



**AVAILABILITY, ACCESSIBILITY AND USE OF E- RESOURCES IN SELECTED PRIVATE
UNIVERSITIES IN SOUTH WEST, NIGERIA**

ISHOLA, BOLANLE CLIFFORD

*Department of Library and Information Science, Federal Polytechnic Ede, Osun
State.Nigeria.sholacliff@gmail.com.*

ABOYADE, MODUPE ADUKE

*Department of Library and Information Science, Federal Polytechnic Ede, Osun state
abowakan@gmail.com*

OJOKUKU, BEATRICE YEMISI

*Department of Library and Information Science, Federal Polytechnic Ede, Osun state
yemiojokuku@gmail.com*

&

AKINTADE, KAYODE OLAYINKA

*Oduduwa University, Ipetumodu Ile-Ife, Osun State.Nigeria
positivefisayo@yahoo.com*

ABSTRACT

Purpose of the present study was to examine the availability, accessibility and use of e- resources in selected private universities in South West, Nigeria. Survey research method was adopted for the study. The instruments for data collection were a researcher-designed questionnaire and observational techniques. The study found that Internet services and e-resources are adequately available for use in the academic libraries studied; e-information resources are frequently available for use in the libraries; Library users do make use of online services, since those who use e-resources daily relatively outweighed the other pattern of usage; Ease of access and use are the major factors responsible for preference of the use of e-resources to other information formats. Though usefulness, quick response, reliability of the electronic sources were other good factor for preference of electronic sources; further findings reveal that majority of the respondents use e-resources for, course work 401 (90.72%), though the e-resources is also substantially use for general reading, teaching, research, deepening e-knowledge skills, finding answers, seeking virtual treasures etc. The study recommended that the National University Commission should ensure that all the universities are functionally networked and subscribes to a major relevant academic electronic database to facilitate students' access to and use of e-resources, on regular basis in Nigerian universities.

Keywords: *Electronic information sources; Access to electronic information sources; Use of electronic information sources; Academic libraries-Nigeria*



Introduction

Academic library is the hub around which all academic activities revolve, the heart of a true citadel of learning and research. It is an indispensable instrument for intellectual development. A well-stocked academic library is a storehouse of information, a record of human experience to which users may turn to for data or information. Encyclopaedia Britannia (2013), defined the term information as “facts and opinion provided and received during the course of our daily life”. One obtains information directly from other living beings, from mass media, electronic databanks, libraries, information centres and from all sorts of observable phenomena in the surrounding environment. The advent of computer since 1960s has changed the information flow, storage and capacity for research. However, for information to be communicated broadly, it needs to be stored externally to human memories because accumulation of human experience, knowledge, and learning has grown exponentially. Etim (2004) cited in Okon (2005) observes that the rapid pace of development in the field of information technology and the advent of networked information services have prompted a comprehensive review of the Library and Information Sciences (LIS) profession. The global trend is now characterized by a fundamental shift from traditional information environment to an e-environment where emphasis is placed more on the acquisition of e-resources such as e-books, e-journals as well as online databases. However, traditional library and information services and functions are still very relevant, especially in developing countries.

The basic purpose of academic libraries, according to Buckland (2002) is to provide access to information’. In order to be able to do this, Ochogwu (2007) opined that libraries and other information-related organizations provide a variety of information to society in different physical formats. These range from printed sources, audio-visual materials, film and computerized/machine readable materials. Singh and Kaur (2009) stressed that preservation and access to knowledge and information are the main mandates of academic libraries as a way to supporting the mission of their parent institutions which is teaching and research. Academic libraries are at the forefront of providing information services to their respective communities which comprises students, lecturers, and researchers in order to support their teaching, learning and research needs.

The role of academic libraries in any part of the globe is indispensable in the realization of the set objective of the academic institutions by supporting the institutions programs through effective planning, acquisition of current and relevant materials and making them readily available as required by all categories of users in the academic communities. Examples of academic libraries include that of universities, colleges, and polytechnics which defers in terms of nature of resources stocked and peculiarity of the institution they serve. Whitmire (2002) asserts that academic library resources are considered a good measure of an institution's excellence and quality but stressed the need for adequate access. Popoola (2008) affirmed that the information resources and services available in institutional information systems must be capable of supporting research activities among the students and faculty members. Accessibility and use of information sources is an important recurring theme in the literature. According to Aguolu and Aguolu (2002), resources may be available in the library and even identified bibliographically as relevant to one's subject of interest, but the user may not be able to lay hands on them, whereas readers tend to use information sources that require the least effort to access.

