

USE OF ELECTRONIC JOURNALS: A CASE STUDY OF PANJAB UNIVERSITY LIBRARY

NAVJYOTI DHINGRA

PREETI MAHAJAN

Abstract

Over the last few years there has been a rapid rise in the electronic journals and this electronic delivery of journals has resulted this study. Users of the E-journals in the A.C. Joshi Library, Panjab University, Chandigarh were studied in this survey. Study highlights the level of the use of the available electronic journals. Experiences of faculty and students about various issues relating to electronic journals are highlighted. This article also discusses whether attitudes of the users change depending upon gender, age, access place and branch of study etc.

Keywords : E-journals users/Attitude/ Panjab university library/ E-resources, IT services

1. Introduction

Currently we are passing through an era of rapid technological and socio-economic changes and the aura of such changes make us believe that we are living in an information society. These technological advances have replaced traditional services and processes with electronic versions which are attractive and economically feasible for the academic libraries. This technological revolution in the last four decades has made tremendous impact on the way information is processed, stored, retrieved and disseminated. Majority of the sources of information, especially the journals are now available on electronic media like online, CD-ROM and Internet. Because of these advancements, information reaches the people in short time, at a less cost and occupies less space. Over the last few years there has been a rapid rise in the electronic journals and this electronic delivery of journals has resulted in elimination of paper, the ease in handling complex data, tables, moving pictures, sound images and video clips. It is estimated that about 2250 e-journals are available free of cost over the Internet. Many print journals are now releasing their online versions also, which are often available free to print subscribers.

Electronic journals are often referred to interchangeably as “electronic publishing”, “electronic serials”, “online journals” and “electronic periodicals”. Gail Macmillan defines E-journals as “any serials produced, published and distributed nationally and internationally via electronic networks such as Binet and Internet.[1]” According to W. Jones, “E-journals are available electronically via a computer or a computer network,

that they may or may not be published in some other physical medium, but that are not CD-ROM's.[2]" Wikipedia defines electronic journals as, "Electronic journals are scholarly journals or magazines that can be accessed via electronic transmission. They are a specialized form of electronic document: they have the purpose of providing material for academic research and study, they are formatted approximately like printed journal articles, the metadata is entered into specialized databases, such as DOAJ or OACI as well as the databases for the discipline, and they are predominantly available through academic libraries and special libraries.[3]" According to Harrod's Librarian's glossary, "A journal which is available in electronic format; a physical, printed version may also be available.[4]" Thus electronic journals are periodical that are made available as individual titles via electronic medium, typically the world wide web. Today, most of the e-journals appear as parallel version of their print counterparts.

2. Features of electronic journals

E-journals offers many opportunities to today's users that were not available to their predecessors.[5] Because of the multidimensional features of e-journals, they are becoming the choice of academic as well as public library users. Electronic journals can be accessed round the clock across geographical barriers, which make e-journals omnipresent. The e-journals get published or reach the subscribers much before their counterparts. Another important feature of e-journals is that more than one person can access them at a time. Moreover, articles can be downloaded and printed simultaneously by more than one reader, depending on access rights and permission. Electronic journals offset the missing issue problems. If a particular volume of print version of the journal is not complete, library staff can download and print all the articles available online or can save it in digital form till the hard copy is supplied by the publisher. Electronic journals also include multimedia and graphics and text search is much easier and less cumbersome. Electronic journals are better for the environment, by reducing the space; dust and the air pollution .The hypertext available in the electronic journal will directly link to the areas of greatest interest and results in creative reading. Electronic publication provides online submission of manuscripts and we can also keep track of the submitted manuscripts with the reference number.[6] This reduces the time of publication of manuscripts. The content of the electronic journal can be reproduced, forwarded, modified, leading to possible problems with copyright protection and preserving authenticity.

3. Role of journals in higher education

A journal may be looked upon as an information shell in a subject. Besides being a formal channel of scholarly communication, journals hold crucial significance in higher education. While studies observe that journals are sought for various reasons including research, current awareness and continuing education, teaching and external communication, journal articles have been regarded as a principal source of information with respect to higher education. University libraries in India are faced with the challenges to meet the users requirements due to various reasons such as exponential growth of knowledge, price escalation and budget restrictions. Moreover there is also a

change in the information habits and spiraling expectations of users. In such a situation, the e-journals open up many existing opportunities and potentials for higher education Institutions. “Shared subscription” or “Consortia-based subscription” to electronic resources through consortium of libraries is now considered to be a feasible strategy to increase the access to e-journals across the higher education institutes at highly discounted rates of subscription. The consortia-based subscriptions can be successfully deployed to meet the pressures in the libraries such as minimized budget, increased user demands and rising costs of journals.

