The Use of Electronic Journals by Lecturers: A Case Study of University of Ibadan, Nigeria

HUMPHREY O. NWAOGU
Systems Librarian
Crawford University Library
Faith City, Igbesa, Ogun State.

GOODLUCK I. IFIJEH
Serials Librarian
Centre for Learning Resources
Covenant University
Canaanland, Ota, Ogun State.

Abstract

This study investigated the use of electronic journals by lecturers of University of Ibadan, Nigeria. The descriptive survey research was adopted for the study. Questionnaire was used as the data collecting tool for this study. The population comprise of all faculties (Lecturers) of the University of Ibadan, Nigeria. A total of four hundred and sixty-seven questionnaires were filled and returned.

The study found that lecturers in the University of Ibadan use e-journals for personal and academic reasons. It was also discovered that in their quest to use electronic journals, lecturers face such challenges as low bandwidth, poor electricity supply etc. Solutions and recommendations were however offered.

Keywords: University Library, Lecturers, Electronic Journals, Databases, University of Ibadan

Introduction

The importance of electronic information resources in library services cannot be over emphasized. One of the most used electronic resources is electronic journal. Bush, King and Tenopir (2004) reported that the first e-journal was created in the form of a project undertaken "to test networking computers as a means of improving scientific communications." In 1976, the New Jersey Institute of Technology came out with the first proto-type E-journal named Chimo - a weekly newsletter. Most of the e-journals came into the picture in the 1990s, the most popular of them being Psycoloque edited by Stevan Hamad in 1989. By 1992 there was OJCCI (Online Journal of Current Clinical Trials), it was the first peer-reviewed science journal with graphics and completely searchable full text.

Literature suggests that faculty's use of e-journals might be influenced by many factors : subject disciplines, academic positions, their local information environment of electronic resources, their awareness of those resources, their age, their information needs etc., (Ojedokun and Owolabi, 2003)

As academic institutions progressed towards the 21st century, increases in student numbers, distance learning, changes in copyright licensing and lack of funding means that they have to look more closely at the use of electronic resources in order to meet these challenges. The "wired campus" and "virtual university" mean more users looking for electronic resources and increased pressure on libraries to provide these services.

It is expected that academic institutions especially universities in Nigeria provide internet access to its entire academic and support staff members, and the university library subscribes to a number of online databases and full text journals. Thus libraries are using technology to improve, strengthen and speed up access to scholarly information not held locally. However, though the facilities may be available, it is not known how extensively academic staff members utilize them. Hence this paper seeks to investigate and assess the use of e-journals by lecturers in Universities using the University of Ibadan, Nigeria as a case study, thereby justifying the huge resource spent in acquiring them by their various universities.

Objectives of the Study

The main purpose of this study is to ascertain the extent of use of e-journals over conventional sources of information for academic purpose on the various universities. Specifically the paper seeks:

(a) To identify the type of electronic journals available in university libraries.
(b) To determine the frequency of usage by lecturers
(c) To ascertain the benefits of e-journal over conventional source of information
(d) To determine the impact of e-journal on output of lecturer in Nigerian Universities.
(e) To identify the challenges lecturers encounter in the use of e-journals

Literature Review

Tenopir (2003) analyzed the results of over 200 studies of the use of electronic resources in libraries published between 1995 and 2003. The main conclusion of this review was that electronic journals have been rapidly adopted in academic spheres, though the behaviour varies according to the discipline. Brockman, William. S. et al. (2001) also reviewed the conclusions of several papers that used log analysis to study the use and users of electronic journals. These papers gave contradictory conclusions on the volume of use of subscriptions though there was a high degree of concentration in the use of the titles and a clear preference for PDF rather than HTML format. They also provided interesting information on the behavior patterns of users and the growing preference for searching to the detriment of browsing as the main means of accessing information. The surveys of users of electronic journals carried out so far have been summarized by Bar-Ilan. J, PeritzB .C and Wolman.Y (2003). They showed that:

- Use of electronic journals increases with time.
- Age and/or academic position are inversely related to the use of electronic media and journals.
- There is a gradual reduction in the use of printed journals as users prefer and use the electronic format more.
- With increased use, users access the electronic format more frequently.
- The use of a journal is not necessarily an indication of the preference of users. There may be an increase in the acceptance and frequency of use of the electronic format merely because the traditional print format is no longer easily available.

