

**PATTERN OF INTERNET USE AMONG LIBRARIANS IN FEDERAL UNIVERSITY LIBRARIES IN SOUTH-EAST, NIGERIA**

**By**

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**Abstract**

The study investigated pattern of internet use among librarians in three Federal university libraries in Southeast Nigeria. Three research objectives guided the study, covering internet facilities available, pattern of internet use by the librarians, and purpose of internet use by the librarians. The study adopted survey research design. The population comprises 30 principal librarians and University librarians in the three Federal University libraries in South-east, Nigeria. A total of 27 copies of the questionnaire were returned. Interview was conducted and observation was made on internet facilities to determine the authenticity of the respondents' responses. Findings revealed that major internet facilities available in the libraries include laptops, cybercafé, institutional website, institutional virtual library, desktop computers, wireless fidelity, cable modem, computer networking (local/wide area network), broadband internet, satellite dish and e-mail. The findings equally revealed that internet is used majorly in the libraries for sending and receiving mail, chatting, reading news and sports information, downloading music, researching for products and services, downloading images, searching for job online, and cataloguing. Based on the findings, the study recommended that library management should encourage their staff especially librarians to improve on their use of internet facilities available in the university libraries.

**Keywords: Internet Use, Librarians, University Libraries, internet facilities,**

**Introduction**

Internet has become the norm and culture of many libraries especially academic libraries. This is because of its drive in higher institution to promote the use of information and communication technology (ICT) to provide educationist, scientist, lecturers and students access to sources of information at any point over the globe. According to Ikegwuro (2017), internet has become a basic ingredient of information accessibility and dissemination. It is one of the greatest recent advancement in world of information technology and has become a useful instrument that has fostered the process of making the world a global village. Agada and Tofi

(2021) noted that internet has impacted on every sphere of academic library activity especially in the form of the library collection development strategies, library building and consortia.

Internet has increasingly become an important source of academic information that has been integrated in the overall services that library offers which ranges from providing books and other informative materials such as current awareness service, selective dissemination of information among others. Atanda (2017) noted that the library and the internet are being viewed increasingly as a versatile unified system, providing an enormous variety of materials in different formats. The internet has become an important subject for all information providers such as libraries. This is because of its relevance and application to tasks in libraries and information centres. The potential impact of internet on the public demand for the services and resources of libraries is an issue of critical importance.

University libraries have remained unchallenged until the emergence of internet, as providers of convenient and comprehensive information to meet a wide range of the information needs of her users. The fifth law of Ranganathan as cited in Weiner (2003) is that the library is a growing organism. Growth implies change and libraries are faced not only with an unprecedented rate of change but also challenges to their existence in contemporary society. The development of internet during the past decades has had profound impact on society in general and on libraries in particular.

The internet technology has evolved process, functions, services, media and information resources; on the library as a whole (Melchionda, 2007). Observation has shown that any library left behind will lose her users in near future. It is observed that fewer people are visiting the libraries than before because what they go to library for is found elsewhere. University libraries can no longer afford to be parochial and isolated. They have to change with the society. This has

been recognized for years and the networked world of the information society imposes per se a new dimension and a new obligation for co-operation. It is against this backdrop that this study investigates pattern of internet use among librarians in Federal University libraries in Southeast Nigeria.

### **Literature Review**

Some related studies have been carried out in the area of internet use. Among them are works of Atanda (2017) which investigated the influence of internet usage on user satisfaction with library services in Federal University Otuoke, Bayelsa State, Nigeria. Three research questions and three hypotheses guided the study. The findings revealed that the usage of e-mail, database and website have significant influence on students' satisfaction with library services. In their study on internet access and use internet by students of private universities in Ogun State Nigeria, Salaam and Adwgbore (2010) revealed that internet facilities were available in all the private universities.

Audu (2006) revealed that 100% of the students use the internet facilities for their studies in his study on the internet availability to postgraduate students at University of Nigeria, Nsukka. In their work to determine internet availability and use by postgraduate students of University of Nigeria, Nsukka, Oduwole and Akpati (2003) indicated that electronic resources such as CD-ROM databases, electronic mail, online public catalogue (OPAC), and Web resources were recognized as available online resources.

In her study of dynamics of internet usage: a case of students of the Federal University of Technology Owerri (FUTO) Nigeria, Anunobi (2006) revealed that 81% used internet for academic purposes as against 15% who used it for entertainment purposes. Hong, Ridzuan and Kuek (2003) revealed that students confirmed that the internet serves as a lecturing and

learning device.