4. Objectives of study

The main objectives of the study are:-

1. To determine the purpose and utilization of e-journals.
2. To identify the age group, status and research field for using e-journals.
3. To find out frequency of using e-journals.
4. To study comparative usage of print verses electronic journals.
5. To find out the preferred place for accessing the e-journals.
6. To rank the various key advantages of electronic journals.
7. To find out the hindrances and problems faced by the users while accessing and using electronic journals.
8. To study the satisfaction level of users for infrastructural facilities provided by the library for accessing e-journals.
9. To study the preference level of using the journals.
10. To suggest measures for improvement of the use of e-journals.

5. Methodology

For the purpose of the study, A.C.Joshi Library of Panjab University was taken into consideration where, under the UGC’s E-journal consortium programme library get access of about 4000 full text scholarly electronic journals from 25 publishers. The consortium provides current as well as archival access to core and peer-reviewed journals in different disciplines. Under the INDEST Consortium facility the library get 150 journals from IEEE Xplore and having access of 171 Proquest Science Journals . There are some more electronic journals which are having free electronic access with the print subscription of the journals. In order to collect the comprehensive and relevant data for the study, the questionnaire method was used. List of questions were formulated keeping in view the objectives of the study. Data were collected from the 150 users comprising Post -graduate students, research scholars and faculty members

6. Analysis of Data

The data collected were analysed and inferences derived, based on standard statistical techniques. The results of the study are as under:-

Table-1

Study Population : Characteristics:- The study population comprised users of all age groups, both sexes, different qualifications and subject streams as can be seen from Table-I.

Table-1a

Age(In Years)	Number	Percentage
18-22	36	24%
23-27	87	58%
28-32	15	10%
33-37	6	4%
38-42	0	-

Table-1a reveals 58% of the users of e-journals belong to 23-27 years of age group and 24% of users belong to 18-22 years, whereas no respondent belonged to 38-42 years of age group. The age groups of 33-37 years and 43-47 years were having same percentage of respondents, which is 4% for each category.

Table-1b

Gender	Number	Percentage
Male	66	44%
Female	84	56%

Table-1b reveals that 56% of population studied were female, and only 44% of total were male who access e-journals for different purposes.

Table-1c

Qualification	Number	Percentage
Post-graduate	84	56%
Research Scholar	54	36%
Faculty	12	8%

Table-1c shows that 56% of the respondents were Post-graduate students, 36% research scholars and only 8% were faculty.

Table-1d

Stream	Number	Percentage
Engineering	15	10%
Sciences	63	42%
Social Sciences	51	34%
Any other	21	14%

Table-1d reveals that 42% of the users of e-journals belonged to Science stream, 34% were from Social Science stream, 10% were from Engineering and rest only 14% of users were from any other streams like language, etc.

Table-II

Purpose of Using e-journals:- A question was asked to identify the purpose of using e-journals.

Table-II

Purpose	Number	Percentage
For writing papers	30	20%
For Projects	36	24%
For Preparing notes	21	14%
For Seminars	36	24%
For Research Work	90	60%
For any other	9	6%

Note: Because of multiple choice options the percentage is exceeded to more than 100%. [7]

From Table II it is clear that most of the respondents i.e. 60% use e-journals for their research work. 24% of the users use e-journals for their project work and seminars. 14% of users use e-journals for writing notes and 20% use this facility for writing papers. Only 6% users use e-journal facility for other works like general awareness, etc.

Table-III

Frequency for using e-journals:- Here an attempt has been made to find out the frequency of using the e-journals.

Table-III

Frequency	Number	Percentage
Daily	39	26%
Once in a week	18	12%
2-3 time in a week	66	44%
Occasionally	27	18%

Table III reveals only 26% of users access e-journals daily, 12 % of respondents use e-journals once in a week. 44% users use e-journals 2-3 times in a week and only 18% use it occasionally.

Table-IV

Comparison in using print and electronic journals in week:- Print journals are equally popular as the electronic journals, which is shown by table IV.

Table-IV

Number	Print in week	Electronic in a week
1-2	60 (40%)	54 (36%)
3-5	36 (24%)	60 (40%)
6-10	30 (20%)	21 (14%)
11-20	24 (16%)	15 (10%)

Table IV reveals that sixty (40%) users read or use 1-2 print journals, on the other hand fifty four (36%) users use 1-2 journals of electronic version in a week. Thirty six (24%) and sixty (40%) users read print and electronic journals respectively 3-5 journals in a week. 20% users read from 6-10 print journals and only 14% of users use 6-10 electronic journals in a week. Twenty four (16%) users use 11-20 print journals in a week and only fifteen (10%) users use 11-20 e-journals in a week.

