

## **The Electronic Library : An Indian Scenario**

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### **Introduction**

An electronic library is a heterogeneous system in which information is available in hard copy, on magnetic tape and discs, CD-ROMs and videodiscs, and also from online sources. Storage and copying of information are done either by downloading or by printing from a master file. Such libraries can provide very diverse information; however, electronic libraries will evolve in an incremental fashion and, at least for the next few decades, we will operate in a dual paper-based and electronic environment.

Digital library collections contain fixed permanent documents. While current libraries have more dynamic collections, a digital library facilitates quicker handling of information. Digital libraries break the physical boundaries of data. Digital libraries are as important for communications and collaboration as for information seeking activities.

### **Preservation**

Libraries have preservation issues of all kinds to deal with, especially the deterioration of the paper collection. Digitizing as a means of preservation is quite beneficial. It helps to preserve rare and fragile objects without denying access to those who wish to study them. Convenience is also a benefit. Users can retrieve digitized books in seconds by searching for words, phrases or ideas. Several people can simultaneously read the same book or view the same picture. Another benefit is space. Electronic copies occupy millimeters of space rather than meters on shelf.

Preservation concerns include deciding what to digitize, formats for texts and images, quality of images, and costs.

### **Technologies**

Digitization requires certain technologies. These include storage technologies—a variety of devices to store and retrieve information in digital form such as magnetic tapes/cassettes, floppy disks, hard disks, DAT Tape, CD-ROM, smart cards; processing technology—creating the systems and applications software that is required for the

performance of digital network; communication technologies—primarily to communicate information in digital form; display technologies—varieties of output devices.

## **E-journals in India**

Most of the world's leading publishers have electronic journal (e-journal) access services at present. IIT Bombay ([www.iitb.ernet.in/](http://www.iitb.ernet.in/)) subscribes to the full text versions of 222 e-journals covering a large number of publishers such as Elsevier, AIP, ACS, ASCE, SIAM, ASME, IOP, RSC, OUP, Wiley, etc. These are made available on their intranet. A list of 158 free electronic journals and magazines are also accessible through their site. IIT Madras ([www.iitm.ac.in/](http://www.iitm.ac.in/)) provides full text access to their clientele to the Science Direct service of Elsevier and the ACM journals, in addition to more than a dozen titles online. IIT Delhi Library ([www.iitd.ernet.in/](http://www.iitd.ernet.in/)) has a much wider coverage of full text e-journals. These include Science Direct from Elsevier, IEEE/IEE Electronic library, American Physical Society, AIP, ASCE, Chemweb, etc. Their subscription to a group of eleven bibliographic databases called "Materials Science Collection" from Cambridge Science Abstracts (CSA) is another noteworthy service.

TIFR ([www.tifr.res.in/](http://www.tifr.res.in/)) has the full text facility of all the Springer journals through the LINK service. Some of the CSIR Labs with their individual efforts have already established excellent facilities in e-library operations. Science Direct is already operational in four CSIR Labs i.e., National Chemical Laboratory Pune ([www.ncl-india.org/](http://www.ncl-india.org/)), National Institute of Oceanography Goa (<http://www.nio.org/>), Central Drug Research Laboratory Trivandrum ([www.cdriindia.org/](http://www.cdriindia.org/)).

INSDOC ([www.insdoc.org/](http://www.insdoc.org/)), the apex institution for Information System and Services under CSIR runs a Digital Library. The electronic library of INSDOC has a rich collection of about 3,500 foreign science and technology periodicals, including 1,123 fulltext journals.

The Virtual Library operational at the Administrative Staff College of India (ASCI), Hyderabad ([www.asci.org.in/](http://www.asci.org.in/)) is perhaps a role model. The Indian Institutes of Management, in Bangalore ([www.iimb.ernet.in/index.jsp](http://www.iimb.ernet.in/index.jsp)), Calcutta (<http://www.iimcal.ac.in/index.asp>), Ahmedabad ([www.iimahd.ernet.in/](http://www.iimahd.ernet.in/)), and elsewhere, are currently in the process of evolving an e-journal consortia for their group of libraries.

National Center for Science Information (NCSI) Bangalore ([www.ncsi.iisc.ernet.in/](http://www.ncsi.iisc.ernet.in/)) plays a unique role in providing access, delivering service, and imparting education in electronic journals and bibliographic databases and a host of other related services/activities. The web-enabled databases/journals include Biosis, Medline, Compendex, Inspec, Mathsci, Current Contents, Adonis (Biomedical Journals), Cambridge Scientific Abstracts, Chemical Abstracts, Union Catalogue of Publications in Bangalore Libraries, etc. NCSI access to UnCover provides free access to the content pages of over 16,000 journals.

J-Gate ([j-gate.informindia.co.in/](http://j-gate.informindia.co.in/)), the e-journal portal for scholarly, research, and technical journals launched by M/s. Informatics India Ltd., Bangalore is a solution offered to

institutions who do not have adequate expertise and resources for e-journals access at an affordable rate and in a customized package.

### **E-learning in Digital Libraries:**

Most of our university libraries are now automated and many scholars have e-mail accounts. Communication and data transfer or interchange has become easy with the help of Internet and email attachments. The Inflibnet ([web.inflibnet.ac.in/index.jsp](http://web.inflibnet.ac.in/index.jsp)) program for university libraries is expanding in every dimension.

The concept of e-learning can be incorporated into a digital library system. For instance, in an e-learning environment the contents are truly dynamic. Any piece of information comes with a system that equips a user to test his level of knowledge. Libraries have adapted accordingly to enhance the learning process.

### **Conclusion**

Education is an important force in the advancement of civilization. Its success depends upon the sharing of information. Electronic libraries can provide a vehicle for extending collaboration, which is at the heart of the academy, with the aim of more effective education.

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