9

USE OF COMPUTER AMONG LIBRARY STAFF IN FOUR UNIVERSITIES OF TECHNOLOGY LIBRARIES IN NORTHERN NIGERIA

Katamba Abubakar Saka*
and
Abdulrazaq Baba Abdulrahman **

*Saka; holds an NCE from College of Education, Minna; a B.LIS degree from A.B.U. Zaria and an MLS degree from Bayero University Kano – Nigeria. He is a lecturer in the Department of Library and Information Technology, Federal University of Technology, Minna – Nigeria.

**Abdulrahman holds a DLS and a B.LIS degree from A.B.U Zaria; MLS from Bayero University, Kano – Nigeria. He is a lecturer in Library and Information Science Unit, Benue State University – Makurdi, Nigeria.

Abstract

The study determines the availability and use of computers by library staff in four (4) selected Universities of Technology Libraries in Northern Nigeria. Survey research was adopted with population of 151 Library staff and a random sample size of 120 staff in four (4) selected Universities of Technology Libraries in Northern Nigeria. The study revealed that 104 staff of various categories responded and 189 computers (desktops, flat screen and laptop) were available in the university libraries under study. Data Analysis shows that Desktop computer was the popular one being used by library staff with 84 (76%) responses while flat screen tended to be the least used computer with 6(5%) response rate. On frequency of use of computers, findings showed that computers were used on daily basis with 72(69%) respondents, while 1(1%) respondent indicated to have used computer on monthly basis. Further analysis revealed that 16(15%) respondents did not indicate any frequency use of computers despite anonymity in questionnaire. It was discovered that respondents used computers for the purpose of internet browsing and e-mail with 42(22%) and 39(21%) responses respectively. On the problems militating against effective use of computers by library staff, findings showed that erratic power supply represented by 56(29%) respondents was the greater problem and this was followed by inadequate computers which were represented by 42(22%) respondents. Recommendations were proffered e.g. non-professional staff should be trained up to paraprofessional and professional status (in librarianship), while modern computers (flat screen and laptop) be procured by University Libraries (among others).

Key words: Computer Technology, Library Staff, University of Technology, Libraries, Northern Nigeria.

Introduction

The use of computer has permeated all aspects of human life such that no aspect is left unturned by computer revolution. It is a technology that is affecting the sectors of education, economy, health, manufacturing industries and libraries inclusive. In education, computers are used in teaching large number of students thereby solving the problem of over crowdedness and thus distance learning programme is achieve today through the application of computer technology, (Mabawonku, 2003). In the economic sector and to be specific, the banking sector – computers are now used in conjunction with other technologies to provide efficient and effective banking services thus solving the problem

of long queue of line by customers. This can be seen from the use of ATM by customers to withdraw money even at door step. In the manufacturing industries, robots are used to process goods, while in libraries computers are used to provide efficient services at ease; (Saka and Garba, 2007).

Library staff can use computer in association with other technologies to meet their personal or users information needs. To meet personal information needs, staff can use computer for word processing, browse, receives or send e-mail etc. Meeting library users' information needs entails searching and retrieving information requested. However, the use of computers in libraries are militated by erratic power supply, limited number of computers, inadequate skilled manpower etc.

Generally speaking computer can be used in conjunction with other technologies to provide internet services.

Statement of the Problem

Despite the importance attached to the use of computers in the 21st century, Nigeria University Libraries still stock few numbers of computers. This affects the rate of accessibility by library staff. On the other hand, library staff do not see the need to use computer so as to meet their personal and users' information needs. The use computers have become a big challenge to library staff in Nigerian Universities. This study therefore focuses on the use of computers by library staff in Universities of Technology Northern Nigeria. This study was designed to achieve the following objectives:

1 To determine the demographic variables of library staff in University Libraries understudy:
2 To determine the types of computer available and used by staff in University Libraries understudy:
3 To determine the frequency of computer usage by staff in University Libraries understudy:
4 To determine the purpose of using computers in University Libraries understudy:

5 To identify the problems encountered by staff in the use of computers in -libraries understudy:

Review of Related Literature

Literature search reveal quite a number of write-ups and studies of computer, information technology and related aspects,

Uhegbu (2001) lamented that information technology in libraries and information centres perform four major tasks and these include information processing, decision making, shared information and innovation. Assessing the definitions given by various authors, Uhegbu further lamented on four basic components of IT which include electronic processing, transmission of information, equipment and dissemination of information in multimedia. A distinction between information and ICT was made on the basis of use and nature. While information technology is concern with sending and receiving digital records of information's, ICT has to do with "systems for producing, storing, sending and retrieving digital files".

Mabawonku (2003) studies the application of information technology in distance learning with reference to three (3) Nigerian Universities (Ibadanm Ibrin and Lagos) and submitted among other students learning methods". It was revealed that lecture method attracted higher response rate of 309(86.5%) and far from this was seminar/discussion with 35(9.8%). Low response was discovered in the area of film/video, television. On the learning materials accessible to students, analysis shows that "lecturers" notes and handbook were the popular materials accessible with 283 (79.1%) response rates with low response from "recording of lectures on video cassettes.

Writing on "computer anxiety and its effects on library staff in Nigerian university libraries" with particular emphasis to Kashim Ibrahim Library, Ahmadu Belo university Zaria, Lemu (2004) submitted that 6(12%) library staff had informal computer training and that is why 20(40% staff had been affected by anxiety. The type of anxiety being exhibited by the library staff was the "expectation of failure" with 14(28%) response rate. The anxiety has affected library staff owing to the fact that it is the first time they are coming in contact with the computer.

Momoh (2006) studied the "Application of computer to special library services in federal capital territory (FCT) Abuja" and discovered that out of 23 special libraries studied, only 10(45%) have computers. On the type of services offered, study revealed that 4(80%) services were offered by central bank of Nigeria library, 5(100%) by national assembly library while 3(60%) corporation (NNPC). On the problems of special libraries in the FCT Abuja, the study further revealed that the most severe problem in all the special libraries studies was that of finance. This was followed by erratic power supply and occasional network failure. Others include indifferent attitude of the management to special library, lack of computer

literacy among library users as well as insufficient number of computers linked to internet.

Use of computer and internet technology among the teaching staff of Imo State University, Owerri was studied by Azubogu and Madu (2007) and discovered that 205(89.1%) respondents indicated YES while 25(10.9%) indicated "NO" responses to the use of the 2 technologies. On factors that motivated the use of computer and internet by the teaching staff, data shows that 230(100%) respondents indicated "modern thing to do, link to other sources of information and usefulness of the technology". This was followed by 210(91.3%) respondents indicated "always getting whatever was needed". The low response was from "convenience" with 100(43.47%) respondents. On the benefits derived from the use of information technologies, studies shows that "accessing information, acquiring curvet information and quick transmission of information each with 230(100%) respondents indicated "easy communication" while 208(90.43%) indicated "publication can be done on the net". Lowest response was from "keeping in touch with friends" with 198(86.08%). Problem encountered in the use of these technologies include inadequate power supply, problem of service computer views, cost of buying and maintaining a computer, inadequate skill development, inadequate connectivity and lack of adequate band width.

Methodology

Survey research design was adopted for the study which involves population and sample as well as the use of questionnaire (Akuezuilo, 1993). The preliminary investigation was carried out in the five (5) Universities of Technology Libraries in Northern Nigeria. The results show that 4 out of 5 universities libraries responded to the preliminary research. The responses revealed that the study population comprised 151 staff in 4 University

of Technology Libraries and as such the first 4 Universities of Technology were selected, they are as follows:

1. Federal University of Technology, Minna
2. Federal University of Technology, Yola
3. Abubakar Tafawa Balewa University Bauchi
4. Kano State University of Technology, Wudli
5. Kebbi State University of Science and Technology. Aliero

Stratified random sampling was used to select the first 4 universities of technology hence Federal University of Technology, Minna represents North Central, FUT Yola and ATBU represents North Eastern Nigeria while Kano State University Wudli represents North Western Nigeria.