Ikegwuro, (2017) tried to assess the internet utilization by researchers in two selected special libraries in Kaduna state. The findings revealed that the internet services mostly used by academic staff is e-mail services and that the researcher use internet to search and obtain data for research and publication, access e-journals, sending and receiving mails among others. The findings of Tadasad, Maheswarapp and Alur (2003) revealed that internet use is limited to general or entertaining purposes, and that the purpose of the internet to support educational curricular requirements has not been recognized by students.

Shehu, Urhefe and Aworo (2015) revealed that their respondents strongly agreed that the reasons for which staff used the internet in Nigeria libraries are for research purpose, for current awareness services/ update of knowledge and to develop personal competencies. In a quest to explore the factors influencing general adult population's internet use in the United State, Yi (2008) carried out a study on internet use patterns in the United States; The results of the study showed that demographics characteristics such as age and race and socio-economic status variables such as education level and household income play significant roles in predicting the patterns of internet use. The respondents who were older or African-Americans were more likely to use the internet for activities other than e-mail. Those with higher levels of education or family income were less likely to use the internet in this manner. Gender, marital status, region, and employment variables appeared to have no influence.

The findings of empirical studies reveal that there are many literatures on internet use on both profit and nonprofit organization like library. The review equally revealed that there is scanty of literature on pattern of internet use as regards to library even though internet has been of immense advantage in the library. Therefore this work is channeled to fill the gap.

**Materials and Method**

This study was conducted in South East geopolitical zone of Nigeria. The area of study covered the three federal university libraries in zone. The population included all the university librarians and the principal librarians who are the management team of these university libraries. These include University libraries of University of Nigeria Nsukka and Enugu Campus-(15), Michael Okpara University of Agriculture Umudike-(4), Nnamdi Azikiwe University Awka-(5).

The type of sampling technique that was used in this study was simple random and purposive sampling technique. The researcher purposively selected University librarians and principal librarians who are the management team of these university libraries on the ground that they are in a better position to know how their libraries use the internet technology. These groups of people are seen as instances that are likely to produce the most valuable data.

The Instrument for data collection was questionnaire, interview schedule and observation checklist. The basic statistical tools used in analyzing the data are frequency, percentages, means and standard deviation. The analysis was based on the three objectives that guided the study.

**Results**

The result of the analysis was given in Tables 1, 2 and 3 as shown below. The remark column on the tables refers to the decision made for each item with respect to the overall mean scores and percentage scores obtained.

**Table 1: Observations and Percentages on Availability of Internet Facilities.**

<b>Facilities in Libraries</b>	<b>UNN Library</b>	<b>NAU Library</b>	<b>MOUA Library</b>	<b>Avg.</b>	<b>Remarks</b>
Laptop	10(83.5%)	5(100%)	2(50%)	77.8%	V. good
Cyber café	8(66.7%)	4(80%)	4(100%)	82.2%	Excellent
Virtual or Digital Library	12(100%)	5(100%)	4(100%)	100%	Excellent
Desktop Computers	12(100%)	5(100%)	4(100%)	100%	Excellent
Institutional Website	12(100%)	5(100%)	4(100%)	100%	Excellent
Individual Website	6(75%)	5(100%)	2(50%)	75%	V. good

Dial-up	2(16.7%)	3(60%)	1(25%)	33.9%	Poor
Wireless Fidelity (Wi-Fi)	7(58.3%)	4(80%)	4(100%)	79.4%	V. good
Digital Subscriber Line (DSL)	3(25%)	4(80%)	2(50%)	51.7%	Fair
Integrated Service Digital Network (ISDN)	5(41.7%)	2(40%)	1(25%)	35.6%	Poor
Cable Modem	6(50%)	5(100%)	3(75%)	75%	V. good
Broadband Internet	9(75%)	3(60%)	4(100%)	78.3%	V. good
Worldwide Interoperability Microwave	2(16.7%)	4(80%)	1(25%)	40.5%	Pass
Satellite Dish	4(33.3%)	5(100%)	3(75%)	69.4%	Good
Cellular Broadband	2(16.7%)	3(60%)	0(0%)	25.6%	Poor
Fiber Optic Communication	11(91.7%)	2(40%)	1(25%)	52.2%	Fair
E-mail	12(100%)	5(100%)	4(100%)	100%	Excellent

The analysis as presented in Table 1 on availability of internet facilities shows that five facilities each scored excellent and very good, following the average percentage score. One each scored good and pass, while two scored fair and three scored poor.