Iyoro (2004) identified accessibility as one of the pre-requisites of information use. Ugah (2008) opined that the more accessible information sources are, the more likely they are to be used. The areas where libraries can improve access and use of library resources to library users include improved academic liaison in combining library and information technology support, open access information technology area with personal or helpline supports from IT staff. Over the past decade, most libraries in Nigeria have been experiencing difficulty in providing materials to the users on account of the alarming rate of inflation, prices of books and journals as well as depreciation value of the Nigerian economy, which dove-tails into poor funding for libraries (Ehikhamenor, 1993). Ugah (2008) quoted Osundina (1974), who noted that the problem of Nigerian students is not the question of wanting to use the college



library, but whether or not the university library can provide for their needs, and whether there is access to what is provided.

Statement of the Problem

The emergence of ICT in the educational system worldwide, though has created an enormous financial burden on libraries appears to have brought relieve to the problem of availability, access and use of library resources. According to Bhat (2009), many university libraries spend huge sum of money in acquisition and provision of e-resources to augment the printed resources. This initiative is to facilitate access to global current scholarly information for learning and research. Useful research information is no longer only in print sources, they are also in electronic forms. The success of many private university libraries in accreditation programmes, the modular financial sources of the private universities and the fact that many of the previous researches has been on the Government funded university necessitated this research to investigate; Availability, Accessibility and Use of E- Resources in private universities because of its vital role in quality academic library services delivery today given that the library remain the nerve centre of academic life of the university and pivot around which all academic activities in any educational institution revolves.

Significance of the Study

This study will help to justify or unjustified the investment of private universities library managers on e-electronic library resources. It will reveal the information type and nature of electronic information resources available in the private universities and reveal the retrieval skills of the library users of e-resources in the private universities. It will help library managers appraise their library services with the aim of exploring prospects of further ensuring e-resources are maximally utilized in universities as a viable solution to the problem of unavailability of teaching and research materials in Nigerian university libraries, cum access and use. The study will enable library managers and information providers to appraise her services towards reducing the frustrations faced by users in their bid to use and access the academic library's information resources. The study is important because it is expected to help to illuminate the challenges being faced in use of e-resources in private universities environment. The foremost beneficiary will be other university libraries facing similar challenges that will benefit from the findings and recommendations. It will also guide library managers from wasting funds in subscribing to e-resources that are seldom used.

Objectives of the Study

The main objective of this study is to investigate the availability, accessibility and use of e- resources in selected private universities, South Western Nigeria. The specific objectives are to:

1. determine the search engines/electronic resources used for research and education in private university libraries;
2. assess the extent to which electronic resources are available for use in private university libraries;
3. find out the frequency of use of the electronics resources; in private university libraries;
4. investigate the factors influencing the use of the electronic resources; in private university libraries;
5. investigate the reason for use of e-resources; in private university libraries;
6. determine the information retrieval skills of e-resources users in private university libraries; and
7. identify the constraints to use of electronic resources; in private university libraries.

Literature Review

Jubb and Green (2007) observe that academic libraries have for centuries played important roles in supporting research in all subjects and disciplines within their host universities or colleges. In the recent past, there has been an increase in the provision and use of e-resources in university libraries

globally. Lorraine Chan and Linda Ong (2013) opined that academic libraries worldwide are facing rapid technological change and seismic shifts in how users access information and create knowledge in the digital age. Old models are no longer sustainable. Libraries must re-think the future. Kumar (2009) notes that academic libraries are changing dramatically by adopting new means of technology in all activities of print to e-environment where a variety of manual method, are replaced by computerized system which provides opportunity for online accessibility. Ekoja (2013) opined that at present the society is in the information age. The 21st century academic library information seekers are preoccupied with many projects and want information as fast as possible. He does not have the time to spend long hours looking through high file of obsolete textbooks, journals, dissertation and newspapers. He wants the information fast in most cases in multimedia packages, which are accessible easily or possibly electronically. Satija, (2003) listed the features of 21st century information media such as:

1. High compact storage.
2. Ease of reproduction, multiplication and manipulation and transmutation.
3. Contents can be very easily detached from its media or container.
4. Ease of migration of contents from one medium to another.
5. Ease of transmission, communication and storage.
6. Sophisticated and multi searches through keywords, free text, Boolean operators, class numbers and natural languages processing.
7. Wall less libraries leading to the vision of multimedia global virtual library (MGVL) inaugurating an era of 'Death of distance' and convergence of technology.

