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# A Survey of Undergraduate Students' Awareness, Satisfaction and Challenges of Using Electronic Information Resources: A Case Study of Baze University Library, Abuja

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**Abstract**

*This study investigated use and user satisfaction of e-resources among Baze University undergraduates, in which the total population of students is about 1000 distributed among four (4) fully functional Faculties which include Management and Social Science, Law, Computing and Applied Sciences and Engineering, each with its library. The instrument used for data collection was a structured questionnaire. Using purposive sampling technique, one hundred (100) students cutting across the four Faculty Libraries were sampled. The data collected was analyzed using simple frequency counts and percentage. The study reveals that male students utilize e-resources more in comparison to their female counterparts. It further reveals that majority of the students used e-resources at least once a month, e-resources are majorly utilized for research and assignments, and the respondents reveal that they prefer to use electronic resources over printed resources. The result also reveals poor connectivity, lack of proper training, lack of printing facilities, inadequate subscription to database and failure of hardware and software as the major key factors hindering the proper use of electronic resources in the library. The following recommendations were made: availability of printing terminals, compulsory regular user training, allocation of funds for database subscriptions, proper management of networks and hardware/software related issues.*

*Keywords: Electronic information resources, University libraries, Undergraduate Students, User satisfaction, Baze University*

## 1.1 Introduction

The emergence and use of information technology in this century is the most significant development affecting scholarly communication. Libraries have witnessed a great metamorphosis in recent years both in their collection development and in their service structures. According to Dadzie (2010) electronic information sources are important research tools that complement the printed information sources in traditional library service. Rani and Chinnasamy (2016)

posit that electronic resources and services can include an information resource, such as an online/offline database, or a service, such as a virtual help desk, provided via network, such as local area network, intranet, or the Internet.

According to Kenchakkanavar (2014) an electronic information resource is defined as a resource which requires computer access or any electronic product that delivers a collection of data, be it referring to full text bases, electronic journals, image collections, other multimedia products and numerical, graphical or time based, as a commercially available title that has been published with an aim to being marketed. These may be delivered on CD ROM, on tape, via Internet and so on. The library and information services of the 21st century are fast changing. With the rapid development of electronic publishing, libraries are not only acquiring reading materials such as printed books and journals but also arranging for providing access to various learning resources in electronic form. The web resources and the use of web as a tool is changing the way users live and learn.

Amori (2003) opined that e-resources such as e-journal, e-book, CD ROM databases, online databases and web-based resources when effectively utilized constitute an important input in the information services in libraries. Looking at the advantages, Dadzie (2010) writes that electronic resources are invaluable research tools that complement the print – based resources in a traditional library setting. Their advantages, according to her include: access to information that might be restricted to the user due to geographical location or finances, access to more current information, and provision of extensive links to additional resources related contents.

Libraries are collections of sources of information and similar resources, made accessible to a defined community for reference or borrowing. It provides physical or digital access to material, and may be a physical building or room or virtual space, or both. Libraries are regarded as repository of wisdom of great thinkers of the past and present. University library is an academic library which is established and funded by the university to support teaching, learning and research activities of the parent institution. University libraries are those libraries established in institutions of higher learning especially those of universities (Alabi, 2015). University libraries are generally categorized under academic library. University libraries play a central role in the university, their primary responsibility being to assist their patrons in the process of transforming information to knowledge.

The term 'satisfaction' has been defined by Zeithalm and Bitmer (2000) as the customers' evaluation of a product or service in terms of whether that product or service has met their needs and expectations. Failure to meet needs and expectations is assumed to result in dissatisfaction with the product or service. As such, it is very important for library to satisfy the users by meeting their information need. Mohammed (2006) sees 'user satisfaction' as the extent to which a library user's information needs are fulfilled with the available services and information resources of a given library.

It is consequent on this backdrop that this study is carried out in order to investigate undergraduate students' awareness, satisfaction and challenges of using electronic information resources at the Baze University Library, Abuja.

