



INFLUENCE OF E- JOURNALS IN ACADEMIA AND SCHOLARLY COMMUNICATIONS

P. Arulpragasam

Librarian, Seva Sadan's College of Education (NAAC-@ A) Ulhasnagar- 421003

Abstract

The article describes to highlight the important of e-journals for the access in the academic libraries. As academia progresses towards the 21st century, increases in student numbers, distance learning, changes in copyright licensing and lack of funding means that academic institutions 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. Electronic journals have become an increasingly important part of academic library collections; Electronic journal usage has created a new set of issues such as archiving, copyright, cataloguing, site licensing, remote access, hardware requirements and journal design. Today availability of e-resources in a university library is very common. This paper deals with different aspects of electronic journals and their impact on users, authors, indexing services, scholarly communication, accessibility and libraries. The academics are still in the process of adopting this medium. There is variation in the use of electronic journals from discipline to discipline. Researchers have positive attitude towards electronic journals. Budget allocation for journals has been shifting from print to electronic form, which has necessitated a change in collection development policies of libraries. The article describes all such aspects of electronic journals.

Keywords: *electronic journals, academic libraries, user awareness, e-journal usage, e-resources.*



Scholarly Research Journal's is licensed Based on a work at www.srjis.com

INTRODUCTION

Scholarly communication is a social phenomenon whereby intellectual and creative activity is passed on from one scholar to another. It can be formal and informal. Formal communication is when contributing to the journals and informal when presenting the results in the conferences and other meetings. Scholarly communication has many roles as making formal knowledge available to the public, developing new knowledge and teaching. The four major functions of scholarly journals are dissemination of information, quality control, canonical archives and recognition of authors (Rowland, 1997). Generally, the communication of research findings between scientific communities is through the scholarly

journals. Scholarly journals provide high quality validation through peer review. Strong journals are identified on the basis of learned editors and society to which they belong.

DEFINITION OF JOURNAL

The first scholarly journal, *Journal des Scavans*, was published as a new medium of communication in 1665, and was soon followed by the *Philosophical Transactions of the Royal Society* (Osburn, 1984). For more than three centuries the journal has played a pivotal role in the creation and transmission of knowledge by serving as the primary medium of scholarly communication, and has remained essentially unchanged in form and function over its lifetime. Science as we know it is scarcely imaginable without the scholarly journal.

At the same time that the costs of producing the paper journal have increased sharply, developments in computer and communications technology have accelerated. And of course we now have the dramatic explosion of the World Wide Web. Technology increasingly offers the possibility of using computers and communication networks to create alternative electronic forms of the conventional paper journal. It is possible that these new forms of computer-based communication will transform the scholarly communication system. There is much debate and discussion concerning how the roles of the various participants in the scholarly communication process, including libraries, may be redefined in the process (Meyer, 1993)

Refereed journal is also known as peer-reviewed journal. According to Webster's Third International Dictionary of English, journal is defined as "a periodical publication, especially dealing with matters of current interest, often of official or semi-official publication of special groups. In AACR2 (1978) "the definition of serial is a publication in any medium issued in successive parts bearing numerical or chronological designation and intended to be continued indefinitely".

ELECTRONIC JOURNALS

The format of scholarly publications has changed from print to electronic media now-a- days. Today's libraries provide electronic access to a wide variety of resources including indexes, full-text articles and complete journals. Electronic journal is any journal which is available in electronic or computerized form on the internet or on CD-ROM. Electronic journals have been called by various names such as virtual journals, paperless journals, online journals, scholarly electronic journals, networked journals and CD-ROM journals (Sasse and Winkler, 1993). In simple words, electronic journal is one which is

available electronically and used with the help of computer and other communication technologies (Singh and Krishan Kumar, 2005). Electronic journal may be defined broadly as any journal, magazine, newsletter or type of electronic serial publication which is available over internet. Electronic journals are mostly available via Web. Out of the electronic journals which are available on Internet, some are delivered over the World Wide Web and by e-mail. Some of them are in ASCII text and in HTML WWW pages. Some journals use PDF (portable document format). The editorial process is the same for electronic journal and print journal. The articles submitted by individuals are peer-reviewed by editorial board members for accepting and rejecting. After completing this process, journals are published.

