
*Article***UNDERSTANDING STUDENTS' UTILIZATION OF ELECTRONIC
INFORMATION RESOURCES AT THE ABIA STATE UNIVERSITY
ELECTRONIC LIBRARY, UTURU****Samuel K. Ibeme* & Rhoda Fredrick****

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This research was on utilization of Electronic Information Resources (EIRs) by undergraduate students in the library of Abia State University (ABSU), Uturu. The population of the study was 2750 registered undergraduate library users and a sample size of 344 was derived using Yaro Yamanne's statistical formula. Using the survey design method and the random sampling technique, a three part self-constructed questionnaire was distributed to the respondents. The data analysis was done and presented in tables using frequencies and percentages. The results revealed that the available EIRs at ABSU library were moderately used by the students and that to a high extent, the students derived satisfaction in the use of the resources. However, many problems were associated with the use of EIRs such as information overload, need to filter result from search and lastly, download delay. Recommendations were made to solve the identified problems.

Introduction

Electronic Information Resources (EIRs) consist of various non-print and non-paper-based resources which are used to store and convey information. These sources include CD-ROMs (Compact Disk-Reads, Digital Versatile Discs (DVDs), virtual collections contained on the web, among others. Global developments in Information Technology (IT) and its applications in libraries have generated changes in the pattern of information collection, processing, storage and dissemination. Progressive

developments in IT have affected the way library users utilize information. The adoption of new information technology has enabled librarians to perform traditional library responsibilities, such as acquisition, cataloguing and access to online catalogues more effectively. It has also reduced the amount of time and energy spent by users on seeking information.

The advent of computer as a product of information technology has made it easy to automate library operations, thereby facilitating the ability of users in searching information and carrying out research in their respective fields of interest. The application of information technology has made the library a new information service unit, providing electronic acquisition, electronic cataloguing, electronic Online Public Access Catalogue (OPAC), and serials control, electronic inter-library loan and electronic circulation functions (Raseroka, 1999).

Information professionals have long sought to comprehend what factors are relevant in encouraging a person to seek out information. More recently, a particular focus on inquiry has been on those factors that play a role in deciding to use the library's electronic resources to seek information as opposed to just surfing the Internet. These inquiries assume an even greater importance in the light of the fact that more people are using the Internet to find information that is unmediated by the library (Kibirige, 2000).

Understanding what constitutes students interest in the use of electronic resources is important in helping to develop an access pedagogy designed to assist them in satisfying their information needs. Students are more and more web-savvy (Kibirige, 2000), many of them having been brought up around computers and Web-searching skills and experience. It is therefore of interest to try and understand what characteristics will make one student branch out and explore library resources, while another one might not. In line with this necessity, this study examines the utilization of electronic information resources by undergraduates of Abia State University, Uturu.

History background of Abia State University (ABSU) Electronic Library

Abia State University, Uturu was formerly Imo State University established under the government of late Chief Sam Mbakwe, the then governor of Imo State. It operated a two campus structure as well; the campuses were located at Etitu and Aba. The Etitu campus served the Colleges of Humanities and Social Science, Biological and Physical Sciences and the School of Architecture. The Aba Campus and its library served the

Business Administration and Legal Studies. The two were merged to its permanent site at Okigwe in 1987. Abia State University, Uturu was established based on Imo State University Law No. 4 of 1981 and No 21 of 1985 as amended by Imo State University Edict No. 5 of 1991 following the 1991 State creation exercise. Abia State was created out of the old Imo State consequently, the then Imo State University fell within the jurisdiction of Abia State. Assets were shared between Abia State University, Uturu based on the provision of Abia State University Edict of 1995.

ABSU electronic library which was established due to growth and development of Information and Communication Technology (ICT), and its need in the provision of quality support for teaching, learning and research. It was formally opened on 3rd July, 2007 by the National Universities Commission (NUC). The E-library has two dedicated bandwidth, one by NUC through the Education Trust Fund (ETF) money. The E-library of ABSU was established to serve primarily the University community; it was aimed at enhancing teaching and research programmes of the student, lecturers and the universities community in general.