- When respondents were asked about the advantages of electronic journals, accessibility and desktop access, home access, ease of retrieval and hyperlinks to outside content were the arguments cited most often. On the other hand, the disadvantages of electronic journals mentioned most often were the lack of back issues and problems with reading a text from the computer screen. One of the aspects most analyzed in the studies of users carried out so far is that of the variables determining their behavior in the use of electronic resources. Ehikhamenor, F.A. (2003) asserted that different behaviours can be identified according to variables such as discipline, age and academic position. With regard to the discipline, it seems that teaching and research staff in exact and natural (hard) sciences, who were in fact the first to adopt electronic journals, are the most active users of titles in electronic format. This may be related to the fact that, according to several studies, involvement in research is the best predictor of the use of electronic resources (Tenopir, 2003)

Palmer. and Sandler (2003 investigated the effective factors in using e-resources – Internet and optic disc- among faculty members of Shiraz University. This research was done to find the incentives and obstacles in using e-resources in order to adapt information system to the faculty members 'needs. The results show that use of both Internet and optic disc are affected by factors such as gender, scientific rank and educational degree, amount of computer skills and instructions for using e- resources. The barriers for using such resources were divided into individual problems and those problems resulting from the information systems. Unfamiliarity with e-resources, need of tutorial courses and shortage of time were found as individual obstacles, while the information systems' problems were identified as uneasy access, expenses, and technical and practical limitations (Cockrell and Elaine 2002).One clear way to solve the problem of expenses and funding is through library networking of co-operation (Ejimofo and Ohaji, 2008).

Research Methodology

The descriptive survey research was adopted for the study. Questionnaire was used as the data collecting tool for this study. The population comprise of all faculties (Lecturers) of the University of Ibadan, Nigeria. A total of four hundred and sixty-seven questionnaires were filled and returned. The collected data was analyzed descriptively using statistical tables where necessary and other statistical computations like percentage frequencies for an appropriate summary.

Data Analysis and Result

Table 1: kinds of electronic journals available in library databases

s/n	E-journals	A	NA	NRA	RA	Mean	S.D
1	SCIENCE DIRECT JOURNALS	105 22.5%	51 10.9%	112 24.0%	199 42.6%	2.87	1.19
2	AGORA	130 27.8%	62 13.3%	132 28.3%	143 30.6%	2.62	1.19
7	JSTOR	128 27.4%	82 17.6%	101 21.6%	156 33.4%	2.61	1.21
5	NIGERIA VIRTUAL LIBRARY	138 29.6%	62 13.3%	127 27.2%	140 30.0%	2.58	1.20
6	EBSCOHOST	137 29.3%	75 16.1%	135 28.9%	120 25.7%	2.51	1.16
3	HINARI	154 33.0%	75 16.1%	123 26.3%	115 24.6%	2.43	1.18
4	OARES	144 30.8%	87 18.6%	138 29.6%	98 21.0%	2.41	1.13
8	DOAJ	169 36.2%	95 20.3%	110 23.6%	93 19.9%	2.27	1.15
9	PROCEEDINGS OF THE AMERICAN MATHEMATICAL SOCIETY	183 39.2%	109 23.3%	110 23.6%	65 13.9%	2.12	1.08
10	TRANSACTION OF THE AMERICAN PATHOLOGICAL SOCIETY	200 42.8%	106 22.7%	101 21.6%	60 12.8%	2.04	1.08

Key: A – Available, NA – Not available, NRA – Not readily available, RA – Readily available

The table above shows the list of electronic journals available in the library databases of the respondents: SCIENCE DIRECT JOURNALS (Mean=2.87) ranked highest by the mean score ratings and was followed by AGORA (Mean=2.62), JSTOR (Mean=2.61), NIGERIA VIRTUAL LIBRARY (Mean=2.58), EBSCOHOST (Mean=2.51), HINARI (Mean=2.43), OARES (Mean=2.41), DOAJ (Mean=2.27), PROCEEDINGS OF THE AMERICAN MATHEMATICAL SOCIETY (Mean=2.12) and lastly TRANSACTION OF THE AMERICAN PATHOLOGICAL SOCIETY (Mean=2.04).

