E-Journals: Paving the way for Dynamic Scholarship

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Abstract

ICT has changed the complete scenario of delivering the information. Now, information is available in electronic form and e-journals are the part of it. E-journals form the major part of the collection in libraries and are supporting the dynamic research in the present scenario. Present paper is a sincere attempt to discuss about the concept of e-journals and its role in opening the path for the dynamic research in present society.

Keywords: E-journal, Electronic Journals Consortium, Information and Communication Technology, Dynamic Research

1. Introduction

In recent years, Internet has been the major force, which has led to the electronic versions of library collections, like books, journals, CD-ROMs. E-journals form a major part of the digital collection. Today's ICT era e-journals have proved powerful tools in teaching, learning and supporting research in all the academic and special institutions. Conventionally libraries were well equipped with only printed journals, but the rapid information and communication technology and digital revolution made it possible for their representation in electronic figure, which in turn has added a dynamic way of learning and research for the scholars (Bist 2005). Electronic journals have grown explosively they made their appearance in the mid of 1990. The number of journals in electronic form has grown steadily since then. Now there are more than 14246 scholarly research and professional electronic journals available on the net. Some of which are free. They have almost all the characteristics of print journals and are available either online or offline or both (Halijwale, Manjunath and Pujar 2004).

2. E-Journal: Concept

An electronic journal, as its name implies, is a serial containing research papers, review articles, scholarly communications, issued periodically in electronic form, by using computers. E-Journals may be defined very broadly as any journals, magazine, e'zine, webzine, newsletters or any type of electronic serial publication, which is available over the Internet. In the electronic environment teaching, learning and research are being supported by e-journals as new powerful tools. E-journals have an impact not only on libraries but on authors and publishers too. Correct and timely information is a key to sound decisions. Hence, now-a-days majority of the users expect more relevant, up-to-date and timely information from modern library and information centers. For these purposes library and information centers need accessibility to a variety of information resources and in various formats. Information from journals can easily, quickly, pin-pointedly and remotely be retrieved, provided the journals are available in electronic format (Kandiya and Akbari 2009).

3. E-Journals: Definition

The recent developments in the field of Information and Communication Technology (ICT) have changed each and every aspect of the world scenario. It has permeated the publication industry also leading to the change in medium of scientific communication. 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 journals are often referred to interchangeably as "Electronic serials" "Online journals" and "Electronic periodicals". No generally accepted standard definition exists for electronic serial publications. The terminology itself and the definitions have varied over time. Before the terms "Electronic Journals" and the online journal were used. Some authors simply call an electronic journal as a publication that is delivered to the subscribers through a computer file. They have almost all the characteristics of print journals and are available either online of offline or both (Bist 2005).

University of Glasgow library defines e-journal as "Any journal that is available over the internet can be called an electronic journal" (Bhatt 2005).

Jones and Cook say that "An e-journal is a digital periodical that publishes on the Internet or www. E-journals are primarily those journals that are published and distributed in electronic format as CD-ROMs or online on the Internet" (Bhatt 2005).

E-Journal is a journal in an electronic format. These are available through subscription databases. There are also some that are available through open access on the Internet (GCCAZ).

According to Lancaster, "E-journal is a journal created for the electronic medium and available only in this medium" (Lancaster 1995).

An E-journal is an article or complete journal available fully electronically via a web site on the Internet. It could be available free or as part of a paid for service.

According to other definitions an electronic counterpart of the print journal is not considered a genuine e-journal. James and cook define e-journals as a "digital periodical that publishes on the Internet and www".

4. Functions of E-journals in Scholarly Communities

E-journals play an important role in the scholarly communities it can be described as:

4.1 Building a Collective Knowledge Database

The most important role e-journals play is forming our archive of knowledge database, most would agree these e-journals form the most comprehensive, up-to-date and authoritative archive of information in a given scholarly field. The accuracy and quality of material contained in this archive is of central importance. Peer review serves as one of the most important mechanisms for validating the information contained in e-journals (Solomon 2008).

4.2 Communicating Information

Communication among scholars working in the same field is the most important quality of e-journals. They are communicated with speed and interactivity to the scholars for their research work (Solomon 2008).

4.3 Validating the Quality of Research

E-journals play an important role in maintaining community standards on how research and scholarship are conducted. To some extent this is implemented by acting as a filtering mechanism in what is published and hence disseminated. The effects can also be subtler. The work of experienced scholars rarely receives harsh reviews. That is not to say they always get their manuscripts published, but they tend to have internalized the norms of the field and know how the research or scholarship should be conducted and described, and are much less likely than novices to be chastised by reviewers (Solomon 2008).