Random sampling technique was used to select 120 library staff and the same copies of questionnaire were administered. Two 2 sets of questionnaire were used, i.e. the first one was to solicit for information on types and number of computers available in University libraries understudy. The second set was to sought for information on demographic data of respondents; types of computer used, frequency and purposes for usage as well as problems encountered in the use computer etc. The administration of 120 copies of questionnaire was made possible through colleagues in the University Libraries understudy.

Data Analysis and Discussion

Data were analyzed by means of frequency counts, tables and percentages.

The response rate showed that out of 120 copies of questionnaire administered, 104 copies were returned and found usable. This represents 87% success.

Characteristics of Respondents

Section A of the questionnaire sought for information on respondents' characteristics such as Gender, qualification and status, and are presented into tables, 1, 2 and 3.

Table 1: Respondents Characteristics by Gender

Gender	Frequency	Percentages (%)
Male	76	73
Female	26	25
Gender not indicated	02	02
TOTAL	104	100

The table above revealed that male respondents were 76(73%), while 26(25%) respondents were females and that 02(02%) did not indicated any of the

above sex. The higher number of males confirms the research findings by (Saka, 2005).

Table 2: Educational qualification of respondents

Qualification	Frequency	Percentage/%
Ph.D	01	01
MLS	16	15
BLS	22	21
HND	-	-
DLS	30	29
Dip. of Computer Science	09	09
Cert. in Computer Science	05	05
Cert. in lib. Science	07	07
M.SC/M.Tech	-	-
B.Sc./B.Tech	01	01
B. Arts degree	01	01
Not indicated	03	03
TOTAL	**104**	**100**

Information on qualification of library staff was sought. Data revealed that only 1(1%) staff possessed Ph.D in librarianship, 16(15%) MLS holders, while BLS holders were 22(21%). There was no single staff with HND in Librarianship. However, the highest number of staff holds Diploma in Library Science and they represents 30(29%) staff in University Libraries understudy. It was discovered that 9(9%) respondents hold Diploma in Computer Science and this was followed by Certificate in Library Science holders and they represents 7(7%) staff. Others were holders of first degree in science/technology/Arts with each 1(1%) staff respectively. Table 3 explains details on the status of the respondents.

Table 3: Status of Respondents

Status	Frequency	Percentage (%)
Professional staff	39	38
Para-professional staff	37	36
Non-professional staff	25	24
Status not indicated	03	02
TOTAL	**104**	**100**

The analysis of data on this table was based on the number of respondents by their educational qualifications. Those with BLS, MLS, and Ph.D Library Science were regarded as professional staff and they represented 39(38%) respondents. While paraprofessional staff were holders of Diploma and Certificate in Library Science represents 37(36%) respondents. Non-professional Staff were staffs who do not hold Certificate in Librarianship i.e. they hold degrees, diploma certificates in fields other than librarianship and they represents 25 (24%) respondents. Despite anonymity in questionnaire, 3(2%) respondents did not indicated their educational qualifications.

Information was sought on the types of computer being used by staff in university libraries understudy and the data contained in the table below:-

Table 4: Availability of Computers by Structure

Computers (by structure)	Number	Percentage %
Desktop	134	71
Flat screen	31	16
Laptop	24	13
TOTAL	**189**	**100**

There were 189 computers in the four (4) university libraries understudy with 134(71%) desktop computers being the highest probably due to its inexpensive nature of procure and maintain. Next to this was flat screen computers which were 31(16%) and 24(13%) laptop computers. The latter is the most expensive and this could be responsible for the university libraries to have a

lesser number of its type. University libraries due to its expensive nature. Despite all these, 13(12%) of respondents indicated to use the model in libraries. The lowest was 6(5%)

respondents that indicated to use flat screen computers. This shows that not all libraries procure flat screen computers.