**Table 2: Means (std. dev. in bracket) on Factors Influencing Pattern of Internet Use.**

<b>Factors</b>	<b>UNN Library</b>	<b>NAU Library</b>	<b>MOUA Library</b>	<b>Avg.</b>	<b>Remarks</b>
Availability of Wi-fi	2.67(1.07)	2.60(0.894)	2.50(0.557)	2.59	GE
Speed of server	3.42(0.67)	3.20(0.447)	2.50(0.557)	3.04	GE
Power supply	3.58(0.67)	3.60(0.548)	3.75(0.50)	3.64	VGE
Environmental Factor	2.67(0.99)	2.80(1.095)	3.00(0.816)	2.82	GE
Difficulty in locating the needed sites	3.25(0.87)	2.40(0.894)	2.50(0.577)	2.72	GE
Access to modem	2.50(1.24)	2.80(1.095)	2.25(0.957)	2.52	GE
Access to Network	2.42(0.99)	2.20(1.095)	2.00(0.816)	2.21	LE
Insufficient infrastructures	3.33(0.49)	2.80(1.095)	3.00(0.816)	3.04	GE
Restricted access to some sites	3.25(0.62)	3.40(0.548)	2.75(0.500)	3.13	GE
Lack of funds	2.92(1.08)	3.00(1.225)	3.25(0.50)	3.05	GE
Resistance to change by management	2.50(1.09)	3.40(1.342)	2.50(0.577)	2.80	GE
Insufficient work station/cyber cafes	2.58(1.17)	2.00(0.707)	2.75(0.50)	2.44	LE
Inadequate training on use internet facilities	3.75(0.45)	4.00(0.00)	3.25(0.50)	3.67	VGE

**Remarks:** very greater extent (VGE) = 4, greater extent (GE) = 3, low extent (LE) = 2, very low extent (VLE) = 1

The results in Table 2, shows that among all the factors that influence the pattern of use of the internet, inadequate training on use of internet facilities has the highest mean score of 3.67 followed by power supply with a mean score of 3.64. The least score is access to network (2.21) followed by Insufficient work station/cyber cafes (2.44).

**Table 3: Means (std. dev. in bracket) on Purposes of Internet Use.**

<b>Purpose of Internet</b>	<b>UNN Library</b>	<b>NAU Library</b>	<b>MOUA Library</b>	<b>Avg.</b>	<b>Remarks</b>
Sending and receiving mail	3.75(0.622)	3.40(0.548)	4.00(0.00)	3.70	SA
Chatting	2.75(0.866)	2.80(1.304)	3.50(0.557)	3.02	A
Reading news and sport information	3.50(0.522)	3.00(1.225)	3.50(0.557)	3.30	A
Downloading music	2.83(1.115)	2.60(1.342)	2.25(1.258)	2.56	A
Buying product online.	2.64(0.809)	2.20(1.095)	2.75(0.957)	2.53	A
Researching for products and services.	3.25(0.622)	3.20(1.304)	3.75(0.500)	3.40	A
Playing Games	2.58(0.793)	2.60(1.342)	2.00(0.816)	2.39	DA
Uploading Materials	3.00(0.953)	3.00(1.225)	2.25(0.957)	2.75	A
Banking online	2.33(1.155)	2.80(1.304)	2.50(1.291)	2.54	A
Searching for job	2.67(0.888)	2.80(1.304)	3.50(0.577)	2.99	A
Telephone calls	2.67(0.651)	2.00(1.225)	1.75(0.500)	2.14	DA
Online cataloguing	3.17(0.835)	2.20(1.304)	2.25(0.957)	2.54	A
Video conferencing	2.58(0.996)	3.00(1.225)	3.25(0.50)	2.94	A
Sharing information	3.33(0.492)	3.40(0.894)	3.75(0.50)	3.49	A
Accessing information on any subject	3.50(0.522)	4.00(0.00)	3.75(0.50)	3.75	SA
Accessing online directories and encycl.	3.58(0.515)	3.40(1.342)	3.50(0.577)	3.49	A