4.4 Distributing Rewards

Publication in peer-reviewed e-journals is one of the major ways scholars are evaluated. Not only is quantity important, but which e-journals one publishes in is general equally if not more important. For this the researchers get the recognition and this can be the general measure of achievement as a scholar (Solomon 2008).

4.5 Building Scientific Communities

Information in scholarly e-journals strictly focuses on scholarship. These e-journals also act as a means of tying a scholarly community together in a number of ways. A hallmark of a new discipline's coming of age is the establishment of a new e-journal-in essence, staking out the intellectual territory of the new field. Beyond that, editorials, opinion articles and letters to the editor often serve a sa forum to debate the current issues in the discipline. Sometimes they are substantive and sometimes they extend to related areas, such as the social implication of findings, funding and/or training issues within the field. E-journals also commonly serve as a forum for new such as appointments to major positions or the passing of a well-known member of the community (Solomon 2008).

5. Merits of Electronic Journals in Research Activities

Compare to print journals, e-journals have added advantage and made it dynamic for the research scholars for their research activities. Some of the important features of e-journals are (Bist 2005):

- Multiple access simultaneously is a strong feature that an e-journal provides to the researchers;
- E-journals are accessible to all scholars regardless of geographical location through Proper compatible software and browser services;
- It does not require time-consuming printing and mailing process, therefore an e-journal take less time to publish and distribute and make it accessible;

- No space restriction i.e. an e-journal can publish a greater number of articles compared to the print counterpart;
- Occupy very little space if stored in a CD-ROM;
- Can include sources, video, and interactive and 3 dimensional models. E-journal can publish colour figure and graphics at no extra cost;
- Users can access individual articles by making pay-per-view i.e. pay for the required articles, if they do not want to subscribe to the entire journal;
- Some online journals can be accessed without paying any charge;
- E-journals can be distributed more economically than the paper ones, because the main costs of preparing the text, the review process and other such procedures are not as capital-intensive as the costs of printing and mailing print copies;
- Interaction by means of letters to the editor and opinion forum is a dynamic feature of an e-journal;
- Some journals include at the end of every paper a forum where readers and authors can exchange opinions. An electronically published article can very easily contain a link, which facilitates e-mail communication with the author or the editor;
- E-journal can contain hyperlinks to cited articles and other information sources such as related journals or websites;
- Searching facilities in e-journals are very effective and fast. E-journals provide excellent search facilities with every issue in which user can search articles not only by title, author, keyword but can also use Boolean operators for searching;
- E-journal is never missing from the shelf, and several people can read the same article at once from separate workstations;
- Ludwick and Glazer States "the ability to easily locate use of electronic journal articles through user sessions or "hits" is a welcome benefit for scholars interested in documenting impact of their scholarly work for promotion and tenure committees";
- Usage statistics can be generated by using accepted standards;
- Cross reference of references can be viewed.

6. Challenges of Electronic Journals

The challenges of electronic journals are (Kandadiya and Akbari 2009):

- Difficulty in reading computer screens;
- Archiving;
- Perishable citation;
- Authenticity; and
- Search engines ignore a PDF file, etc.

In addition, there are other challenges of e-journals like:

- In order to use electronic journals, users and librarians must have basic computer and networking skills;
- Electronic journals that include graphics and sound are often very slow to access;
- Articles of electronic journals are very easy to download and they can be easily copied and changed, therefore, changes of plagiarism may increase;
- Even though it is becoming cost effective, but initial investment is high. Special equipments (computer or printer) are required high to read electronic journals;
- Required technological support and compatibility of hardware may vary from one publication/ publisher to another;
- Lack of browsing facility at home or during journey.

7. How Do Research Scholars Access to Electronic Journals?

Scholars involved in research can access electronic journals through several ways for free or subscribed e-journals. The ways through which scholars can access electronic journals are:

- Through publishers websites;
- Through university websites;
- Through search engines;
- Through library portals;
- Through Subject portals;
- Through Subject gateways;
- Through online databases;
- Through full text databases available through library;
- Through bibliographic databases;
- E-journals available in CD, DVD or any other storage devices; and
- Through library consortium etc.

7.1 Publisher's Website

There are so many e-journals publishers are publishing e-journals and providing it to the users through their website according to subject or any specialization. E.g. American Chemical Society in Chemistry field, H.W. Wilson etc.

7.2 Library websites

(a) Public domain e-journals: These e-journals are free and nobody have propriety interest.

(b) Subscribed E-journals: Many universities subscribe in bulk to packages of electronic journals, so as to provide access to them to their students and faculty (University of Delhi).