Harrod's Librarian's Glossary and Reference Book (Prytherth, 2000) defines "electronic journal" as strictly a journal in which all aspects of preparation, refereeing, assembly and distribution are carried out electronically. In other words, an electronic journal is one where writing, editing, refereeing and distribution of items are carried out electronically without any paper intermediaries.

Electronic-only journals are those that are originally published in electronic format. They have no print counter parts. They may be on payment of subscription or free.

OPEN ACCESS JOURNALS

Open access journals follow same procedure of peer-review as traditional journals. The articles in open access are peer-reviewed before the publication. These journals allow copyright to authors or publishers. The journals are published to make available their articles free online immediately after the publication. This is also called as the "golden" road open access. Some of the publishers providing open access journals are BioMed Central and Public Library of Science.

OBJECTIVE

The objective of paper is to study the impact of electronic journals on:

1. Attitude of users towards impact of electronic journals
2. Quality of information
3. Indexing services
4. Scholarly communication
5. Accessibility
6. Management of journals in libraries.

IMPACT OF ELECTRONIC JOURNALS

In early 1990s there were only a few electronic journals. There were 27 electronic journals in 1991. The strength of electronic journals had increased from 3634 titles in 1997 to 8000 titles in 1999 (Okerson, 2000). The use of electronic journals depends on many factors such as disciplines, age of users, types of institutions and awareness about electronic journals. Users have different attitudes towards journals in print and electronic format. There is variation in the use of electronic journals by academics. The academics are still in the process of adopting this medium. There is also a variation in the use of electronic journals from discipline to discipline. The users are using electronic journals more in sciences than in social sciences. According to Tommey and Burton (1998) because of less familiarity of technological knowledge of electronic resources, academics have to spend more time in accessing electronic journals.

The electronic journals have affected the processing of information for research. With the advent of electronic journals there are different approaches in the use of research journal formats. Print journals were used for reading articles and scanning contents; and for printing and checking references, electronic journals were used. Users think electronic journals are easier to access and search than print journals (Sathe, *et al*, 2002). Age of the user influences the use of electronic journals, the higher age, the lesser use. Researchers and students are preferring electronic journals and faculty is preferring print journals. Use pattern for electronic journals varies in different institutions and working environments. Tenopir (2003) found that users of medical institutions are using more electronic journals.

There is a significant change in the acceptance of electronic journals in the recent times. Hallmark (2004) found that majority of scientists adopted conventional ways for access and retrieval of new citations in the field of geosciences and chemistry during late 1990s. Electronic journal publishing is growing. Even then some authors do not consider electronic journals as legitimate publication in spite of electronic journals being peer-reviewed rigorously by an editorial board. Many researchers have misgivings about format and intellectual quality of electronic journals. They think that electronic journals are of lower quality than print journals. Researchers are in dilemma where to publish their research output whether in print journals or electronic journals. Generally authors prefer to submit their manuscripts to electronic journals which have print version. Only few authors contribute to electronic-only journals because they have apprehension about their stability. Author's

opinion is that submitting papers to print journals is more beneficial because electronic journals may cease to continue (Kiernan, 1999). Another reason for non-submission of papers to electronic journals is that authors are not confident that promotion committee will accept electronic publication at par with print publication. Their views are that electronic journals will not give much credit to their promotion and tenure.

QUALITY OF INFORMATION

The use of print journals is decreasing. Patrons prefer to access online journal even if it has print counterpart. The convenience is major factor for selecting articles in electronic journal. They prefer the articles which are easily available over the quality (Groote & Dorsch, 2001). Today a number of scholarly free electronic journals are available on World Wide Web. Users search information in subscribed electronic journals or scholarly free electronic journals by keywords, titles and authors limiting their choice to what is available easily. They do not want to take pain to locate print journals on shelves because it requires the time for browsing and to search information needed by them. Thus users are sacrificing qualitative information at the cost of convenience. In developing countries, whatever is freely available on the Web is being cited more.