Statement of the Problem

Supporting research and learning activities is a major mission for academic libraries. The thriving growth of electronic publication is reshaping the nature of collections and the mode of delivering and accessing information in libraries. The traditional print resources currently face challenges from their electronic counterparts in faster and timely delivery of information as well as improved access. It appears that the rate of production of electronic materials has exceeded that of print-based publications. The consequence of this development is that the library users need to adapt to new techniques in information search and utilization in order to benefit maximally from the rich vein of information contained in electronic information resources. The problem then lies with the extent to which these users are prepared to embrace the new mode of information service and unwillingness to delve into the unknown. These factors therefore, make the study on Electronic Information Resources utilization by undergraduates of Abia State University to be very pertinent.

Objectives of the Study

The objectives of the study were to:

- i. Find out whether Electronic Information Resources and services are available at Abia State University, Uturu.

- ii. Ascertain whether the Electronic Information Resources are accessible to the undergraduate students of ABSU.
- iii. Determine the extent of the use of Electronic Information Resources by the undergraduate students of ABSU.
- iv. Find out the extent to which the use of EIRs contributes to the satisfaction of information needs of the undergraduate students of ABSU.
- v. Identify the problems encountered by the undergraduate students in the use of EIRs at the ABSU library.
- vi. Proffer suggestions for the solutions of the problems encountered by the undergraduate students of ABSU.

Research Questions

The following research questions were formulated to guide the study:

- i. Are the Electronic Information Resources and services available at Abia State University, Uturu?
- ii. Are the Electronic Information Resources accessible to the undergraduate students of ABSU?
- iii. What is the extent of the use of EIRs by the undergraduate students of Abia State University, Uturu?
- iv. What is the extent to which the use of EIRs contributes to the satisfaction of the information needs of undergraduate students of Abia State University, Uturu?
- v. What are the problems encountered by the undergraduate students in the use of EIRs at the ABSU library?
- vi. What are the solutions to the problems encountered by the undergraduate students of ABSU?

Scope of the Study

The study focuses on the use of electronic information resources by undergraduate students of Abia State University, Uturu. This study was carried out within Abia State University, Uturu library and the respondents of interest to the study were undergraduate regular students only. Other types of information resources that are not in the electronic form are excluded from the study.

Significance of the Study

This study attempts to identify the variables that play significant roles in students' use of electronic information resources. It also X-rayed the problems associated with the use of electronic resources and as such the result of the findings of this study will contribute to providing better service to students in the area of electronic information resources. It will also be beneficial to academics, researchers, students and professionals interested in this area of study. Generally, if one can say that the use of electronic information resources for sourcing information by students of higher institution is a must, then this study is imperative.

Review of Related Literature

Any medium containing information is an information resource. Information resources are obtainable in two formats: print and non-print (Ibenne, 2010). Information resources are what Aina (2004) refers to as information carriers. He further opines that with the advent of electronic publishing, many library and information materials are now in electronic form. This is especially true of basic reference sources, full text monographs, books and electronic journals. Electronic publishing has become important to libraries because of the escalating cost of print materials. This is especially true of journals. The prices are escalating at alarming rate. In order to fit into library budgets, many journal titles have had to be cut down. The average cost of accessing electronic publishing has been found to be much cheaper than owning the entire issue of a journal. Other advantages are ease of searching, accessibility and currency.

According to Ibenne (2010), Electronic Information Resources (EIRs) consist of various non-print and non-paper-based resources which are used to store and convey information. These resources include the CD-ROMs (Compact Disk-Read Only Memory), online databases, Digital Versatile Discs (DVDs) and virtual collections contained on the Web. Reitz (2004) cited in Ojedokun (2007) holds that a database is a large regularly updated file of digitized information (bibliographic records, abstracts, full-text documents, directory entries, images statistics, etc) related to a specific subject of field, consisting of records and uniform form organized for ease and speed of search and retrieval and managed with the aid of Database Management System (DBMS) software.

Databases are useful information sources. Some databases are not limited to optical disks, but are also available online. Online databases provide the most up-dated

information access that may not be available on optical disks. Online access may be available to local databases or external databases across geographical barriers. Online information search is the acquisition of information from a distance computer via a terminal computer which includes data stored in electronic form consisting of references to journal articles, conference papers, reports, books etc. Libraries expand their information resources base by providing paid access to relevant online databases, which provide e-journals, e-books, reference works etc. The Internet offers access to a wide range of useful information resources. With the advent and acceptance of Web publishing as part of additions to the literature of disciplines, a new vista is opened for information resource acquisition. The advantage of web-based system is that you can access them from any computer, anywhere in the world where there is an Internet connection (Totterdell, 2005).