7.3 Search Engines

Web search engine is designed to search for information on the World Wide Web and FTP servers. The search results are generally presented in a list of results and are often called hits. The information may consist of web pages, images, information and other types of files. Some search engines also mine data available in databases or open directories. E.g. Google, Yahoo, Web Crawler etc.

7.4 Library portal

Software that allows a computer user to customize online access to collections of information resources by creating a list of Internet connections, much like a personalized directory of street addresses and telephone/fax numbers (example: MyLibrary). Library portals are designed to reduce information overload by allowing patrons to select only the resources they wish to display on their personal interface. (Reitz 2010)

7.5 Subject Portals

Software that allows a computer user to customize online access to collections of information resources according to the subject like science, humanities etc

7.6 Open Access E-journals

Open access journals are scholarly journals that are available online to the reader "without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself."

e.g., Directory of Open Access Journals. This service covers free, full text, quality controlled scientific and scholarly journals. We aim to cover all subjects and languages. There are now 5579 journals in the directory. Currently 2377 journals are searchable at article level. As of today 462898 articles are included in the DOAJ service (http://www.doaj).

7.7 Subject Gateways

Gateways are portals to information that are usually limited to a specific domain or subject area. The resources accessible through these gateways are reviewed, selected, evaluated and catalogued by information professionals or subject experts.

e.g. Intute: A freely available Internet service which aims to provide a trusted source of selected, high quality Internet information for students, academics, researchers and practitioners in Science & Technology, Arts and Humanities Social Sciences, Health and Life Sciences (http://www.int...).

7.8 Online Databases

Online databases are those databases which are available online to users through library websites it can be subscribed or freely available.

7.9 Bibliographic Database

Database of bibliographic records, an organized digital collection of references to published literature, including journal and newspaper articles, conference proceedings, reports, government and legal publications, patents, books, etc. In contrast to library catalogue entries, a large proportion of the bibliographic records in bibliographic databases describe analytics (articles, conference papers, etc.) rather than complete monographs, and they generally contain very rich subject descriptions in the form of keywords, subject classification terms, or abstracts.

e.g., Inspec is a major indexing database of scientific and technical literature, published by the Institution of Engineering and Technology (IET), and formerly by the Institution of Electrical Engineers (IEE), one of the IET's forerunners.

Compendex, the computerized version of the Engineering Index, is a comprehensive engineering bibliographic database. Compendex is an index of engineering materials started in 1884, compiled by hand under the original title of Engineering Index. As Compendex it is now published by Elsevier. The name "Compendex" stands for COMPuterized ENgineering inDEX.

7.10 E-journal's Consortium

Library consortium is a cooperative arrangement among groups of libraries or institutions helping to derive the best possible purchase bargain from publishers due to collective buying power. In other words, it is a kind of an agreement between various publishers and cooperative group of libraries/ information centers, for accessing the large number of e-journals published by various publishers/ group of publishers on highly discounted rates. It usually refers to cooperation, coordination and collaboration between and amongst libraries for the purpose of sharing information (Singh and Krishan Kumar 2005).

8. Some Examples of Consortia in India

There are several consortiums available in India, which are providing e-journals to scholars for their research activities. Some of the prominent consortia in India are (Singh, Vinod Kumar 2010):

- UGC-INFONET E-journals Consortium; (Inflibnet)
- INDEST-AICTE Consortium; (INDEST-AICTE)
- IIM Consortium;
- CSIR Consortium; (csir)
- FORSA Consortium; (http://dhruva1.ncra.tifr.res.in/~library/forsaweb/index.htm)
- DAE Consortium; (DAE)
- RGUHS-HELINET Consortium; (RGUHS)
- ERMED Consortium; (http://nmlermed.in/aboutArmed.htm)
- CeRA Consortium; (http://www.cera.jccc.in/)
- MCIT Library Consortium; (http://mcitconsortium.nic.in/)
- ISRO Libraries Consortium;
- DRDO Consortium; and
- DeLCON Consortium etc. (DeLCON)

9. Conclusion

In today's information and communication technology (ICT) era, the emergence of Internet, particularly the World Wide Web (www) has changed the medium of communication of information. Now publishers are using the Internet as a global way to offer their publications to the international community of academicians. E-journals are the result of this ICT change and the users demand has also changed. Now today's users don't want to go to the library physically, they want their required information on a single click and they also don't want to carry bulky books with them they want to take that information in their storage devices like pen drives, CD's, DVD's etc. So e-journals are fulfilling this need of users and they are required in today's era by the large number of academicians for their research.

In very short we can conclude it by saying that in the electronic environment research is being supported by e-journals as new powerful tools.

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