Table 5: Types of Computers Utilized

Computers	Frequency	Percentages (%)
Desktop	84	76
Flat screen	06	05
Laptop	13	12
Flat screen/desktop	07	06
Not indicated	01	01
TOTAL	111	100

From the above table, the response rate of respondent was 111 änd respondents were 104. This shows that a respondent tick more than one type of computer more especially where we have 7(6%) respondents indicated flat screen/desktop computers. As discovered from the table, desktop computer seem to be popular or dominant over other computers in terms of usage as it generated 84(74%) response rate. Although it is the old

model and of course the popular one being use every where including library probably because of its cheapness in terms of purchase and maintenance. Next to this was the laptop computers with 13(12%) responses; thus is a new model and that cannot be acquired in large quantities.

Respondents were requested to indicate the frequency of computer usage and the responses were tabulated below:

Table 6: Frequency Use of Computers in University Libraries understudy

Frequency	Response rate	Percentage %
Daily	72	69
Once a weak	11	11
Twice a week	04	04
Monthly	01	01
Yearly	-	-
Not indicated	16	15
TOTAL	104	100

The table indicated non-response by 16(15%) respondents which translates to means that 16 respondents either deliberately refuse ticking options or over sighted that section of questionnaire. An interesting thing from the table was that a good number of respondents indicated to have used computer everyday with 72(69%) respondents which show that library staff access computer for personal and users' information needs. Very surprising was that 16(15%)

respondents do not indicate the frequency of computer usage which might either be deliberate or over sightedness. Next was 11(11%) respondents indicated "once a week" access to computer while 4(4%) respondents used computer "twice a week". Only 1(1%) respondents claimed to have used computer once a month. From the interpretation, it can be deduced that the more one use computer on daily basis, the more prefect one becomes.

Table 7: Purpose(s) for Using Computers in University Libraries Understudy

Purpose(s) for using computer	Frequency	Percentage %
Word processing	34	18
Internet browsing	42	22
e-mail	39	21
Record storage	33	17
Distance learning	02	01
Information retrieval for users	25	13
TOTAL	**190**	**100**

From the table, respondents popular mission for using computer in University Libraries understudy was internet browsing with 42(22%) responses which shows that university libraries understudy can equally be regarded as virtual or electronic library since one can use computer to in conjunction with other technology. Very closely related to internet browsing was E-mail with 39(21%) responses which shows that respondents browse, receive and send messages through E-mail services in libraries understudy. The 3ʳᵈ in the rank was word processing which shows that 34(18%) respondents can access and operate computers. Related to this was information/record storage with 33(17%)

responses which shows that as words are processed, they are equally stored in computer memory. They record cataloging information, ordering and acquisition record etc. Further analysis indicated that 25(13%) respondents retrieved information for users hence computers are used for information storage and retrieval devices.

Computer usage has permeated every aspects of human life and hence 15(8%) respondents use computers for relaxation (music, news, films, game etc) while in library very few respondents indicated to use computer for distance learning programme. It should be noted that the response rate outnumbered the respondents hence a respondent is likely to tick more than one alternative option.

Table 8: Problems Encountered in the Use of Computers in University Libraries understudy

Problems encountered	Frequency	Percentage %
Erratic power supply	56	29
Inadequate computers	42	22
Inadequate skills	24	12
System corruption (virus)	20	10
Network problem	34	17
Malfunction of computer	04	02
Computer accessories	06	03
Restriction to cyber café	09	05
TOTAL	**195**	**100**

There are 104 respondents with 195 response rate. As far as Nigeria is concern, power failure has also affected the provision of library services which means that erratic power supply does not guaranteed the use of computer excepts with the use of generating plants. It shows that 56(%) respondents indicated constant power failure which has become a problem to Nigeria University Libraries. Table equally shows that there exists non-availability of computers which may likely be connected to that fact that the number of library staff is greater than the number of computers. Next to this was 34(17%) respondents who lamented the network problem thus inability of staff to browse, download and send as well as receive e-mails. Respondents lamented lack of adequate skills

with 24 (12%) response rates. System corruption attracted 20(10%) responses as the use of computer can be hampered by computer virus. The least was that computers are not functioning well probably they need replacement.