## 1.2 Statement of the Problem

The thriving growth of electronic publications is reshaping the nature of collections and the mode of delivering and accessing information in libraries. Electronic resources are replacing print resources in the modern world because of the timely delivery

of information and improved access via electronic means.

Baze University is a privately owned, self-financed university located in the heart of Abuja, Nigeria and was established in the year 2011, with Senator Baba Datti Ahmed as the Pro Chancellor. Its vision is to be a distinctive quality base-educational institution, making difference in the nation history through positive impact of its service and its graduate output. Students of Baze University, Abuja are important segment of user community of the institution and yet no study has been carried out to know the utilization level of electronic information resources in the institution. Hence the need to find out the use, impact, need and satisfaction level of e-resources and services in the university necessitated this study.

## 1.3 Objectives of the Study
The followings were the specific objectives of the study
1) To find out the awareness level of students about available electronic information resources in Baze University
2) To know the frequency of use of electronic resources by Baze University students
3) To find out the purpose of using e-resources by the undergraduate students of the institution.
4) To identify the problems encountered by students in using e-resources.
5) To investigate the satisfaction level of use of e-resources by students of the institution
6) To ascertain between print and e-resources which one is the preferred choice for educational purposes
7) Influence of e-resources on academic work of Baze University students.

## 2.1 Review of Related Literature
The Internet and e-resources are transforming the library system and as well the way in which we view information sources (Kenchakkanavar 2014). According to Sharmin (2010) that the visit of library by students and faculty members in developed nations has reduced drastically due to their ability to access e-resources in their classes, rooms and hostels. However, this is not the case in the developing nations especially Nigeria, where a good proportion of the students cannot afford to purchase computers and where the cost of accessing internet is extremely high. Hence the library within the University systems provides the infrastructures and internet facilities to enhance student's accessibility of e-resources.

There have been a number of studies that discussed use of e-resources in universities worldwide. In Africa for example, Ojo and Akande (2005) in a survey of 350 respondents examined student's access, usage and awareness of electronic information resources at the University College Hospital (UCH) Ibadan, Nigeria. The study shows that the level of usage of the electronic information resources is not high. The major problem identified was lack of information retrieval skills for exploiting electronic resources, thus making the level of usage of e-resources by medical students very low. Egberongbe (2011) conducted a survey at University of Lagos on use and impact of electronic resources using structured questionnaire 182 respondents responded out of a survey population of 200, the study revealed that a large number were aware of e-resources and even took training course regarding the use of electronic resources, majority preferred to use electronic resources in comparison to traditional resources and that notwith-standing, e-resources will never diminish the light of traditional resources.

Another study had been conducted by Okello-Obura and Magara (2008) on electronic information access and utilization

at the East African School of Library and Information Science, Makerere University, Uganda. Out of the 250 targeted students, 190 responded, giving a response rate of 76%. The study revealed that users derived a lot of benefits from electronic resources gaining access to a wider range of information and improved academic performance as a result of access to quality information. Chisenga (2004) carried out a survey of the use of ICTs in ten African Public Library Services. The survey found that, although most libraries had internet connectivity, very few were offering web-based information services to their users. The study however, identifies 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 ICT services.

Similarly, Ajuwon et al (2003) also carried out a study of uptake of ICTs by health science students at the University College Hospital, Ibadan. This study found that 57% of students sampled could not use a computer, that the use of the database was poor, due to lack of awareness, lack of access to computers, insufficient training and the high cost of provision.

In other parts of the world, Umme (2016) carried out a study on use of electronic resources and its impact in eastern university Bangladesh. The study found out that there is increased usage of e-resources among younger generation hence 80 percent of students' samples prefer using e-resources than printed resources but the library is unable to provide satisfactory amount of e-resources due to restricted funds. In another context in other part of the world, Holley and Powell (2004) conducted a survey of students' satisfaction of electronic library resources at Wayne state university Detroit USA of 10% (2965) through random sampling with a return rate of 9.41% (271). About 40% of the responding students said that they were unaware of e-resources, 38.3% said they learned about e-resources in the library through efforts by library staff to publicize. Then a high percentage of students 92.4% answered that the library has expand e-resources in the library.