Reviewing of literature	3.50(0.522)	3.40(1.342)	3.75(0.50)	3.55	SA
Sending research article for publication	3.75(0.452)	4.00(0.00)	3.75(0.50)	3.83	SA
Sending and receiving question. online	3.33(0.651)	3.20(1.304)	2.50(0.577)	3.01	A
Collecting research data through interview	2.58(0.793)	2.60(1.14)	2.75(0.957)	2.64	A
Giving and receiving inf. from users	3.33(0.492)	3.40(0.548)	3.25(0.50)	3.33	A
Sending and receiving inf. from vendors	2.92(0.515)	2.60(1.14)	2.00(0.816)	2.51	A
Contacting Governmental Agencies	3.08(0.793)	2.00(1.414)	2.50(0.577)	2.53	A

Remarks: strongly agree (SA) = 4, agree (A) = 3, disagree (DA) = 2, strongly disagree (SDA) = 1

The result on table 3 shows that the highest mean score on purposes of internet use is on Sending research articles for publication (3.83). This was followed by Sending and receiving mail (3.70) while the lowest mean score is on telephone calls (2.14) followed by playing games (2.39).

### Discussion of Findings

The result in table 1 shows that laptop, cybercafé, virtual or digital library, desktop computers, institutional website, individual websites, wireless fidelity, digital subscriber line, cable modem, broadband internet, worldwide interoperability microwave, cyber optics communication, satellite dish and e-mail were found to be available following their scores while dial-up, integrated service digital network and cellular broadband are not available following their scores.

There are variation on respondent responses and observations made. It was observed that some of the internet facilities though available were not functional. There are also differences on internet facilities available in the three federal university libraries in South – East Nigeria. The findings of this study corroborate with Oduwole and Akpati (2003) who found that electronic



resources such as CD-ROM databases, electronic mail, online public catalogue (OPAC), and Web resources were available in their study area. Awoleye et al. (2008) found that personal office desktops were available in the area they studied and Salaam and Adwgbore (2010) also found that internet facilities were available in all the private universities they studied.

The result presented on factors influencing the pattern of internet use showed that availability of Wi-Fi, speed of server, power supply, environmental factor, insufficient infrastructure, difficulty in locating some needed site, restricted access to some sites, lack of funds, resistance to change by management, inadequate training on use of internet facilities are major factors affecting pattern of internet use while access to network and Insufficient work station/cyber cafes are seen as minor factors that influence pattern of internet use. The interview conducted showed that also among the factors that influence the pattern of use are insufficient number of computers, power failure, slow movement of server, technical problems or hitches, low voltage, weather conditions, example thunder, problem of whether access to internet should be for fee or free. The finding from the interview did not reveal that pattern of internet use is affected by personal characteristics of the user. This is in agreement with Yi (2008) who found that gender, marital status, region, and employment variables appeared to have no influence on pattern of internet use in the area studied.

The analysis done on the purposes of internet use on three federal university libraries in south East Nigeria showed that, out of twenty-four (23) identified purposes, twenty one (21) were agreed upon as a major purpose while two (2) were disagreed as the purpose for internet use. Those recognized more as reasons for the internet use are sending and receiving mail, chatting, reading news and sport information, downloading music, researching for product and services, uploading materials, searching for job, online cataloging, buying product online, video

conferencing, sharing information, accessing information on any subject, accessing online directory and encyclopedia, review of literature, banking online, sending research article for publication, sending and receiving questionnaire online, collecting research data through interview, giving and receiving information from users, sending and receiving information from vendors, contacting governmental agencies, while others that are recognized less as reasons for internet adoption are playing games and Telephone call.

There are some purposes that were not listed on the questionnaire which were identified from the interview carried out. These include to provide information resources on global scale beyond and above their resources in the library and the time within which these resources are needed, to effectively support teaching, learning and research, for library users to have easy access to information across the globe and to raise fund for the university, to help students and staff to embrace what is going on across the globe and not to risk their life going outside the university, to enable students to be conversant with computer system and internet and for easy access to information.

The findings of this study are in agreement with Ferrer et al. (2003) who found that internet is used for e-mail services. Anunobi (2006) revealed that internet is used for academic purposes as against entertainment purposes. Ikegwuro, (2017) found that the internet services mostly used by academic staff is e-mail services and that the researcher used internet to search and obtain data for research and publication, access e-journals, sending and receiving mails. Tadasad, Maheswarapp and Alur (2003) found that internet use is not limited to general or entertaining purposes, but was to support educational curriculum requirements and Shehu et al. (2015) found that staff use the internet in Nigeria libraries for research purpose, current awareness services/ update of knowledge and to develop personal competencies.