Electronic information resources offer today's students different opportunities from their predecessors. Brophy (1993) details the advantage of networking for the user as being: the information needed can be delivered from the appropriate source to the user; the user can re-specify his or her needs dynamically, the information is obtained when it is wanted, so becomes "just in time" rather than "just in case," the user selects only the information needed to answer the specify question and finally, the information is only stored should the user wish. Electronic Information Resources can therefore provide a number of advantages over traditional print-based sources. These advantages include the fact that electronic information sources are often faster than consulting print indexes, especially when searching retrospectively.

Despite the availability of these resources and their benefits to university education, their effective use in Nigeria is being hampered by varying factors. Studies have revealed that these factors include poor telecommunication infrastructures; poor funding of universities, high cost of IT equipment and so on (Fatoki, 2004). Attitude towards a particular phenomenon can enhance or mar human approach to such phenomenon. Positive attitude is widely recognized as a necessary condition for effective use and integration of information technology in learning and teaching (Christensen, 1996). Age is a variable which has been found to correlate with computer and use of electronic information resources. Younger generations are brought up with computers. For example, Babcock and Laguna (1997) found that there were significant age differences on the computer task, as measured by older adults making few correct decisions and taking longer time to make their decisions than younger adult. Waldman

(2003) submits that males seem to enjoy browsing on the internet for enjoyment, while females tend to use it for work-related purposes. Ford, Miller and Mosses (2001) found that females tended to experience more difficulty finding information online, to feel competent and comfortable using the Internet, to use the internet less frequently than males and to make use of a less varied set of Internet application.

An empirical study conducted by Fatoki (2004), revealed that a reasonable percentage of the population in the university use the Internet, specifically, the electronic mail to communicate with students and participate in on-line discussions. They also use the World Wide Web (www) to access entertainment and sport, news and academic materials and that the users of virtual library are students, teachers, researchers and academics.

Research Methodology

The research design adopted for this investigation was the descriptive survey research method. The population of the study was 2750, consisting of the regular undergraduate students of Abia State University who are users of the Electronic library. The students in 100 level are 279,200 level students are 471,300 level students are 395,400 level students are 564,500 level students are 513, while 600 level students are 548 in number. From the 2750 respondent population, a sample was drawn to give a fair representation of the population size. To achieve this therefore, the researcher adopted Yaro Yamane's (1969) statistical formula in drawing the sample size. The statistical formula is expressed thus:

$$n = \frac{N}{1+N(e)^2}$$

Where

n = the sample size required

N = the total known population of study

e = level of significance (or limit of tolerable error) = 0.05

1 = unit (a constant)

The instrument used for data collection was the questionnaire which was a self-designed one and consisted of three (3) sections. The instrument for data collection was validated by its being read by experts in Library and Information Science. Frequency

tables, figures and simple percentages were used to analyze and present responses and discussions were done alongside questions to ensure clarity.

Discussion of Findings

A total number of 344 copies of questionnaire were distributed to respondents drawn from the users of ABSU library and were successfully collected giving a 100% rate of return. Out of 344 copies returned, only 300 copies were dully filled representing 87.2% of the questionnaire while 44 copies (12.79%) of the questionnaire) were invalid.

From table 2, the males were 185(61.67%) while the females were 115(38.33%). This shows that there are more male respondents to the questionnaire than female respondents:

Table 3: Age Distribution of Respondents

Age	Response	Percentage
16-20	55	18.33
21-23	116	38.67
24-26	79	26.33
Above 26	50	16.67
Total	300	100

Table 4: Registration and use of ABSU Library

S/N	Questions	Options	Response	Percentage
1.	Are you registered with the ABSU Library?	Yes No	287 13	95.67 4.33
		Total	300	100
2.	Do you make regular use of E-library of ABSU?	Yes No	275 25	91.67 8.33
		Total	300	100

From table 4, out of 300 responses received, 287(95.67%) are registered with ABSU Library while 13(4.33%) are not registered. Also 275(91.67%) respondents agreed that they make regular use of E-library of ABSU while 25(8.33%) do not use it.

Objective 1: To find out whether Electronic Information Resources and Services are available at ABSU library

To achieve this objective, the respondents were asked whether Electronic Information Resources and Services were available at ABSU library. The data is presented in table 5 based on the total number of responses received from the users.

Table 5: Are Electronic Information Resources and Services available at ABSU library?

Question	Options	Response	Percentage
Are the EIRs and services available at ABSU library?	Yes	300	100
	No	0	-
	Total	300	100

From table 5, the result showed that 300 (100%) respondents agreed that EIRs and services are available at ABSU library.