Wildman (2003) study of faculty's use of e- resources shows that use was influenced by such factors as computing skills of academics. Zin et al. (2000), lend credence to this in their assertion that knowledge, skill and competence with computer technology are now vital assets for all employees in institutions and organizations. Several studies related to the use of e-resources by different groups of researchers have been reported in the literature. The study of Torma and Vakkari (2004) showed the perceived availability of key e-resources by researchers in Finish National Electronic Library (Fin Elec Lib) was a stronger predictor of the frequency and purpose of use of its services than user's discipline. Tenopir (2003) writing on the use of e-resources by University faculty has shown that factors like subject discipline, status, sex and age are typical factors related to the use of e-resources and digital libraries in these groups. Abels et al (1996) noted that the availability of relevant e-resources affects frequently scholar's discipline (Borgman, 2000; Tenopir, 2003). Torma and Vankkari (2004) citing Borgman (2000) asserted that provision of e-resources varies among disciplines. According to them, they are most available in science and medicine and least in social sciences and humanities.

Ani and Ahiazu (2008) conducted a research on effective development of e-information resources in Nigerian university libraries. Findings of their study revealed that there is a high level of development of e-information resources in Nigerian university library. The study of Oyelaran-Oyeyinka and Adeya (2004) on internet access in Africa: empirical evidence from Kenya and Nigeria is very germane to this particular study. The study has identified that Internet use is constrained by structural as well as cost factors. It was also revealed that initial investment cost of end-user equipment limits the ownership of personal computers, compelling academics to seek internet access in cyber cafes and other public places. In the same vein, Aramide (2010) studied availability and use of audio-visual and electronic resources by distance learning students in Nigerian universities and reported that lack of skill is one of the factors limiting the use of the resources by the students.

Although scholars have reported a high level of usage of e-resources by researchers and academics in various disciplines all over the world (Tenopir, 2003; Torma and Vankarri, 2004; Gui, 2007), studies in Nigeria like (Ajuwon 2003; Ureigho, Oroke and Ekruyota 2006); and Olalude 2007) have reported low usage of e-resources especially Internet resources among the researchers and scholars. According to Olalude (2007), there is low use of scholarly electronic publications by lecturers in federal



universities in Nigeria compared to their counterparts in Britain, United States, and even in Botswana and South Africa. Information delivery capacity is the function of availability of the resources and their competency in the use of the resources even now that many libraries in Nigeria are experiencing a transition from print to electronic collections.

Methodology

Survey method was adopted in this study; the instruments used for data collection are the questionnaires and observation. The questionnaires was carefully designed for the respondents and copies were personally administered to 495 respondents, being 13% of registered library users of students of Oduduwa University, Ipetumodu; Lead City University, Ibadan and Fountain University, Osogbo South West, Nigeria. Out this number 442 were dully completed and returned. Another data collection instrument was the observation used because some of the universities under study were some of the researchers home university as at the time the research was conducted. The observation techniques also enabled the researcher explained a few seemly complex questions.