Table 2: Categories of Lecturers who make use of the e-journals

Categories of lectures	Frequency	Percentage
Assistance lecturer	150	32
Lecturer II	100	22
Lecturer I	100	22
Senior lecturer	83	.17
Professor	34	7
Total	**467**	**100.0**

Table 2 shows the categories of Lecturers who use e-journals as recorded in the study: 232(49.7%) Assistant Lecturers, 34(7.3%) Lecturers I, 199(42.6%) Senior Lecturers 2(.4%) making a total of 467(100.0%)

Table 3: Frequency of Use by Lecturers

Frequency of patronage	N	%
Every day	65	13.9
Once a week	145	31.1
1-3 times a week	50	10.7
4-5 times a week	40	8.6
Once in 2 weeks	67	14.3
1-3 times a month	50	10.7
4-5 times a month	50	10.7
Not at all	-	-
Total	467	100

Table 3 above shows the frequency of usage of e-journals by the respondents. Majority of the respondents (145 or 31.1%) make use of e-journals once a week..

Table 4: Impact of e-journals on the academic responsibility and pursuit of respondents

Items	SA	A	D	SD	Mean	S.D
It helps me do all my academic work	237 50.7%	154 33.0%	64 13.7%	12 2.6%	1.68	.80
I need it for my academics	243 52.0%	163 34.9%	30 6.4%	31 6.6%	1.68	.86
It gives me relevant information on any subject	236 50.5%	170 36.4%	38 8.1%	23 4.9%	1.67	.82
It helps me collect information related to my subject field	244 52.2%	165 35.3%	34 7.3%	24 5.1%	1.65	.83
It also help to upgrade general knowledge	252 54.0%	157 33.6%	31 6.6%	27 5.8%	1.64	.84
I can have access to related studies	245 52.5%	167 35.8%	41 8.8%	14 3.0%	1.62	.77
It helps me in writing good literature review	265 56.7%	153 32.8%	31 6.6%	18 3.9%	1.58	.78
It helps me in research	292 62.5%	133 28.5%	20 4.3%	22 4.7%	1.51	.79
It helps me to write a good background relevant to my discipline	309 66.2%	123 26.3%	14 3.0%	21 4.5%	1.46	.76

Key : SD – strongly disagree, D – Disagree, A – Agree, SA – Strongly agree
Listed above are the responses on the importance of e-journals to the academic responsibility and pursuit of the respondents:

I can easily lay hands on required information resources (Mean=1.72) ranked highest by the mean ratings and was followed by It helps me do all my academic work (Mean=1.68), I need it for my academics (Mean=1.68), It gives me relevant information on any subject (Mean=1.67), It helps me collect information related to my subject field (Mean=1.65), It also helps to upgrade general knowledge (Mean=1.64), I can have access to related studies (Mean=1.62), It helps me in writing good literature review (Mean=1.58), It helps me in research (Mean=1.51) and It helps me to write a good background relevant to my discipline (Mean=1.46).

Table 5: The advantages of e-journals over other information resources

s/n	Benefits factors	SD	D	A	SA	Mean	S.D
1	More convenient them visiting a resources centre	41 8.8%	38 8.1%	144 30.8%	244 52.2%	3.27	.94
5	There is wider choice of titles	33 7.1%	42 9.0%	194 41.5%	198 42.4%	3.19	.87
3	You can have a 24\7 hours access	45 9.6%	60 12.8%	178 38.1%	184 39.4%	3.07	.95
6	It is always up to date	43 9.2%	69 14.8%	168 36.0%	187 40.0%	3.07	.96
2	You can have an off campus access	54 11.6%	37 7.9%	203 43.5%	173 37.0%	3.06	.95
4	It helps with multimedia content	39 8.4%	49 10.5%	223 47.8%	156 33.4%	3.06	.88

Above is response on the main advantages of e-journals to the respondents:

More convenient then visiting a resources centre (Mean=3.27) ranked highest by the mean ratings and was followed by there is wider choice of titles (Mean=3.19), You can have a 24\7 hour's access (Mean=3.07), It is always up to date (Mean=3.07), You can have an off campus access (Mean=3.06) and lastly by It helps with multimedia content (Mean=3.06).

Table 6: The challenges of using e-journals

S/N	**Challenging factors**	**L.E**	**A.E**	**GE**	**VGE**	**Mean**	**S.D**
1	Lack of knowledge of and inability to use computer systems	152 32.5%	100 21.4%	82 17.6%	133 28.5%	2.42	1.21
2	Limited access to computer and internet	132 28.3%	144 30.8%	66 14.1%	125 26.8%	2.39	1.16
8	Health hazards occasioned by the nature of radiators from monitor	138 29.6%	128 27.4%	93 19.9%	108 23.1%	2.37.	1.14
3	Too much information retrieved	142 30.4%	145 31.0%	93 19.9%	87 18.6%	2.27	1.09
4	Speed of access is limited	158 33.8%	169 36.2%	90 19.3%	50 10.7%	2.07	.98
6	Lack of efficiency of electronic information retrieval	185 39.6%	143 30.6%	82 17.6%	57 12.2%	2.02	1.03
7	Restrictions from vendors	183 39.2%	151 32.3%	82 17.6%	51 10.9%	2.00	1.00
5	Lack of adequate power supply	234 50.1%	141 30.2%	58 12.4%	34 7.3%	1.77	.93
9	Challenges with printing out papers	146 31.3%	-	-	-	.31	.46

