E-RESOURCES FOR ACADEMIC COMMUNITY IN INDIAN SCENARIO

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Abstract

In the present digital era, dissemination of e- information, e- resources to the scholastic society and community has become an important task though information is transmitted through various media such as periodicals, serials, journals, databases, etc. In this article we come across the importance of dissemination of information through e- resources to the academic community and the steps taken for the promotion of e- journals and e- resources in India by the reputed organizations like UGC, INFLIBNET, CSIR, HELINET, FORSA, IGCAR, JCCC & VIC, INDEST, SONET, OUHYD Math Consortium etc. Reflecting upon the fast development of electronic journals, there is no doubt that electronic journals open up many exciting service opportunities for academic libraries though this technology possesses both advantages and disadvantages.

Keywords : E- journals, E- resources, Academic libraries, Digital journals, Indian initiatives.

1.   INTRODUCTION

Information communication technologies, and developments in IT have brought drastic   changes in the methods of library collections over a period of time. These developments also increased digitization of printed material, with which libraries have implemented the just-in-time approach to collection development and dissemination of information, especially of journals. While technology progresses rapidly in library and information centres.

The size and number of journals published has increased to accommodate the volume. New journals are created to publish work in emerging specialist branches. This is known, as 'twigging'. Libraries with financial crunch are unable to acquire all publications that their users would generally expect to have. The increasing volume of available publications has also created problems for libraries trying to provide all of the resources that their users need.

Digital journals thus came in to existence to come across such problems. These were first piloted in the 1980s but fully operational digital journals were not available until the 1990s. Although the majority of scholarly journal publishers operating worldwide are learned societies each publishing only one journal, a relatively small number of commercial companies dominate the market by publishing thousands of journals. Indian Academic libraries are no exception to this fact and moved from print format to electronic format and formed many consortia. Here we explore to provide information about electronic journals in terms of their development, advantages and disadvantages, main features and other issues, for academic libraries.

2.   DEFINITIONS

The definitions differ from; author to author for the term" electronic journals". Electronic journals are often referred to interchangeably as "electronic publishing", "electronic serials", "online journals" and "electronic periodicals". There are certain intrinsic factors that make these terms interrelated or equivalent. Some authors simply take an electronic journal as "a publication whose primary means of delivery to subscribers is through a computer file", others define it strictly to be "a full text electronic publication, which may

include images, and is intended to be published indefinitely". So it is said that e-journals are serial publications available in digital format. Some are distributed on CD-ROMs, some over the Internet. Thus an Electronic Journal is defined as the grouping of information that is sent out in electronic form with some regularity. It covers any serial or serial-like publication available in electronic format, which is produced, published, and distributed electronically. Networked electronic journals are based on mailing list software or client/server computing applications, including Gopher and WWW. The first-generation networked-based electronic journals are termed as ASCIItext files with simple file structure and small file sizes. Second-generation electronic journals are "either HTML-based or use the WWW to disseminate specially formatted files". File structure is less hierarchical and less uniform.

3.   ADVANTAGES

Easy Access : Access to a specific article or journal is easier for the users. They can access the desired material within minutes, or even seconds, on their desktops, provided equipment is available. Large collections of material can be searched and retrieved simultaneously and instantly. There is an active dissemination of information by alerting the readers at their desktops about the new articles that are accepted into the database. In other words, electronic journals allow intelligent full-text retrieval based on past use and interests. "Virtual issues" can be generated through dynamic interaction with the users.

Speed : High speed and efficiency benefits the publishing and distributing journals   electronically. Authoring and publishing systems can be integrated easily by computer- readable text. Also, electronic transmission, especially in the review process, saves valuable time.

Linkages : Linkages can be enabled by hypertext and hypermedia formats among sections within an article and among articles in journals and other electronic resources. E- mail contacts would be easier among users, publishers and suppliers. Users have more creative ways to have their information queries answered.

Costs : The journals are published electronically rather than in paper and no new costs are introduced.