Table 1: Population and Sample

Universities	Total population of registered library users in the selected private University	Sample of the Study	Percentage of the Population Sampled
Oduduwa University, Ipetumodu	1500	195	13%
Lead City University, Ibadan	1500	195	13%
Fountain University, Osogbo	1120	146	13%
Total	4120	536	13 %

(Source: University library)

Preamble to Data Analysis

Table 2: Questionnaire Administration and Response rate

Universities	Number of Questionnaires administered	Retrieved Questionnaire	No. valid for analysis
Oduduwa University, Ipetumodu	195	157	157
Lead City University, Ibadan	195	139	139
Fountain University, Osogbo	146	146	146
Total	536	442	442

Data Analysis, Results and Discussion

Table 3: Data Bases/Electronic Resources Available for Use

Date base/electronic resources available	Yes	No	Total
--	-----	----	-------

Internet	439 (99.32%)	3 (0.67%)	100%
Ebrary	440 (99.54%)	2 (0.45%)	100%
Proquest	439 (99.32%)	3 (0.67%)	100%
E-books	437 (98.86%)	5 (1.13%)	100%
E-journals	442 (100%)	-	100%
Agora	401 (90.72%)	31 (7.013)	100%
DOAJ	331 (74.88%)	111 (25.11%)	100%
WIKIPEDIA	401 (90.72%)	21 (4.75%)	100%
National Virtual library	441 (99.77%)	1 (0.22%)	100%
JSTORE	321 (72.62%)	121 (29.63%)	100%
OARE	391 (88.46%)	51 (11.53%)	100%
Science direct	311 (70.36%)	131 (29.63%)	100%
Book Bonne	441 (99.77%)	1 (0.22%)	100%
ICAN packs	441 (99.77%)	1 (0.22%)	100%
Others	411 (92.98%)	31 (7.013%)	100%

Analysis on Table 3 reveal that 439 (99.32%) of the respondents agreed that Internet resources is available in the selected academic library in Southwest Nigeria, as well as e-resources such as ebrary 440 (99.54%), proquest 439 (99.32%), ebooks 437 (98.86%), e- journals 442 (100%), Agora 401 (90.72%), DOAJ 331 (74.88%), Wikipedia 401 (90.72%), National Virtual Library 441 (99.77%), JSTORE 321 (72.62%), OARE 391 (88.46%), Science direct 311 (70.36%), Book Bonne 441 (99.77%), ICAN Packs 441 (99.77%) and others 411 (92.98%), This implies that Internet services and e-resources are adequately available for use in the studied universities. This finding synchronizes with the findings of Ani and Ahiazu (2008), which conducted a research on effective development of e-resources in Nigerian university libraries and reported that there is a high level of development of e-resources in Nigerian university library. The finding also agrees with Torma and Vakkari (2004) that the perceived availability of key e-resources by researchers is a stronger predictor of the frequency and purpose of use of its services.

Table 4: Rate of Availability of E-Resources

Rate	Frequency	Percentage
Very well	181	40.95%
Well	192	43.43%
Some degree	51	11.53%
Badly	18	4.07%
Total	442	100

The responses to the question on rate of availability of e-resources indicate that 181 (40.95%) of the respondents subscribing to Very Well Available and 192 (43.43%) subscribed to well available. The result generally reveals that e- resources are frequently available for use in academic libraries in Southwest Nigeria. This finding is justified by earlier findings of Tihamiyu (2007), Fatoki (2004) and Obuh (2007) that students in higher institutions in Nigeria have access to the Internet and e- resources.

Table 5: Pattern of E-resources' Use

Pattern of use	Frequency	Percentage
Daily	311	70.36%
Twice weekly	102	23.07%
Thrice weekly	20	4.52%
Occasionally	9	2.03%
Total	442	100

Table 5 revealed that a larger percentage of the respondent's use electronic Resources on a daily basis 311 (70.36%) compared to which responded for twice weekly 102 (23.07%) and 9 (2.03%) occasionally. This therefore provided a stand point, that library users do make use of online services, since those who use it daily relatively outweighed the other pattern of usage. This finding align with the findings of Rehman and Ramzy (2004) who reported that the Internet resources have established a place in the personal and professional lives of researchers and scholars through their daily use of the Net for serious work and personal communication. Salako and Tihamiyu (2007) investigated the use of search engines for research by students and found that 78.3% of the respondents had been using the Internet for more than 24 months before commencing their postgraduate programmes.