Findings from the Study:

1. Professional and paraprofes-sional staff constituted reasonable number of staff in University Libraries understudy which may be attributed to the fact that librarianship is their background.

2. Desktop computers were the common computer available and used by staff in University Libraries understudy. This could be attributed to its inexpensive in terms of procurement and ease of handling.

3. Majority of staff working in university libraries understudy utilizes computer on daily basis. In order to meet their information and professional needs of information delivery to users;
4. Staff in University Libraries understudy access and use computers in libraries for internet services (internet browsing and e-mail services) which shows that the University Libraries understudy have been connected to internet;
5. Erratic power supply seems to be the dominant problem staff in University Libraries understudy. Encountered in the course of using computer meet personal and users' information needs.

Conclusion

Based on the findings from the study, conclusion was that:
1. Universities of Technology Libraries in Northern Nigeria has more professional and paraprofessional staff with few non-professional staff;
2. Desktop computers were the common computers available for use by staff in University Libraries in Northern Nigeria.
3. Library staff in Universities of Technology in Northern Nigeria uses computers on daily basis;

4. Computers in Universities of Technology Libraries in Northern Nigeria were used by library staff mainly for the provision of internet services.
5. The greatest problem encountered by Library Staff in the use of computers was the erratic power supply.

Recommendations

Based on the conclusion reached, suggestions and recommendations are hereby proffered:
1. The non-professional staff in University of Technology Libraries in Northern Nigeria should be encouraged or trained to professional or paraprofessional status in the field of librarianship with some elements of ICT in their training;
2. University of Technology libraries is in Northern Nigeria should procure modern computers for their libraries so as to meet the challenges and reality of 21st century of information age;
3. As staff uses computer on daily basis, they should keep up with the trends in the information technology;
4. Computers in University of Technology Libraries can equally be used to provide services such as OPAC (On-line Public Access Catalogue), reference service etc);
5. University libraries should endeavour to provide a stand-by generating plant to safeguard against the constant power failure.

References

Aguolu, C. C. and Aguolu, I. E. (2002). Libraries and Information Management in Nigeria. Maiduguri: Ed-Linform Services, pp 366-368.

Akuezuilo, E. O. (1993). Research Methodology and Statistics. NUC/NBTE/NCCE Minimum Standard. Abba, Christian Printing and Publishing Company, p.9.

Azubogu, N. C. and Madu, C. (2007). Use of Computer and Internet Technology among the Teaching Staff of Imo State University, Owerri, **Heartland Journal of Library and Information Science.** 1(2) 2007, pp. 38-49.

Lemu, A. A. (2004). Computer Anxiety and its Effects on Library Staff of Nigerian University Libraries: A Case Study of Kashim Ibrahim Library, A.B.U Zaria. **Zaria Journal of Librarianship** 7(1&2), 2004, 69-78.

Mabawonku, I. (2003). The Application of Information Technology in Distance Learning: A Case of Three Nigerian Universities. **Nigerian Libraries.** 37(2)2003 p. 34-45.

Momoh, R. L. (2006). Application of Computer to Special Library Services in Federal Capital Territory, Abuja. **Borno Library, Archival and Information Science Journal** 5(2) pp. 47-53.

Saka, K. A. (2006). Utilization of Information Resources in selected Post-primary School Libraries in Niger State. **Educational Forum** 9(1) 2006, pp. 46-51.

Saka, K. A. (2005). Analytical Study of Library, Archival and Information Science professional in North-Eastern Nigeria. **Borno Library Archival and Information Science Journal** 4(1&2) 2005, pp. 1-8

Saka, K. A. and Garba, S. K. (2007). Analysis of articles in the Information Technologist. **Journal of Information Technologist** 4(1) pp. 114-122.