Multimedia : Innovative ways of presenting research results can be supported by electronic page layout. Interactive three-dimensional models, motion video and sound are a few possibilities

4.   CONSTRAINTS

Financial constraints : The infrastructure required to display, store or print electronic journals are expensive. Downloading and printing each article will be a costly affair. This means a net increase in economic and ecological costs and it becomes a relatively expensive way to acquire a single copy. Many e- journals do charge subscription fees. The pricing schemes of some suppliers are very complicated and limiting, and this might hinder libraries from utilizing e- journals.

Social constraints : Electronic interfaces can take a long time to master. Electronic searching, downloading and printing replace the traditional activities of physically browsing, scanning and photocopying journal articles. The intricate steps to accomplish the previously simple or habitual tasks might frustrate users. People read up to 25 to 30 percent more slowly on a computer screen than on paper

Technological constraints : Digital journals depend up on technology and equipment for storage and display. Proper Infrastructure facilities are required for the access. The academic community can be divided into "haves" and "have-nots" because of access to equipment and network. The network or connection speed can be too slow. Screen quality of graphics and photos is still primitive when compared

to print. A typical screen has a resolution of 72dpi, with at most 300dpi for some expensive and special purpose screens; while the average journal is printed at approximately 1,200 dpi.

5.   MAIN FEATURES

Stability and storage : The volatility of e- journals makes preservation of e- journals a major concern. In case of the benefits of access are enhanced, the ability of electronic journals to transmit information through time is not completely confirmed. Offline storage methods suggested are magnetic media, such as tape, hard disks, and floppy disks, and optical media such as CD-ROMs. There are issues of preservation of storage media, hardware and software dependency and dynamic versions of electronic journals that also need to be dealt with.

IPR Issues : There are certain issues like; protection of the intellectual property of the author in order to preserve the originality and integrity of the work; warrant for the attachment of the author and the work in public; protection of the author's ideal and economic interest and benefits, including publication and reproduction of his/her work. This is usually accomplished through the publishers, who disseminate the work in an appropriate, protected and retraceable manner. Electronic journals presently emphasize information access instead of ownership.

Reviewing : There have been challenges for electronic journals in getting contributions because tenure committees in academic institutions question the legitimacy of electronic journals. Nevertheless, vigorous peer review process is implemented in many scholarly electronic journals.

6.   OTHER ISSUES

Selection and acquisition : The selection criteria for e – journals resembles the selection of other periodicals. The library selection policies can be applied to electronic journals, there are considerations unique to electronic journals that should be addressed by libraries, such as: subscription scheme, ordering procedure, standards, effectiveness of the search engine, ability to limit to local holdings (if not full text), and hardware and software compatibility.

Cataloguing : E- journals can be classified according to the ordinary guidelines, such as LC call numbers. Libraries should be alert to emerging standards for cataloguing electronic publications.

Users' access : Depending on the licensing agreement and local funding, downloading and printing can be provided in libraries as well as at the desktops of the users. Minimum hardware and software requirements are going to progress as technology progresses, but basic entities such as hard drives, colour monitors, external disk drives, printers, security cables, tables and chairs are often inevitable to be equipped onsite. Internet connection and bibliographic linking software are extras to provide value-added service.

Training and support for staff and users : With the number of e- journals being published and the variety of different interfaces, more sophisticated searching and retrieving skills are necessary. If library staff is provided with adequate training and support in order to be aware of new development of technology, more flexible and suitable services can then be available for users. The information provider role of libraries remains important but the delivery and type of services might have to adapt to the changing technology and users' needs.

7. INDIAN INITIATIVES IN E- JOURNAL AND E- CONTENT ACQUISITION

In India, few Institutions felt for the importance and necessity of developing consortia based subscription of E – Journals for online access of information, to foster the research needs and craving for information of the scholarly community.

FORSA (Formula for Resource Sharing in Astronomy and Astrophysics, Hyderabad) : The Astronomical Research Institute with common subject interests formed in to a group in 1981 to share the information related to common interests for Resource sharing and establish common tools for information retrieval.

CSIR (Council of Scientific and Industrial Research) : The Council of Scientific and Industrial Research (CSIR) can take the credit being the first major and formal consortium at national level. This well conceived pilot project with a limited central funding set a process and model for identification of resources and favorable licensing negotiation. This has been established in April 1, 2000 to benefit its 40 laboratories in India.