Key :L.E – Low extent, A.E – Average extent, G.E – Great extent, VGE – Very great extent

Shown above are the responses on the main challenges encountered by the respondents using the e-journals: Lack of knowledge and non used to computer environment (Mean=2.42) ranked highest by the mean ratings and was followed by Limited access to computer (Mean=2.39), Health hazards nature of radiators from monitor (Mean=2.37), Too much information retrieved (Mean=2.27), Speed of access is limited (Mean=2.07), Lack of efficiency of electronic information retrieval (Mean=2.02), Restrictions from vendors (Mean=2.00), Lack of adequate power supply (Mean=1.77) and lastly by Challenges with printing out papers (Mean=.31).

Recommendations

1. The Library needs to acquire more databases to provide more and better options for access to e-journals
2. There is need to acquire more internet bandwidth so as to facilitate the speed of access to e – journals
3. Provision of stable electricity supply should not be jeopardized
4. The library should also carry out user training programmes for lecturers with the aim of imbibing internet search skills

Conclusion

This study found that lecturers in the University of Ibadan use e-journals for personal and academic reasons. This clearly shows that academic life has been drastically changed by the advent of e-journals. Thus, development has been fueled by t he advancement in computers and telecommunications technology. In the past if a library did not subscribe to a journal, a researcher would have a difficult time locating the journal from other libraries. But today, journals have become available in electronic format through subscriptions Most times e-journals come through database aggregators like EBSCOHOST, SCIENCE DIRECT, AGORA, etc. However, this study observed that lecturers face such challenges as low bandwith, poor electricity supply etc. It is therefore important that relevant authorities proffer solutions to these challenges, so that users could make effective and efficient use of e-journals.

References

Bush, A., King, D., and Tenopir, C (2004) "Medical faculty's use of print and electronic journals: changes over time and in comparison with scientists," *Journal of the Medical Library Association* 92 (2004): 233-241.

Bar-Ilan. J, PeritzB .C and Wolman.Y(2003) A survey of the electronic Databases and Academic Staff of Isreali Universities. *Journal of Academic Librarianship.* 29Pp 346-361

Brockman, William. S. et al. (2001). Scholarly Work in the Humanities and the Evolving information Environment. Washington, D.C.: Council on Library and Information resources Available at http://www.clir.org/pubs/abstract/ pub104abst.html.

Carol Tenopir,(2003) *Use and users of electronic library resources: an overview and analysis of recent research studies* (Washington, DC: Council on Library and Information

Cockrell, B. J. and Elaine, A. J. (2002) How Do I Find an Article? Insights from a Web Usability Study. The Journal of Academic Librarianship 28(2): 122-132.

Ehikhamenor, F.A. (2003). Internet resources and productivity in scientific research in Nigerian universities. Journal of Information Science 29 (2): 102-116.

Ejimofo, P.N., & Ohaji, I.K. (2008). Networking and networking among libraries and information providers the University of Nigeria, Enugu Campus (UNEC) library experience. Paper presented at 46th Annual National Conference and AGM, Kaduna, 1st June, 2008: 13-19.

Jamali, H., Nicholas, D and Huntington, P (2005) "The use and users of scholarly e -

journals: a review of log analysis studies," *Aslib Proceedings* 57 :554-571.

Bar-Ilan, J and Fink, N (2005), "Preference for electronic format of scientific journals – a case study of the Science Library users at the Hebrew University," *Library & Information Science Research* 27 : 363-376.

Ojedokun, A.A., & Owolabi, E.O. (2003). Internet use for teaching and research in Botswana. *African J*ournal of Library, Archives, and Information Science 13 (1): 43-53.

Palmer, Janet P. and Mark Sandler. (2003). What Do Faculty Want? Netconnect (Winter): 26- 28

Tenopir, C. (2003). *Increasing effective student use of the scientific journal literature: Phase 1 final report, volumes 1 and 2.* April 1, 2003
http://web.utk.edu/~tenopir/nsf/presentations.html