## **Recommendations**

Based on the findings and implications of the study highlighted above, the following recommendations are made

- The library management should organize workshops for their staff especially librarians on the use of internet facilities available in their university libraries.
- Internet use should be included as part of the curriculum in library and information science departments. This will provide adequate education for their students on the use of internet facilities.
- An improved conducive internet friendly environment should be pursued.
- Finally a culture of internet compliance should be included in the tertiary institutions in Nigeria.

## **Conclusion**

That identified major facilities in university libraries in south East Nigeria includes Email, cybercafé, institutional virtual library, desktop computers and institutional website. All the factor influencing pattern of use is of great extent except access to network and insufficient work station/cyber cafes. The two major purpose of internet use are sending research article for publication and sending and receiving mails.

The following implications are identified which can be of immense benefit to library authorities, librarians, library and information science students and other library users.

Internet being a veritable tool in university libraries should be very familiar to all library users and staff. This is not so going by the findings since there are variations on both the responses and

observations made concerning internet facilities. This variation was also discovered in internet use where the respondents identified some internet facilities but do not use it to a great extent.

There are certain factors that influence the pattern of use of internet which have been identified. These factors may either be positive or negative. Negative factors deter the use of internet. The library management needs to make use of this knowledge and improve the internet use in the library. The purposes of internet use identified are many and varied. These findings will create the awareness to the library authorities for consideration.

### **References**

- Agada, E. O. Tofi, S. T. (2021) Use of Internet Resources and Its Perceived Effects on Academic Librarians in Academic Libraries in Nasarawa State, Nigeria, *Jewel Journal of Librarianship*, 16(1), 103-110
- Atanda, L. A. (2017) Internet Usage and User Satisfaction with Library Services in Federal University, *Journal of Library & Information Science*, 7(3), 1-16
- Audu, C. D. (2006). Internet availability and use by postgraduate students of University of Nigeria, Nsukka. *Global Review of Library and Information Sciences*, (2), 34-43.
- Awoleye, O.M., Siyanbola W.O., Egbetokun, A.A., Yesufu, T.K. and Adewoyin J. (2008). Pattern of computer and internet use among Teachers in Higher Institutions in Nigeria. *The International Journal of learning*. Vol. 15(5) 245-254.
- Ferrer, S.R.D., Schroder, D.H. and Orthman, D. (2003). Internet use and factors affecting adoption of internet Applications by Sugarcane farm business in the Kwazulu midlands. *Contributed paper presented at the 41<sup>st</sup> annual conference of the Agricultural Economics Association of South Africa (AEASA)*.
- Ikegwuro, P. U. (2017) Utilization of Internet Resources/Services by Academic Staff of National Water Resources Institute and Federal College of Forestry Mechanization, Kaduna, Kaduna State. *Advances in Sciences and Humanities*. 3(5) 54-60.  
doi: 10.11648/j.ash.20170305.13
- Melchionda, M.G. (2007) Librarians in the age of internet: Their attitudes and roles. *New library world*, 108(3/4), 123-140.
- Oduwole, A. A. & Akpati, C. B. (2003). Accessibility and retrieval of electronic information at the University of Agriculture Library, Abeokuta, Nigeria. *Library Review* 52(5), 228-233.

- Salaam, M.O & Adegbore, A.M (2010). Internet access and use by students of private Universities in Ogun State: Nigeria. Access June 30, 2016, Available at <http://webpages.uidaho.edu/mbolin/salaamasegbore.htm>
- Saxton, J. & Game, S. (2001). Virtual promise- are charities keeping up with the internet revolution. WWW, virtualpromise.net. Assess June 25<sup>th</sup> 2011.
- Shehu, H. Urhefe, E. A. & Aworo (2015) Accessibility and Utilization of Internet Service in Nigeria Libraries: an empirical study. *International Journal of Academic Research and Reflection*, 3(5), 78-98
- Tadasad, P. G., Maheswarapp, B. S., & Alur, S. A. (2003). Use of Internet by undergraduate students of P.D.A College of Engineering, Gulbarga. *Annals of Library and Information*
- Walczuch, R. Braven, G.V. and Lungren, H. (2000). Internet Adoption Barriers for small firms in the Netherlands. *European Management journal* 18(5): 561-573.
- Weiner, S.G. (2003). Resistance to Change in Libraries: Application of communication theories. *Portals: libraries and the academy*, 3: 69- 78.
- Yi, Z. (2008). Internet use patterns in the United States. *Chinese Librarianship: an International Electronic Journal*, 25, URL: <http://www.iclc.us/cliej/cl25yi.pdf>