JCCC & VIC, Hyderabad : This consortium was set up on January, 2002 by Virtual Information Centre of ICICI knowledge park, Hyderabad. The members are OU, Hyd., NIN, CCMB, IICT, ICRISAT, and NCL, VIC fully funded by VIC. The site is accessible via JCCC interface for information.

IGCAR (Indira Gandhi Centre for Atomic Research, Kalpakkam, Tamil Nadu) : IGCAR has 12 units and 14 field stations under one umbrella for sharing the information through consortia. The institute has agreement with Elsevier journal publishers.

OUHYD Maths Consortium: Hyderabad, A.P : Osmanioa University, Hyderabad was pioneer to establish consortia in 1998. The members are IISC, ISI and Maths. This is the only consortium in the field of Mathematics covered by mathematical science network of American Mathematical Society.

INDEST (Indian National Digital Library in Engineering Sciences and   Technology, MHRD, New Delhi) : This Consortium can truly take the credit as the first well planned and thoughtfully implemented national and multi-sector consortium with both funding and management commitment. This was established by Govt. if India, Ministry of HRD, New Delhi in December 2000. This consortium disseminates electronic resources of information to Technical education system in India. All IITs, IIMs, RECs and 38 leading Engineering and Technological institutions can search online access of journals. INDEST has expanded its consortium membership to 120 institutions at present.

SONET (Society for Networking for Excellence in Technical Education, Hyderabad) : Sonet has been established in September 2003 with Association of all engineering colleges in A.P. The Department of Technical Education A.P. is coordinating to e-direction of all engineering colleges of A.P.

Health Sciences Library & Information Network (**HELINET) :** Health Sciences Library and Information Network (HELINET) is the first such initiative of a University consortium piloted by the Digital Library at the Rajiv Gandhi University of Health Sciences (RGUHS) covering 25 medical libraries in the State of Karnataka. HELINET planned its funding for content licensing costs from the participating members, with central infrastructure and service development funding at HELIENET headquarters coming from RGUHS. WHO has encouraged this project by providing support funding for the development of a resource-sharing gateway.

UGC – Infonet (University Grants Commission – Information Network) : University Grants Commission has launched two projects namely "UGC-INFONET" and "UGC-Infonet: E-Journals Consortium" for

dissemination of e - information to the academic community of the country in the year 2004. Both the projects are being executed and implemented by INFLIBNET in collaboration with UGC and ERNET India. This is the largest consortium with a vision and plans to reach out to more than 150 universities and several thousand colleges affiliated to these universities, over a period of time.

An UGC- INFONET E journal consortium is a memorable project in the history of academic community and users in India. All Academic institutions, which come under the purview of UGC, are members of this consortium.   It is the largest academic library consortium in India monitored by INFLIBNET. It is subscribing e – resources of high quality collection of more than 4000 full text e - journals, Indexing and abstracting databases for the benefit of millions of users in India, from 25 different publishers to the academic community, comprising of faculty, staff, researchers and students.

8.   CONCLUSION

It is said that E- journals can't replace print journals yet because only a fraction of scholarly materials is available electronically. What is available varies in quality, accessibility and price.

But E-journals provide many opportunities and potentials for academic libraries. Out of the advantages and disadvantages of e-journals librarians need to be able to identify and balance the factors that would make e - journals a success or failure in their libraries. Certain bottlenecks still arise with e-journals such as users experience frustration and difficulty in their first efforts to use   e-journals if they lack proper infrastructure they may oppose efforts by libraries to replace printed journals by electronic ones. Librarians facing financial pressure identify journal price rise as a significant contributing factor. Library users want the advantages of the digital format, but until archiving issues have been satisfactorily addressed, many librarians consider it necessary to acquire the print format as well. As a result, total subscription fees and delivery costs have increased significantly. Developing a common vision of the future of IT can consolidate efforts to tap into the evolving telecommunication infrastructure. There is a general consensus that e-journals would not replace but coexist with the print format.

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