Finally, Ali (2005) conducted a research in India and found out that 83% of students surveyed felt that using this source saved them time, and found it relatively easy to use. Two thirds of those surveyed stated that if they were unable to use e-resources due to certain factors, they will wait for it to become available, than use the print tool. However, a study of online searching of scientific information in science and technology libraries of Delhi reveals a sizeable number of users (almost 60%) are facing numerous problems while browsing electronic information, such as lack of knowledge about the resources, lack of trained staff and inadequate terminals.

## 3.1 Research Methodology

Descriptive Survey Research method was adopted for this study. There are about 1000 students presently enrolled in Baze University. One hundred (100) registered library users (who are all undergraduates of Baze University campus) were sampled. Primary data was collected using structured questionnaires. The students were selected through the use of purposive sampling technique. Data collected were analyzed using frequency counts and percentages and presented in a tabular form.

## 4.1 Data Presentation and Analysis
**Table 1: Awareness about available e-resources in Baze Universities**

| Gender | No of Aware | Not aware |
|--------|-------------|-----------|
| Male | 60 (75%) | 10 (48%) |
| Female | 19(24%) | 11 (52%) |
| **Total** | **79(79%)** | **21(21%)** |

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Table 1 shows the awareness of e-resources among the respondents. 60 Baze University students (75%) of male users were aware about the e-resources; whereas 19 (24%) of female users were aware about the availability of e-resources it can be seen that male respondents are more informed about e-resources than the females. For the students who were not aware of the available e-resources 10 (48%) were male students while 11 (52%) of them were female students. The overall total 79 (79%) indicated that they were aware and 21 (21%) indicated that they were not aware of availability of e-resources at the Baze University, Abuja.

**Table 2: Frequency of Using E-resources**

| Frequency of Use | Number of Respondents | Percentage |
|---|---|---|
| Daily | 10 | 10.00 |
| 2-3times a week | 10 | 10.00 |
| 2-3times a month | 30 | 30.00 |
| Once in a month | 50 | 50.00 |
| **Total** | **100** | **100.0** |

In response to the question: 'how frequently do you use e-resources in Baze University?', it can be seen in Table 2 that 10 percent of the students use e-resources daily, 10 percent 2-3times a week, 30 percent 2-3times a month, and majority 50 percent once a month. From the analysis above Baze University students sparingly used e-resources

**Table 3: Purpose of Using of E-resources**

| Purpose | Number of Respondents | Percentage |
|---|---|---|
| Research | 47 | 47.00 |
| Education | 50 | 50.00 |
| Entertainment | 3 | 3.00 |
| **Total** | **100** | **100.0** |

Table 3 shows that majority of the students, i.e. 50 (50%) use e-resources for education, while 47 (47%) use e-resources for research work and only 3 (3%) use e-resources for entertainment.

**Table 4: Problems encountered using E-resources**

| Problems Encountered | Number of Respondents | Percentage |
|---|---|---|
| Overload of information | 6 | 6.00 |
| Slow speed connectivity/pc | 33 | 33.00 |
| Lack of knowledge/training | 40 | 40.00 |
| It takes too long to view/download pages | 1 | 1.00 |
| Difficulty in finding relevant information | 20 | 20.00 |
| **Total** | **100** | **100.0** |

In table 4, six (6%) of the students face problems when accessing information due to overload of information on the internet. 33 (33%) encounter problems accessing the e-resources due to slow internet/connectivity problem, 40 (40%) indicated lack of knowledge or training in using e –resources as a problem, 1 (1%) said that downloading and 20 (20%) said difficulty in finding information.

**Table 5: Preferred Choice of Print or Electronic Resources for Educational Purpose**

| Preferred | Number of Respondents | Percentage |
|---|---|---|
| Electronic Resources | 70 | 70.00 |
| Printed Documents | 30 | 30.00 |
| **Total** | **100** | **100.0** |

Table 5 shows that majority of the students, i.e. 70 (70%) in the survey indicated they preferred to use electronic resource for their educational purpose and 30 (30%) of the respondents said they prefer to use conventional or printed resources for

educational purposes like research and assignments.