Objective 2: To ascertain whether the EIRs are accessible to the undergraduate students of ABSU

To achieve this objective, the respondents were asked how accessible are the EIRs to them? Table 6 shows their various responses.

Table 6: How accessible are the EIRs?

Options	Response	Percentage
Easily accessible	223	81.09
Not easily accessible	52	18.91
Not accessible	- -	- - -
Total	275	100

From table 6, it was discovered that out of the total number of 275 respondents that answered the question on how accessible the EIRs are to them, 223(81.09%) respondents said the EIRs are easily accessible while 52(18.91%) said they are not easily accessible. The remaining 25 out of the total 300 respondents that returned the questionnaire did not answer the question since they had earlier indicated that they do not use the e-library at all.

In addition, the respondents were also asked their opinion on the convenience of the use EIRs and their responses are shown in table 7.

Table 7: Opinion on the Convenience of the Use of EIRs

Options	Response	Percentage
Very Easy	92	33.45
Easy	76	27.64
Fairly Easy	65	23.64
Difficult	30	10.91
Very Difficult	12	4.36
Total	300	100

On the convenience of the use of EIRs, the study revealed that 92(33.45%) respondents reported that they found it, to a greater extent easy to use, 76(27.64%) found it easy to use, 65(23.64%) fairly easy to use, 30(10.91%) difficult to use. This finding revealed that the electronic services at the University Library are relatively easy to search and do not appear to require previous training in information technology use.

Objective 3: To determine the extent to Use of EIRs by the undergraduate students of ABSU

To achieve this objective, the respondents were asked the following questions.

- (i) Do you make use of the E-library of ABSU?
- (ii) If yes, how often do you visit and utilize the resources and services of the library in the EIRs section?
- (iii) How long have you been using EIRs?

Table 8: The extent of use of EIRs

S/N	Questions	Options	Response	Percentage
1.	Do you make regular use of the e-library of ABSU?	Yes	275	91.67
		No	25	8.33
		Total	300	100
2.	How often do you visit and utilize the resources?	Daily	38	13.82
		Weekly	135	49.09
		Fortnightly	76	27.64
		Monthly	22	8
		Quarterly/ per semester	4	1.45
		Total	300	100
3.	How long have you been using EIRs?	Below 1-year	98	35.64
		1-2years	110	40
		3-4years	67	24.36
		Above 4years	0	-- --
		Total	275	100

From table 8, out of 300 respondents, 275(91.67%) respondents make regular use of the e-library of ABSU while 25(8.33%) do not. Also, out of 275 respondents that answered the question on how often they visit and utilize the resources and services, 38(13.82%) respondents visit and utilize the resources daily, 135(49.09%) weekly, 76(27.64%) fortnightly, 22(8%) monthly and 4(1.45%) quarterly/once per semester. It also showed that 98(35.64%) respondents have been using it below 1-year, 110(40%) for 1-2years, 67(24.36%) for 3-4years. In addition, the respondents were also asked how often they use the following types of electronic resources in table 9.

Table 9: How often do you Use these Types of EIRs?

S/N		Options	Response	Percentage
1.	Entertainment	Very often	0	-- --
		Often	3	1.09
		Rarely	40	14.55
		Never	232	84.36
		Total	275	100
2.	Education/ Academic	Very often	93	33.82
		Often	182	66.18
		Rarely	0	-- --
		Never	0	-- --
		Total	275	100
3.	Sport	Very often	76	27.64
		Often	122	44.36
		Rarely	42	15.27
		Never	35	12.27
		Total	275	100
4.	Religions	Very often	0	-- --
		Often	0	-- --
		Rarely	0	-- --
		Never	0	-- --
		Total	0	-- --
5.	Commercial News	Very often	0	-- --
		Often	19	6.91
		Rarely	170	61.82
		Never	86	31.27
		Total	275	100
6.	Health	Very often	0	-- --
		Often	0	-- --
		Rarely	2	9.45
		Never	249	90.55
		Total	275	100

The result in table 9, shows that 3(1.09%) respondents often use entertainment, 40(14.55%) rarely use it and 232(84.36%) don't use it all. Based on education/academic, 93(33.82%) respondents use it very often, 182(66.18%) use it often. Also, 76(27.64%) make use of sport often, 42(15.27%) rarely use it while 35(12.73%) do not use it at all. No respondent patronize the religious resources. On the use of commercial news, 19(6.91%) use it often, 170(61.82%) rarely use it while 86(31.27%) do not use it. Also on health resources, 26 (9.45%) rarely use it and 249(90.55%) do not use it.

