Influence of Electronic Resources in Engineering College Libraries

Bhavosingh Korra
Room No.99, NRS Hostel
Osmania University
e-mail: bhavosingh.korra@gmail.com

Abstract - *Change is only permanent thing in the world, technology has tremendously changed each and every phase of our lives. Libraries are also no exception. By the advent of E-Resources library facilities have become more accessable and more enhanced to meet the need of users. The library is no more a mere stack holders of books, now they became owners of electronic information. The print media is getting digitilized and through the advent of internet, the information is available to anybody from any corner of world. The use of e-journals, e-books has created a new source of information to the users. Their features attract the users to seek information from these media. The open access publishing has enhanced the availability of information by breaking down the financial barriers. It is this technology which has made greater impact on libraries.*

Keywords : E-books/ E-journals/ Open Access Publishing

Introduction

The rapid growth of information and communication technologies have gave rise to the evolution of several new jargons like paperless society, electronic resources, portal / gateway and global digital library. In the day context , all types of libraries viz: academic, public and special are not only providing printed resources to their library users rather they provide printed, electronic as well as other Internet resources like e-books and databases for fulfilling the day to day academic and research requirements of the library users. The traditional functions of libraries and librarians have undergone radical changes in the present day context of ICT. Now libraries and information centers have incorporated/ adopted various electronics resources for its collection developments to fulfill the requirements of different category of library users in a better way.

E-Resources

E-resources are those resources which include documents in electronic or e-format that can be accessed via Internet in digital library environment. E-resources are that electronic product that delivers a collection of data, be it text, image collection, other multimedia products like numerical, graphical mode for commercially available for library and information centre's. These may be delivered on CD-ROM / DVD, over the Internet and so on. Providing access to E-resources is a service to help library users to find E-Databases, E-Journals, EMagazines, E-Books/ E-Audio/ E-Images, Data/ GIS, Digital Library Projects, Electronic Exhibitions, E-Subject Guide, E-newsletters, E-White papers, E-conferences proceedings and Web search tools on a range of topic. Many of the electronic resources are freely available to anyone over Internet access but some are commercial resources. Information and communication technology is one of the important buzzwords of today's world. It has changed the society into information society and is way of life.

Uses of E-Resources in Libraries

The electronic resources are becoming more and more available in the libraries. The print media is now being digitalized, which increases the availability of books and journals in the electronic format. The electronic books are helpful because of their portability and its feature of incorporating more than one book in a single hand held device. The published material is also available on open access. This helps the poorer people also to get the information required free of cost. They need not worry for licensing and usage of the information.

The government is also undertaking various steps to introduce this facility in academic institutions for the benefit of research scholars. The university avails this facility and gain access to e-resources. UGC-INFONET is a programme that provides electronic access to scholarly and literally in all areas of learning to the Universities in India. This programme is wholly funded by the UGC and administered and monitored by INFLIBNET.Universities which are always short of funds, are greatly benefited by this facility.

Significance of E-Resources

In modern library the electronic resources are becoming more and more important.
1. The printed resources are now being digitalized, which has given rise in increases of the availability of books and journals in the electronic format.
2. The electronic books are helpful because of their easy portability and its feature of incorporating more than one book in a single hand held device.
3. The published materials are also available on open access platform. This helps the poorer also to get the information required free of cost and bridge the gap between users and library.
4. They need not worry for licensing and usage of the information.
5. The government has taken various steps to introduce E- resource facility in academic institutions for the benefit of Research Scholars. Because information resources especially journals are becoming very expensive due to their availability in electronic format.
6. On the other hand libraries are facing financial crunch which has given rise to the birth of library cooperation / resource sharing. Due to rapid escalation in the cost of printed as well as electronic resources it is even difficult for the best universities and research organizations in the world to afford expenses for all resources they require for their library users.
7. Due to emergence of many local, regional , national and International resource sharing knowledge network initiatives throughout the world, the universities and institutions of higher learning institutions have started optimally utilizing the resources amongst themselves via resource sharing over the network available under various consortia like INDEST, UGC-INFONET and N-List Programme of MHRD/ UGC (INFLIBNET) in India to have 24X7 access to the 5500+ e-journals, e-books and databases by the faculty and researchers working in the areas of higher studies and research .