Table 6: Degree of Use of Online Information Sources

Degree	Frequency	Percentage
Very high	362	(81.900%)
High	28	(6.33%)
Not sure	17	(3.84%)
Low	8	(1.80%)
Very low	7	(1.58%)
Total	422	100

Table 6 revealed that electronic information source is effective in facilitating research and education, as 362 (81.900%) of the respondents affirmed it is very high, and 28(6.33%) affirmed it is high; , alongside 8(1.80%) and7 (1.58%) respectively responding to its low and very low effect. A baffling revelation from the research is that 17 (3.84%) of the respondents who said they are not sure. These findings justify earlier findings from Ojedokun and Owolabi (2003), whose study found that lecturers perceive the ICT to be useful for research and teaching .Similarly, Igun (2006) conducted a research on the use of the Internet resources in Delta State University, Nigeria. Which showed that majority of the respondents (95%) reported that the use of the Internet resources had improved their teaching and research. This finding reveals a high degree of improvement over Ajuwon (2003); Oroke and Ekruyota (2006) and Olalude (2007) findings of low usage of electronic resources especially Internet resources. Yuen and Majid (2007) lent credence to these findings by stating that ICT opens new avenues of learning and knowledge sharing to tertiary education students.

Table 7: Factors Influencing the Use of Electronic Resources

Factor	Frequency	Percentage
Ease of access	151	34.16%
Usefulness	81	18.32%
Quick response time	29	6.56%
Ease of use	119	26.92%
Reliability	41	9.27%
Total	442	100%

Table 7 presents data on the factors influencing the use of e-resources; where ease of access and use are the major factor responsible for preference of the use of electronic resources to other information formats as indicated by 151 (34.16%) for ease of access and 119 (26.92%) for ease of use, respectively. Other factors determining the use of e-resources as shown in Table 6 are: Usefulness 81 (18.32%) and quick response time 29 (6.56%), Reliability is not a strong factor influencing the use of the electronic resources as revealed 41 (9.27%) of the total respondents. These findings are in line with the findings of Adeogun (2003) who reported that the convergence of computers and telecommunications technologies has made possible the activities which were considered impossible in the past. Those activities include information retrieval and transfer which were hampered by time and distance. Similarly, Adomi et al (2004) reported from their study that the Internet is very important to university students in Nigeria

because it enables them to have access to timely, accurate and relevant information.. The findings of this study corroborate Barret’s (2005) view that researchers have preference for electronic resources because of their time saving qualities and the convenience of remote access to full text journals.

Table 8: Reason for Use of Online Information Sources

Reasons	Frequency	Percentage (of 100%)
Research	95	(21.49%)
Course work	401	(90.72%)
Teaching	91	(20.58%)
Current information	218	(49.32%)
Recreation	51	(11.53%)
Personal Self-development	203	(45.92%)
Examination preparation	222	(50.22%)
Publication	94	(21.26%)
Funding grants and awards	15	(3.39%)
Conferences/meetings proceedings	2	(0.45%)
General reading	233	(52.71%)
e-business	44	(9.95%)
Deepening e- knowledge and skills	91	(20.58%)
Evaluation websites	7	(1.58%)
Seeking virtual treasure	54	(12.21%)
Finding answers	201	(45.47%)

Table 8 revealed that majority of the respondents use electronic information resources for course work 401 (90.72%), general reading 233(52.71%), preparing for examination 222 (50.22%) current information 218(49.32%), finding answers 201(45.47%) ; Another reason which is closer to this is for research 95 (21.49%) , deepening e-knowledge skills 91 (20.58%) ,teaching which took a share of 91 (20.58%) of the whole respondents. The table also showed that a less predominant reason for use of electronic resources is for seeking virtual treasure 54 (12.21%), recreation 51 (11.53%), e-business 44(9.95%) as well as funding grants and awards and evaluation of websites , as they both take 15(3.39%) and 7(1.58%) respectively, as well as conference/meeting proceeding recorded 2 (0.45%) responses.