INDEXING AND ABSTRACTING SERVICES

Indexing plays a crucial role for gaining acceptance of journals. Indexing services face the problems to cover electronic journals. The fleeting nature of medium and unstable websites is some of the obstacles to cover electronic journals in indexing services. Electronic journals do not follow the procedures of print journals as electronic journals bring out articles as soon as they are ready for publication and do not wait regular issues. Some electronic journals allow authors to modify the text of articles after publication. Some journal publishers and authors post abstracts of their own journals in the public domain. A large number of electronic journals are available free on internet and scholars search information in electronic journals and abstracts by keywords, titles, authors, etc, and search engines like Google make an index of a number of related articles. In this way user also gets information on interdisciplinary subjects.

Major indexing services are indexing electronic journals. Few electronic titles which are not included in indexing services have been found out and cited heavily by scholars. (Llewellyn, *et al.*, 2002). Researchers may not find articles in print journals if not indexed which are valuable to their research. In electronic journals users are finding articles without

going through indexing services. Due to the above reasons dependence on indexing services is decreasing. Electronic journals also affected the value of indexing services.

SCHOLARLY COMMUNICATION

Journals play a crucial role in scholarly communication. The electronic journals help in promoting scholarly communication. The scholarly publishing has made direct connection between authors and users. Some references cited in articles of electronic journals have hyperlinks. Clicking these links reader can read original articles. Some of journal publishers and some authors also post abstract or full text of research articles of electronic journals on Internet. Some authors provide their e-mail addresses in abstract or full text of research articles of electronic journals through which user can make contact with authors to get full text of articles electronically (Kling & Covi, 1995). E-mail addresses were also available in print version but due to non-availability of electronic format authors were unable to transfer articles to users.

Electronic journals influenced the scholarship and research. Many researchers have done studies on citation analysis of electronic journals from 1996 to 2004. The impact of electronic journals increased in scholarly research in their respective disciplines slowly with time. Now researchers are discovering articles in electronic journals and citing them in their research. Electronic journals are becoming component of scholarly research process and playing a role in the advancement of knowledge (Harter, 1996; Harter, 1998; Fosmire and Yu, 2000; Llewellyn et al, 2002; Hallmark, 2004).

ACCESSIBILITY

Access to published research has become easy through electronic journals. A number of publishers are providing keyword search through electronic journals. User can access any time electronic journals anywhere via computer. At a time a number of users can access electronic journals if subscription is multi user or free on World Wide Web. Electronic journals are made available by vendors or publishers through the internet. There are many issues for libraries providing access to electronic journals such as computer technology, access through aggregators and publishers. For many years, a number of electronic journals were available on CD-ROM which required considerable computer hard wares and technical expertise for accessing and subscribing them. Now electronic journals are coming via internet because of ease of access and wider acceptance of web technology. Publishers and aggregators are providing access to online journals through assigning passwords to library

patrons or IP addresses of universities and institutions. It is difficult to maintain a set of distinctive passwords for libraries and service providers (Kling & Covi, 1995). Training to users is required to deal with online journals. The users who are accustomed to use print format do not feel it easy to access electronic journals.

The access via IP address to university is restricted to university campus and reader can not access online journals at home. The speed of internet connection at home is generally not fast to enable quick transmission of networked electronic journals. After sometime the URLs of many electronic journals cease to exist. Expired links of electronic journals also make users embarrassed

LIBRARY MANAGEMENT

Electronic journals have changed the infrastructure of libraries. To provide access to electronic journals, networks, servers, computer hard wares/soft wares are required. For using the print journals all these are not required. The infrastructure of libraries is changing with time to provide access to electronic journals as new developments in hard wares and soft wares are taking place. These all demand investing a large amount of money and skilled staff for handling them. Print collection subscriptions are decreasing. Budget allocation for journals has been shifting from print to electronic form. Subscription cost per title of electronic journal has been lowered. The selection process has become more complex for electronic journals as compared to print journals because the business strategy of publishers has changed. Some journals are available in only electronic format which do not have print version.

Some journals are published in both the modes and price is the same. Sometimes publishers charge extra payment to access electronic with print journals or vice versa. Managing both print and electronic version of same journal is double burden on staff. Each print/electronic journal is evaluated before its renewal and subscription in terms of cost and benefit to library and patrons. It is very difficult for library to decide whether a print journal should be cancelled or continued for the coming year. The subscription cost of aggregator is hard to calculate as it includes some part of database and some part of electronic journals. Considerable library staff becomes engaged to keep abreast with all offerings of electronic journals over the year. Thus subscription pattern has changed (Montgomery, 2000).