Objective 4: To find out the extent to which the use of EIRs contributes to the satisfaction of the information needs of the undergraduate students.

To achieve this objective, the respondents were asked to what extent the use of EIRs contributes to the satisfaction of their information needs. Table 10 shows their various responses.

Table 10: The Extent to which the Use of EIRs Contribute to their Satisfaction

Options	Response	Percentage
Very high extent	189	68.73
High extent	53	19.27
Moderate extent	28	10.18
Low extent	5	1.82
Very low extent	0	---
Total	275	100

In table 10, 189(68.73%) respondents agreed that the use of EIRs contribute to their satisfaction to a very high extent, 53(19.27%) to a high extent, 28(10.18%) to a moderate extent, 5(1.82%) to a low extent. They were also asked the benefits of EIRs and services. Their responses are shown in table 11.

Table 11: The Benefit of EIRs and Services to Students

Options	Response	Percentage
Proper organization of information materials	41	14.91
Effective storage of information materials	49	17.82
Easy retrieval of information materials	28	39.64
Effective utilization of resources	5	27.27
Others	0	0.36
Total	275	100

From the result in the table 11, 41(14.91%) respondents agreed that the benefit of EIRs is the proper organization of information materials, 49(17.82%) effective storage of information materials, 28(39.64%) easy retrieval of information materials and 75(27.27%) effective utilization of resources. 1(0.36%) respondent in his own view said that the EIRs and services are often faster than consulting print index.

Objective 5: To identify the problems encountered by undergraduate students in the use of EIRs

To achieve this objective, the respondents were asked the problems they encounter while using EIRs. The data is presented in table 12 based on their responses.

Table 12: Problems Encountered while Using Electronic Resources

Options	Response	Percentage
Information overload	53	19.27
Need of filter the result from search	85	30.91
Download delay	76	27.64
Failure to find information	31	11.27
Power outages	0	- -
Inaccessibility of some websites	28	10.18
Others	2	0.73
Total	275	100

From table 12, it was observed that 53(19.27%) respondents said their problem while using electronic resources is information overload, 85(30.91%) need to filter the result from the search, 76(27.64%) download delay, (31(11.27%) failure to find information and 28(10.18%) inaccessibility of some websites. The remaining 2(0.73%) respondents said in their own opinion that the problems they encounter while using electronic resources are lack of search skills and difficulties in navigation of some websites.

Objective 6: To proffer suggestions for the solution encountered by undergraduate students of ABSU

To achieve this objective, the respondents were asked to proffer suggestions for the solution of the problems encountered by undergraduate students of ABSU. In summary, they suggested that the Management of ABSU library should employ more trained personnel/technical staff of teach the students on how to narrow their search while seeking for information and other Information and Communication Technology (ICT) skills. Also, ABSU Library should have a good internet service provider for a faster connectivity.

Conclusion

Guided by the objectives of the study, the data collected and presented from the study was able to reveal the following; that a good number of students make use of the E-library of ABSU and that EIRs and services are available at ABSU library, that most undergraduate students have easy access to EIRs and services and they found it to a greater extent easy to use, that majority of students use the E-library, while a good number of the students visit and utilize the resources and services. The frequency of usage of electronic resources is fairly high. Electronic resources like educational/academics and sports are most frequently patronized unlike the religious, commercial news and entertainment resources which are less frequently patronized by students. It is deducible that the students derived a high level of satisfaction with the use of EIRs and that the major benefit of EIRs and services is the easy retrieval of information resources.

Some of the problems encountered by the students in the use of electronic resources are information overload, need to filter the result from search and download delay. Other problems include failure to find needed information in a given search inaccessibility of some websites, lack of proper search skills and difficulties in navigation of some websites.

Recommendations

Based on the findings, the study recommends that:

1. ABSU library must do something concerning teaching its undergraduate student users effective information search and retrieval skills as a key learning objective so that they could be fully equipped to cope with the intensive world of electronic information service delivery as an end-users.
2. ABSU library should be equipped with more enabling infrastructure to support and encourage the usage of electronic information resources by the undergraduate students in view of the high level of interest in their use and the extent to which they contribute in satisfying the information needs of the students.

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