Types of E-resources
- E- Books
- E- Journals
- CD-Rom /DVD Resources
- Online Resources

- Databases
- Web-Based Resources

Electronic Collection

The availability of CD-ROM, DVD-ROM, and other online resources of bibliographical and full-text databases are quite common in the majority of the libraries. Some of the important full-text digital collections available on CD-ROM include: ADONIS, IEEE/IEE Electronic Library (IEL), ABI/INFORM, UMI's Business Express and Library and General Periodicals, Espace Worlds, US Patents, etc. CD-ROM networking technology is now available for providing Web-based access to CD-ROM databases on the Local Area Network (LAN) as well as on the Wide Area Network (WAN). More evolved technology allows caching the contents of CD-ROMs on to a server. The libraries have an option to subscribe to these full-text databases as part of their digital resources. Most of the important publishers now offer Web-based interfaces and full-text of their journals. Some of the major players in electronic full-text journal publishing include:

- Academic Press (Ideal Library): http://www.idealibrary.com/
- American Chemical Society (ACS): http://pubs.acs.org/
- American Physics Society (APS): http://publish.aps.org/
- Elsevier Science publishers (Science Direct): http://www.sciencedirectcom/
- Engineering Sciences Data Unit (http://www.esdu.com/)
- IEEE/IEE Electronic Library :(http://www.ieee.orglieeexplore/)
- Indian National Digital library in Science and Technology (INDEST): http://www.library.iitb.ac.in/indest/
- Springer Verlag (Link Electronic Service) : http://link.springer.de/
- Web of Science (http://www.isinet.com/)
- Wiley lnterscience: http://www.wiley.com/

Advantages

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

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.

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.

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 are easier among users, publishers and suppliers. Users have more creative ways to have their information queries answered.

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.

Disadvantages

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

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 ineconomic 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.

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.

Conclusion

The technology helps the reader to get the information in various other formats than the traditional means. The e-journals as well as the e-books have made changes in the way the information is delivered to the readers. They help them to get, up-to-date and latest information that is updated frequently. The hardware required for the use of e-books has to be considered before creation of the content. Their licensing, pricing and standards are the usability constraints. The open access publishing help the readers with free information availability but in some cases their standards are not tested, they may have broken links, wrong mappings and server problems. This has to be taken into consideration. Although the technological advancements have helped the people, yet it has some disadvantages as well. However, the use of resources is in the hand of users. It is the expertise of users to handle this tool efficiently which helps them to get right information. The future developments should overcome the disadvantages of the technology and give a new path for its effective usage.

References:

1. Duranceau, E. F. (2005) Electronic Resource Management Systems, Part II: Offerings from Serial Vendors and Serial Data Vendors. Against the Grain. 17(3), 59-60

2. Geller, M. (2006). ERM: Staffing, Services, and Systems. Library Technology Reports. 42(2).

3. Hahn, K.L. (2007). SERU (Shared Electronic Resource Understanding): Opening Up New Possibilities for Electronic Resource Transactions. *D-Lib Magazine*. November/December, 13, 11/22.

4. Kannappanavar, B.U. and Vijayakumar, M. (2001). Use ofITinUniversity ofAgriculturalScience Libraries
5. Of Karnataka- a Comparative Study. *DESIDOC Bulletin of Information Technology*. 21, 21-26.

6. Kavitha, R.(2009). Collection development in digital libraries: trends and problems, *Indian Journal of Science and Technology* ,2(12) (Dec. 2009).

7. Mulla, K.R. (2003). Information Technology: A Boon to E-learning. New Challenges in Information Management and E-learning in the Age of Globalization SIS 2003, IITCL, Roorkee; 134-141.

8. Prakash, B.B. (2004). Impact of Communication Technology on Libraries and Information Services. *SERELS Journal of Information Management,* 41, 187-192

9. Satija MP (2003) Digital information systems and services. *IASLIC Bull.* 48 (1), 10-15
10. Strauss, H. Web Portals. (2003).The Future of Information Access and Distribution. *The Serials Librarian*. 44, 27-35.