**Table 6: Influence of use of electronic resources on academic efficiency**

| Influence | Number of Respondents | Percentage |
|---|---|---|
| Improve Academic Competence | 5 | 5. 00 |
| Expedited Research Process | 25 | 25.00 |
| Ease of Assignments/Class Work | 70 | 70.00 |
| **Total** | **100** | **100.0** |

Table 6 shows the response to the question: 'how has the use of e-resources influenced your academic efficiency?' Data in Table 6 shows that five 5 (5%) of the respondents said it improved academic competence, twenty five (25%) said it expedited their research process and 70 (70%) said e-resources have eased their assignments/class work.

**Table 7:    Level of Satisfaction with Available E-resources in Baze University**.

| Satisfaction Level | Number of Respondents | Percentage |
|---|---|---|
| Fully satisfied | 20 | 20.0 |
| Partially satisfied | 65 | 65.0 |
| Not satisfied | 10 | 10.00 |
| No comment | 5 | 5.00 |
| **Total** | **100** | **100.0** |

Table 7 shows that 65 (65%) of the students indicated they were partially satisfied with e-resource services in Baze University, 20 (20%) said they were satisfied, 10 (10%) were not satisfied and 5 (5%) made no comment.

**Table 8: Reason for dissatisfaction or partially satisfied.**

| Reason for Dissatisfaction | Number of Responses | Percentage |
|---|---|---|
| Less opening Time | 0 | 0.00 |
| Lack of printing facilities | 60 | 35.71 |
| Lack of proper e-resources | 4 | 2.38 |
| Inadequate Subscription to Database | 54 | 32.14 |
| Failure of Hardware and software | 50 | 29.00 |
| **Total** | **168** | **100.0** |

In table 8 multiple answers were ticked as reasons why respondents are not satisfied or partially satisfied with e-resources in Baze University. This is the reason for having more than 100 numbers of responses. Sixty (60%) of the respondents said lack of printing facilities were the major cause of not been satisfied, 4% said lack of proper e-resources, 54% said inadequate Subscription to databases and 50% indicated failure of hardware and software affecting the functioning of e-resources. No user indicated less opening time as factor hindering proper usage of e-resources.

**4.2 Discussion of Findings**

The study reveals that male undergraduate students are more aware and utilize electronic resources more in comparison to their female counterparts, that majority of the students prefer to use electronic resources over printed documents. This could be as a result of technological advancement (Omotayo, 2010). It was discovered that majority of Students use e-resources for research and assignments, and e-resources is been used at least once a month.

The study further reveals that each resource has increased academic competence and eased assignments and class works, this finding seems to agree with Ajayi (2014) and Shorunke, (2014) in the literature reviewed. A handful of them agreed that e-resource has expedited research and made their assignments a lot easier.

In trying to identify problems faced

with effective use of e-resources, majority were not fully satisfied with the e-resources owing to the factors of lack of printing facilities at e-resources terminals, inadequate subscription to databases, slow speed/hardware software issues and lack of user training. This is in opinion with Isiapona and Goodluck (2012) where they found out that lack of user training network, lack of contact power supply were among the factors hindering effective utilization of e-resources.

**Conclusion and Recommendations**

The objectives of the study were to gather and analyze information regarding the awareness of the availability of e-resources in Baze University, frequency of using e-resources, satisfaction level, purpose of using e-resources, problem encountered, and, influence on academic efficiency. The high level of usage of electronic resources among undergraduate students in Baze University is an indication to the fact that students are still getting satisfaction out of electronic resources use. So the management and information professionals should do more to ensure that benefits are derived and utilization is maximized.

- I.T. staff in Baze University should be tasked with continuous solving of problems associated with networking Hardware and software
- Funds should be allocated by the management for continuous upgrade and subscription to various databases
- Training courses should be organized frequently for awareness and continuous utilization of electronic resources
- University library should identify the non-users of e-resources especially the females and steps should be taken to convert them into potential users
- Print terminal should be provided in each individual e-resource Centre

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