Table 9: Information Retrieval Skills

Skills	Very Good	Good	Average	Poor	Very poor
Use of Boolean Operators(OR) & (NOT)	159 (35.97%)	131 (29.63%)	128(28.95%)	2(4.75%)	3 (0.67%)
Access of on-line databases	283 (64.02%)	121 (27.37%)	35 (7.91%)	3 (0.67%)	0
Scanning images	163 (36.87%)	98 (22.17%)	88 (19.90%)	79 17.87%)	14 (3.16%)
Download file from on-line databases	312 (70.58%)	66 (14.93%)	54 (12.21%)	7 (1.58%)	3 (0.67%)
Copying information into CD, flash & other storage devices	391 (88.46%)	42 (9.50%)	7 (1.58%)	2 (0.45%)	0
Searching the OPAC through author, title, and shelf searches	291(65.83%)	78(17.64%)	49(11.08%)	23(5.20%)	1(0.22%)
Use of search engines like	369(83.48%)	71(16.06%)	2(0.45%)	0	0

Google, Google scholar, Yahoo, Alta Vista					
Saving retrieved information on line using emails, 4shared & others	233(52.71%)	113(25.56%)	68 (15.38%)	21 (4.75%)	7 (1.58%)
Using of pdf files to search for info online	104 (23.52%)	117 (26.47%)	189 (42.76%)	21 (4.75%)	11 (2.48%)
Devil finder as a search engine	23 (5.20%)	41 (9.27%)	291 (65.83%)	71 (16.06%)	16(3.61%)
Using of keywords to download files	129 (29.18%)	131 (29.63%)	178 (40.27%)	2 (0.46%)	2 (0.45%)
Buying e-books and downloading them	187 (42.30%)	133 (30.09%)	93 (21.04%)	23 (5.20%)	6 (1.35%)

Table 9 shows that the respondents have good retrieval skills and could easily use search engines like Google, Scholar, Yahoo, Alta vista, as shown by 369(83.48%) respondents. The table also indicates that respondents are very good at copying information into storage devices 391(88.46%) while 283(64.02%) are good at accessing on-line databases and 233(52.71%) retrieved information on line using emails, 4shared & others .Similarly, the study revealed that 189(42.76%) of the respondents could averagely use PDF files to search for info online, same goes for Devil finder as a search engine 291(65.83%) and Using of keywords to download files 178(40.27%). The study further revealed that other retrieval skills that respondents possess are Buying e-books and downloading them 187,(42.30%), Use of Boolean Operators(OR) and (NOT) 159 (35.97%) and Scanning images 163(36.87%).From this one could infer that respondents have good knowledge of information retrieval skills. This finding supports Gifty (2003) study which revealed a correlation between the level of usage of Internet and the Internet searching skills of faculty members of universities in Ghana. The study pointed out lack of training as one of the reasons for low use of Internet by faculty members in spite of Internet benefits.

Table 10: Factors Constraining the Use of E-Resources.

S/N	Factors	Percentage
1.	Erratic power supply	(99.32%)
2.	Slow access period	(17.87%)
3.	Lack of adequate information ,knowledge and retrieval skills	(90.27%)
4	Difficulty in finding relevant information	(44.79%)
5.	Lack of access to internet outside school	(81.67%)
6.	Lack of ICT peripherals	(18.55%)
7.	Lack of time to use ICT	(9.27%)
8.	Poor communication network	(11.53%)
9.	High cost of ICT	(85.52%)
10.	Non availability of ICT in university libraries	(0.45%)
11.	Limited access to computer	(9.27%)
12.	No access to computer	(0.45%)
13.	Lack of updated ICT strategy	(59.04%)
14.	Lack of inadequate ICT facility	(61.31%)
15.	Skill levels of librarians	(17.87%)
16.	Lack of adequate training	(7.01%)



Table 10 gives a clear analysis of the factors militating against effective use of the electronic resources in Nigeria. It is conspicuous that erratic power supply is the most significant factor militating against effective use of e-resources 439(99.32%). Lack of adequate information, knowledge and retrieval skills 399(90.27%), Lack of access to Internet outside school 361 (81.67%), High cost of ICT 378 (85.52%), Lack of updated ICT strategy 261(59.04%), Difficulty in finding relevant information 198(44.79%), Lack of ICT peripherals 82(18.55%), Skill levels of librarians 79(17.87%) was identified as a critical factor militating against use of electronic resources. This finding is in line with the findings of Oyelaran-Oyeyinka and Adeya (2004) who identified that the Internet use is constrained by structural as well as cost factors and that initial investment cost of end-user equipment limits the ownership of PCs, compelling academics to seek Internet access in cyber cafes and other public places.