Table-V

Places of Accessing e-Journals:- Users were also asked as to where they access e-journals as they can do so in the library as well as from their departments. The users can access e-journals from their hostels also with the facility of LAN in the university campus.

Table-V

Place	Number	Percentage
Net Café	21	14%
Home	9	6%
Department	36	24%
Library	105	70%
Hostel	6	4%

Note: Because of multiple choice options the percentage is exceeded to more than 100%.

Table V summarises that most of the students (70%) access e-journals through library, Nine (6%) access e-journals from home, 14% access them from internet café, Thirty six(24%) users access e-journals from department also, whereas only 4% users are there who use this facility from hostel.

Table-VI

Features of Online-Journals:- In table VI, key advantages of accessing electronic journals were ranked. The purpose is to identify the advantages of e-journals that users find important. Three options Irrelevant, Neutral and Very Important were given to users.

Table-1a

Feature	Irrelevant	Neutral	Very Important
Available form Desktop	21 (14%)	54 (36%)	75 (50%)
Speed of Publication	21 (14%)	39 (26%)	90 (60%)
Search is easy	21 (14%)	24 (16%)	105 (70%)
Hyperlinks to references	15 (10%)	33 (22%)	102 (68%)
Graphic Capabilities	24 (16%)	51 (34%)	75 (50%)
On screen reading	36 (24%)	63 (42%)	51 (34%)
Access from diff Location	18 (12%)	33 (22%)	99 (66%)
Timeless availability	15 (10%)	30 (20%)	105 (70%)
Full Text	21 (14%)	45 (30%)	84 (56%)
Down loading facility	24 (16%)	33 (22%)	93 (62%)
Archival Facility	18 (12%)	48 (32%)	84 (56%)
Easy Accessibility	18 (12%)	24 (16%)	108 (72%)

Table VI reveal that 72% users find easy accessibility of e-journals as the most important advantage of e-journals. Timeless availability and easy search of e-journals ranked very important by 70% of users. 102 users feel that Hyperlinks to references is a beneficial advantage for users of e-journals. Onscreen reading of e-journals was found irrelevant by 24% of users. 66% of users find accessing from different location as a key advantage of e-journals. Available from desktop and speed of publication are the features which 14% users for find irrelevant. More than half(56%) users find full text availability as important. Ninety three(62%) users find downloading feature of e-journals is a key advantage. 32% of users are neutral about the archival facility of e-journals.

Table -VII

Hindrances of accessing electronics journals:- Even though e-journals are very important source of information, but there are some problems faced by users. Lack of infrastructure, lack of training, difficult to read from screen, etc. are some of them. Here an attempt has been made to find the major problems faced by the users while accessing e-journals.

Table-VII

Problem	Number	Percentage
18-22	36	24%
Lack of infrastructure	33	22%
Not easy to use	18	12%
Unorganized	12	8%
Difficult to read from screen	36	24%
Lack of traning	72	48%
Preference to paper Journals	30	20%

Note: Because of multiple choice options the percentage is exceeded to more than 100%

Table VII reveals that 48% of users found lack of training as the major problem of not using or less usage of e-journals. 22% users find lack of infrastructure is the main hinderence in using e-journals. Eighteen(12%) users thought e-journals are not easy to use. Only 8% students find e-journals as unorganised and 24% users find it difficult to read from screen as major problem of not using e-journals. Thirty (20%) users give more preference to paper journals than electronic journals.

Table VIII

Satisfaction Level of Infrastructural Facilities provided by Library for accessing e-journals:- The purpose of this is to identify how much users are satisfied with library facilities. Table VIII shows the satisfaction level of the users about infrastructural facilities provided by the library for accessing e-journals.

Table-VIII

Level	Number	Percentage
Fully Satisfied	51	34%
Practical Satisfied	84	56%
Unsatisfied	15	10%

The table reveals that fifty one(34%) users are fully satisfied with the facilities while majority (56%) of users are partially satisfied and only 10% of users are unsatisfied with the infrastructural facility provided by the university for accessing e-journals.

Table -IX

Preference level of using journals in future:- Here an attempt to know the type of journals, users want to use in near future like only print or only electronic or they want to access both types of journals.

Table-IX

Type	Number	Percentage
Print	15	10%
Electronic	72	48%
Both	63	42%

The results reveals that 48% of users want to access only electronic journals, only 10% users want to read from print journals and 42% users want to access from both print as well as electronic form of journals.

