Technology resources and services in selected tertiary institutions' libraries in Kaduna State-Nigeria

Items	Very high Problem		high Problem		Problem		Not Problem		Undecided		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The use of computers	11	7.85	20	14.28	22	15.71	64	45.71	23	16.42	140	100
Use of data bases	20	14.28	21	14.99	23	16.42	53	37.85	23	16.42	140	100
Lack of infrastructure	50	35.71	22	15.71	21	14.99	21	14.99	26	18.57	140	100
Financial support	39	27.85	25	17.85	32	22.85	23	16.42	21	14.99	140	100
Lack of ICT resources	30	21.42	28	19.99	35	24.99	27	19.28	20	14.28	140	100

From the above table it can be seen that 64 (45.71 %) respondents say there is not Problem in use of computers, followed by 23 (16.42%) for undecided, while 22 (15.71%) for some that score for Problem, high Problem score 20 (14.28%) respondents, and very high Problem score 11 (7.85%) respondents. On the use of data bases, 53 (37.85 %) respondents score not Problem, followed by 23 (16.42 %) respondents for each score to Problem and undecided. High Problem score 21 (14.99 %) respondents, while very high Problem score 20 (14.28 %). Lack of infrastructure 50 (35.71%) respondents say there is very high Problem, followed by 26 (18.57 %) who score for undecided, while 22 (15.71%) respondents for high Problem, rest of the option that are problem and not problem each score score 21 with (14.99 %) respondent. Financial support 39 (27.85 %) respondents score for very high Problem, followed by 32 (22.85%) respondents who score to Problem. High Problem score 25 (12.19%) respondents, while not Problem scores 23 (16.42 %) respondents, rest of the option that is undecided score 22 (14.99 %) respondents. Online acquisition techniques 35 (24.99 percent) respondents score for problem, followed by 10 (24.39 %) respondents who score for very high problem, High problem score 28 (19.99) respondents, while not problem score 27 (19.28 %) respondents, and undecided score 20 (14.28 %) respondents.

Conclusion

The trends in the use of ICT in library services that have been visited here together with their possible impacts in library services, information resources and services include open access resource, inter-library loan, online public access catalog (OPAC) and collection management of information resources. A pattern which is emerging is the richness of ICT that is available and diversity of processes that can be applied to those ICT for use in library resources and services. In spite of the huge problems bedevilling of application Information Communication Technology resources and services in selected tertiary institutions' libraries in Kaduna State-Nigeria, the prospects and possibilities are abundant. It is undeniable that much progress has been recorded in ICT application and use in selected tertiary institutions' libraries in Kaduna State-Nigeria. However, there is much room for improvement.

Therefore, The use Information Communication Technology resources and services in selected tertiary institutions' libraries in Kaduna State-Nigeria is a comprehensive is improper. For development training curriculum that aims to equip policymakers with the essential knowledge and skills to fully leverage opportunities presented by ICT to achieve national development goals and bridge the digital divide. For a long lasting, effective and relevant use of Information Communication Technology resources and services in selected tertiary institutions' libraries in Kaduna State-Nigeria, the following measures are hereby recommended.

Recommendation:

- 10) Information Communication Technology resources and services in selected tertiary institutions' libraries in Kaduna State-Nigeria needs funds to initiate the full implementation of ICT in management of information resources and services, the government of federal republic of Nigeria should play vital role by allotting sufficient funds for purchasing and maintaining ICT in libraries.
- 11) A comprehensive collection development policy for e-resources should be maintained by the tertiary institutions' libraries in Kaduna State-Nigeria, in order to follow a set of standard practices for acquisition and management of electronic information resources. There should be specific budget for new resources and the renewal of existing resources.
- 12) Professional organizations such as the Nigerian Library Association (NLA) and library administrators should organize short-term training programmes and workshop for library professionals on available Information Communication Technology resources and services in selected tertiary institutions' libraries in Kaduna State-Nigeria, online information resources, online database, online public access catalogue, electronic publishing, and also online open access databases.
- 13) A long-term plan is an essential component of the long-term implementation of Information Communication Technology resources and services in selected tertiary institutions' libraries in Kaduna State-Nigeria.
- 14) Standby electric power generating set should be procured in order to ensure constant power supply for proper utilization of ICT facilities. Since ICT resources relies heavily on electric power, every effort should be made to ensure that the systems are always powered as required.

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