Similarly, the findings of this study collaborate those of other studies, by Onwuama (2006), Blackmore (1992) Eynon (2006) and Duna and Ridgeway (1991) who reported that non-availability of ICT facilities, lack of ICT spare parts (peripherals), erratic power supply and poor communication network affects the utilization of ICT in Nigeria and other developing countries. To solve this problem, Ezeani and Eke (2010) advocate for the provision of stable power supply to enhance librarians' use of new and emerging Internet tools. According to them, when the power is unstable, librarians become discouraged in using Internet tools and resources. In the same vein, Lazarinis (2010) posited that young people access the Internet from numerous places home, libraries, schools, and the Internet cafes.

Conclusion

The findings give an informative account that electronic resources are adequately available for use in private university libraries and E-resources are frequently available for the use in the private university libraries in high degree. Clearly, Library users do make use of online services; since those who use it daily relatively outweighed the other pattern of use and ease of access and use are the major factor responsible for preference of the use of electronic resources to other information formats. Usefulness, quick response and reliability of the electronic sources were other good factors for preference of e-resources. Similarly, majority of the respondents use electronic information resources for course work, general reading, teaching, research, deepening e-knowledge skills, finding answers, seeking virtual treasures etc. However, electronic information source is effective in facilitating research and education.

Erratic power supply is the most significant factor militating against effective use of e-resources; followed by lack of adequate knowledge and retrieval skills, lack of access to internet outside school, High cost of ICT, Lack of updated ICT strategy. The library users have very good knowledge of retrieval skills in the use of electronic resources; with skills like use of search engines like Google, Scholar, Yahoo, Alta vista, saving retrieved information on line using emails, and 4shared; even as that the study revealed that the respondents could averagely use PDF files to search for information online; same goes for devil finder as a search engine and using of keywords to download files. Thus, the study concluded that the success of service delivery by private university libraries to their user community and their success in the accreditation exercises lies in the availability, access and use of robust e-resources.

Recommendations

Based on the findings of the study, the following recommendations were made:

- i. The National University Commission should ensure that all the universities are functionally network and subscribe to a major relevant academic electronic database to facilitate students' access to and use of e-information resources, on regular basis in Nigerian Universities
- ii. Power problem has become a major setback to National development in every sector of Nigeria. Therefore, to prevent this ugly situation from affecting electronic services to their user community management of academic institutions should provide stand-by power generator to ensure sustainable power generation and distribution.



- iii. Academic libraries should have proper plan for the acquisition and maintenance of ICT in the libraries if the libraries are to participate effectively in the acquisition and dissemination of e-information sources in the 21st century
- iv. Academic Librarians should embark on continuous ICT training and self-development to enhance their competence in information literacy skills.
- v. The management of academic libraries in Nigeria should continue to provide adequate fund for the acquisition of appropriate ICTs.