7. Major findings

This study offers a way to identify the acceptance of e-journals, advantages and the problems encountered while accessing e-journals. The major findings of the study are summarized below:-

1. The frequency of usage of electronic journals is increasing day by day.
2. Major portion (58%) of the users is from the age group of 23-27 years.
3. In comparison to male respondents, female respondents are more interested in accessing e-journals.
4. Out of 150 users, 56% of the respondents belonged to Post graduate level who access e-journals.
5. Electronic journals are more popular with science students.
6. 60% of users use the electronic journals for their research work.
7. There are less number of users who access e-journals daily.

-
8. Major portion of respondents (44%) access e-journal 2-3times a week.
 9. 40% respondents read only 1-2 journals in print form per week.
 10. Only 10% of total respondents access 11-20 e-journals in a week.
 11. A significant proportion of the users access e-journals from the library.
 12. Only 4% of respondents access this facility from hostel.
 13. Easy accessibility, easy search and timeless availability of e-journals are the key advantages, as revealed in study.
 14. 72% of users find lack of training as the major problem in not accessing the e-journals.
 15. The analysis shows that a significant proportion of the users find e-journals difficult to read from screen.
 16. Only 20% respondents gave preference to the paper/print journals.
 17. 34% users are fully satisfied with the facilities provided by the A.C.Joshi library in accessing e-journals.
 18. In future major portion of respondents wants to access journals in electronic form.

8. Suggestions

1. Increased availability of computer systems may increase the use of Electronic journals.
 2. As lack of training is major hindrance in using e-journals, some training is required by the users for better assessment of e-journals.
 3. An adequate number of students suggested that necessary arrangements should be made to access the full text of more electronic journals.
 4. Month-wise usage reports for e-journals could be measured using log on file system by the Institute besides requesting the publishers related to support future electronic journals building.
 5. Information professionals have to create more awareness functions to market their new e-journal services being provided in the library.
 6. Meeting with thought leaders, influential persons in other departments and engaging them to spread the awareness about the e-journals services may be considered.
 7. In order to improve the efficiency of the users towards access to electronic journals the institute should provide hands on experience and conduct user orientation programmes to users
-

8. Need of more trained and skilled staff, who are well aware of the functioning of both software and hardware, who can help the users in areas like accessing, downloading, and printing of e-journals.

9. Conclusion

The study carried out at A.C. Joshi Library, Panjab University reveals that e-journals have become the vital part of information dissemination process. It is clear from the study that younger generation has accepted the digital reading culture and use of electronic journals is going to require a considerable training exercise. Lack of training among users and proper infrastructure in library is major de-motivating factors in the use of electronic journals. The study also brings out some major suggestions for improving the use e-journals. This study will help the information professionals in developing e-journal services to their users.

References

1. McMillan, Gail. Management of serials in libraries. Eaglewood: libraries unlimited Inc. p.10
2. Jones, W. Preface to the special issue on e-serials: publishers, libraries, users and standards (part1). The serial librarian.V.33(1-2), 1998. pp.xv-xvi.
3. http://en.wikipedia.org/wiki/Electronic_journal
4. Prytherch, Ray. Harrod's librarians' glossary and reference book. 10th edition. Burlington: Ashgate. p.243
5. Mounissamy, P.,Kaliammal, A,Swaroop, Rani. User's attitude towards electronic journal. IASLIC Bulletin. V.50(2), Jun 2005. pp. 91-95.
6. Malattiri, Radha. Medical information resources – Role of electronic journals., http://openmed.nic.in/1327/01/Role_of_e-journal.pdf
7. Kumber, Mallinath,N.Girish Kumar, Vasanth Raj. N, Praveen.J.K. Use of electronic resources by research scholars in CFTRI, Mysore: A study. ILA Bulletin. V. 41(3), July-September 2005. pp. 16-20

BIOGRAPHY OF AUTHORS



Ms. Navjyoti Dhingra holds MA(History), MLIS, Diploma in French from Panjab University, Chandigarh. Presently pursuing her Ph.D in Department of Library and Information Science, Panjab University. Her current areas of research interest include e-journals, e-resources, User Studies. She has over three years of work experience in the field of Libray and Information Science.

Email: jyoti020@hotmail.com



Dr. Preeti Mahajan is Reader, Department of Library and Information Science, Panjab University, Chandigarh. She has a vast experience of teaching spanning 18 years. She has published significant number of research papers in National as well as International journals including international conferences. She is also on the editorial board of the Peer reviewed online International journal Library Philosophy and Practice. Her areas of interest include: Online Reference Sources, Cataloguing, Marketing.

Email: ipreeti2001@yahoo.com