Electronic journals decreased workload in some areas of libraries whereas they increased workload for serials acquisition and catalogue database to provide access to

electronic journals. Every year library staff faces problems to maintain the online catalogue database as to whether cataloguing processing should be done or a list of these should be provided on library's website due to impermanence of these journals. There are various problems faced by the cataloguers applying catalogue rules. Applying AACR, finding out the first issue of electronic journals is a problem, which is requisite information, according to AACR. Another big question is whether the print and electronic counterpart should be catalogued on same record or on different records separately. Queries for reference staff have increased regarding journals. Patrons want to know whether a particular journal is being subscribed online or in print format. Reference staff assists in finding out electronic journals titles from online catalogues or resource available and to search articles in particular volume or issue. The workload on account of instructing users and making them aware about electronic journals and e-resources has increased.

Print journals have been growing day by day and created the problem of space. Electronic journals solved problem of space up to some extent in stack area. A large portion of space occupied by print journals in library is saved and only little space is required for hardware. Another effect of electronic journals is that shelving is not required for them. If library subscribes both formats of journals i.e. print and electronic, library staff has to manage both. Clerical assignments have decreased in maintaining print journals. Computer literate and acquainted with electronic resources staff is needed to evaluate and promote electronic journals.

CONCLUSION

So many people around the globe are still not aware the advantages of e-journals over normal journals. The electronic journals as means of scholarly communication have come of age. The recent developments in the Information, Communication and Technology (ICT) have changed the format of scholarly communication from print to electronic media. Open access as a variant of electronic journals have become popular with the users, as they are published to make available articles free online immediately after the publication. Future world without e-media one cannot comes to develop. Professionals get one success with the use of e-journals in part and part of life. Thus e-journals give curiosity and utilization. Electronic information sources are attracting reader's attention in today's net worked environment. Among these, E- journals open up many exciting opportunities and potentials for academic libraries.

Notwithstanding the fact that some of the authors have misgivings about format and intellectual quality of electronic journals, the electronic journals publishing is still growing. As far as researchers are concerned, they have positive attitude towards electronic journals. With the Google search under keyword, author, title etc., the dependence on indexing services has decreased. Electronic journals have made easy access to published work. Libraries need to reorient themselves with new infrastructure, staffing pattern and services, for providing access to electronic journals.

REFERENCES

- ANGLO AMERICAN Cataloguing Rules. ED 2. (1978). *The Library Association, London. pp570.*
- FOSMIRE (Michael) and YU (Song) (2000). *Free scholarly electronic journals: how good they are? Issues in Science and Technology Librarianship.* <http://www.library.ucsb.edu/isl1/00-summer/refereed.html>
- GROOTE (Sandra L. De) and DORSCH (Josephine L) (2001). *Online journals: impact on print journal usage.* *Bull Med Libr Assoc*, 89(4): 372–378.
- HALLMARK (Julie) (2004). *Access and retrieval of recent journal articles: a comparative study of chemists and geoscientists.* *Issues in Science and Technology Librarianship.* <http://www.istl.org/04-summer/article1>
- HARTER (Stephen P) (1996). *The impact of electronic journals on scholarly communication: a citation Analysis.* *Public-Access Computer System Review* 7. <http://info.lib.uh.edu/pr/v7/n5/hart7n5.html>
- HARTER (Stephen P) (1998). *Scholarly communication and electronic journals: an impact study.* *Journal of the American Society for Information Science*, 46 (6): 506-516.
- KIERNAN (V) (1999). *Why do some electronic-only journals struggle, while others flourish?"* *Journal of Electronic Publishing*, 4(4). <http://www.press.umich.edu/jep/04/04/Kiernan.html>
- KLING (Rob) and COVI (LM) (1995). *Electronic journals and legitimate media in the system of scholarly communication.* *The Information Society*. 11(4): 261-271.
- LLYWELLYN (Richard D) et al. (2002). *The use of electronic-only journals in scientific research.* *Issues in Science and Technology Librarianship.* <http://www.istl.org.02-summer/refereed.html>
- TOMNEY (H) and BURTON (PF) (1998). *Electronic journals: a study of usage and attitudes among academics.* *Journal of Information Science*. 24(6): 419-429.