REFERENCES

- Adeogun, M. (2003). The digital divide and university education in sub-saharan Africa. *African Journal of Library, Archives and Information Science*, 3(3), 75-81.
- Adomi, E.E., Omodeko, F.S. & Otolu, P.U. (2004). The use of cybercafé at Delta State University, Abraka, Nigeria. *Library Hi Tech News*, 22(4), 383-388.
- Aguolu, C. & Aguolu, I. E. (2002). Libraries and Information management in Nigeria: seminar essays on themes and problems. Nigeria: Ed- Inform services.
- Ajuwon, G. A (2003). Computer and Internet use by first-year clinical and nursing students in a Nigerian teaching hospital. *BMC Medical Informatics and Decision Making*, 3(10) 3-10. Retrieved on April 13, 2008, from <http://www.biomedical.com/1472>
- 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.
- Azubogu, N., & Madu, C. (2007). Use of computer and Internet technology among the teaching staff of Imo State University. *Owerri Heart land Journal and Information Science*, 1(2), 38-49.
- Barnett, J. (1998). Sensitive questions and response effects: an evaluation. *Journal of Managerial Psychology*, 13(1/2), 63-76.
- Buckland, M. K. (2005). Concepts of library goodness. International Reader in the Management of Library, Information, and Archive Services. Paris: UNESCO. Available: <http://www.unesco.org/webworld/ramp/html/r8722e/r8722e1c.htm>
- Eason, K. Richardson & Yu, L. (2000). Patterns of use of electronic journal. *Journal of Documentation*, 56(5), 477-504.
- Encyclopa Britannica, 15th Edition: London, Encyclopa Britannica Inc., 2010 (18) & 22, 947
- Etim, F.E. (2006). Resource sharing in the Digital Age: Prospects and problems in African Universities. *Library Philosophy and Practice*, 9(1).
- Eynon, R. (2006). The use of ICT for teaching and learning in law education: some innovation perspective. <http://webjcli.ncl.ac.uk/2006/issue3/eyono3.html>.
- Ezeanu, C. N. (2005). Online scholarly publishing and research promotion in Nigeria: a study of academic libraries in South-Eastern Nigeria. In *Improving the Quality Library and Information Science Journals in West Africa: A Stakeholders Conference*. Proceedings of the Conference held at the Conference Centre, University of Ibadan, Nigeria, between 7-8 Dec. 2005: 115-125.
- Gifty, A. (2003). Internet use among faculty members of universities in Ghana. *Library Review*, 52(1), 29-37.
- Igun, S. I. (2006). Use of Internet resources in a Nigerian university community. *Global Review of Library and Information Sciences*, 2, 21-32.
- Iyoro, A.O. (2004). Serial availability, accessibility and use: perceptions of in-training information professionals in a Nigerian university. *The Nigerian Library Link*, 11(2), 66-71.
- Kumar, M. (2009). Academic libraries in electronic environment: paradigm shift. A paper presented at the International Conference on Academic Libraries held at the University of Delhi, India. 105
- Kumar, R. & Kaur, A. (2005). Internet and its use in the Engineering Colleges of Punjab, India: a case study, *Webology*, 2(4), 1-22



- Lazarinis, F. (2010). Online risks obstructing safe Internet access for students. *The Electronic Library*, 28(1), 157-170.
- Obuh, A. O. (2007). A survey on the utilization of Internet services by undergraduate students of Nigerian universities. *Educational Trends*, 25(8).
- Ojedokun, A. A. (2001). Internet access and usage by students of the University of Botswana. *Africa Journal of Library, Archives and Information Sciences*, 11(2), 97-102.
- Okoye, R.B. (2005). Funding Nigerian libraries in the 21st century: will funding from alternative sources suffice? *The Bottom Line: Managing Library Finances*, 18(2), 71-77
- Okon, H.I. (2005). Effective communication and smooth administration of academic libraries in the 21st century: a new paradigm in Nigeria. *Library Philosophy and Practice*, 8(1).
- Onwuama, C.N. (1996). ICT for effective library service in Imo state public library. Paper presented at the 2006 Annual Library week of NLA Imo State Chapter held at Imo state library Board, Owerri from 13th-15 November
- Osudina, O. (1974). The relationship between accessibility and uses made of the academic library by undergraduate students. *Nigerian Libraries*, 41.
- Rehman, S. & Ramzy, V. (2004). Internet use by health professionals at the Health Centre of Kuwait University. *Online Information Review*, 28 (1), 53-60.
- Salako, O. A., & Tihamiyu, M. A. (2007). Use of search engine for research by postgraduate students of the University of Ibadan, Nigeria. *African Journal of Library, Archives and Information Science*, 17(2), 103-115.
- Satija, M. P. (2013). Digital information systems and services. *Lascil Bulletin*, 48(1), 10-13.
- Singh, J. & Kaur, T. (2009). Future of academic libraries in India: challenges and opportunities. A paper presented at the International Conference on Academic Libraries held at the University of Delhi, 52
- Slatter, M. (1963). Types of use and user in industrial libraries: some impressions. *Journal of Documentation*, 21(2), 16.
- Torma, S. & Vakkari, P. (2004). Discipline, availability of electronic resources and the use of Finish National Electronic Library. *Information Research*, 10(1). Retrieved June 20, 2007 from <http://InformationR.net/ir/10-1/paper.204.html>.
- Whitmire, E. (2001). Factors influencing undergraduates' self-reported satisfaction with their information literacy skills. University of Wisconsin. Pdf file. Retrieved November 10, 2007.
- Yuen, T. J. & Majid, M.S. (2007). Knowledge sharing pattern of undergraduate students. *Library Review*, 61(5), 327 - 344