

Digital Library and Library Networks in India

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Abstracts

This paper discusses the objectives of Digital Library, functions of Digital Library, characteristics of Digital Library and Indian Library networks for E-Learning, etc. in the view of demand of user in the utilization of information in digital format.

Key words: Digital Library, Electronic Library, E-Learning, Library Networks, Digital Consortia

INTRODUCTION

Digital Library or Electronic Library is a library, which exists, in an electronic form where the information is selected, acquired, processed, organized, stored and retrieved in digital form. Nowadays Libraries are in the infant stage of the digital revolution. Digital Library helps to improve the e-learning. E-learning refers to the delivery of training by electronic means including text, audio, motion video, still graphics, animation, live interaction with a facilitator and / or other students, exercises, and tests. E-learning extends the capability of classroom training and / or conference calls by making extensive use of the Internet for learner access to training materials on web sites and to interaction with a facilitator using instant messaging, e-mail, audio and / or video. Electronic libraries not only cover text in machine readable form but also Graphics, Photographs, Video and so on. Nowadays most of the textbooks are available in the electronic form. Electronic libraries are to be used either online or offline.

OBJECTIVES OF THE DIGITAL LIBRARY

- ✓ To capture, store, manipulate, and distribute information.
- ✓ To introduce and produce new services.
- ✓ To have large number of databases in CDs/DVDs/external Hard disks etc.
- ✓ To avoid routine and redundant activities.

- ✓ To provide facility for networking and resource sharing.
- ✓ To access national and international journals which are being published only in machine-readable form. Whether it is freely available or paid subscription.
- ✓ To improve the cost effectiveness of library operations.
- ✓ To support library routine functions such as circulations, serial control, acquisition control, stock maintenance and other routine office works and developing in house databases.

CHARACTERISTICS OF DIGITAL LIBRARY

Though Digital libraries have certain special characteristics such as:

- ✓ Digital libraries have collections that
 - i) are large and persist over time; ii) are well-organized and managed; iii) contain many formats; iv) contain objects and not just their representations; v) contain objects that may be otherwise unobtainable; and vi) contain some objects that are digital as origin.
- ✓ Digital libraries include all the processes and services offered by traditional libraries though these processes will have to be revised to accommodate difference between digital and paper media.
- ✓ A digital library is not a single entity, it may also provide access to digital material and resources from outside the actual confines of anyone digital library.
- ✓ Digital libraries support quick and efficient access to a large number of distributed but interlinked information sources that are seamlessly integrated.

ADVANTAGES OF DIGITAL LIBRARIES

- ✓ The resources will never be out on loan and will be available at anytime, anyplace, and anywhere.
- ✓ Access is provided to more complete set of journals than, in many instances, now exist on many library shelves.
- ✓ The cost of tracking the arrival of each journal issue, claiming, and periodical binding will be eliminated.
- ✓ The need for added library space may decline.
- ✓ Cost of retrieving and re shelving materials will be reduced.

COPYRIGHT AND LICENSING ISSUES

The Fair Use Provisions (17 USC § 107) under copyright law provide specific guidelines under which circumstances libraries are allowed to copy digital resources. Four factors that constitute fair use are purpose of use, nature of the work, market impact, and amount or substantiality used. [20]

Some digital libraries acquire a license to "lend out" their resources. This may involve the restriction of lending out only one copy at a time for each license, and applying a system of digital rights management for this purpose.

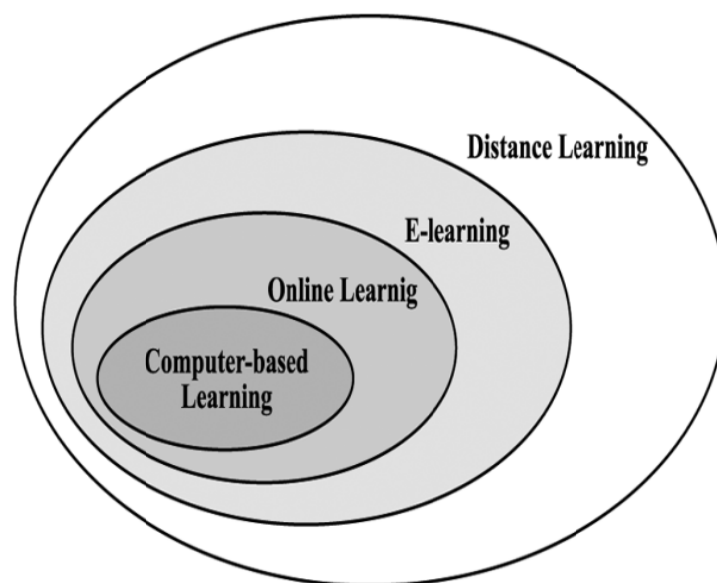


Fig. 1 different types of learning modules

LIBRARY NETWORKS IN INDIA

The following are the important library networks to promote sharing of resources among the libraries in India.

- A. Information and Library Networks(INFLIBNET)
- B. Development Library Network (DELNET)
- C. Calcutta Library Network (CALIBNET)
- D. Ahmedabad Library Network (ADINET)
- E. Educational Research Network (ERNET)
- F. Techpedia : A Network of Projects of Engineering Students

A. INFORMATION AND LIBRARY NETWORKS (INFLIBNET)

URL : <http://www.inflibnet.ac.in/>

Information and Library Network (INFLIBNET) Centre is an Autonomous Inter-University Centre (ICU) of University Grants Commission (UGC) involved increasing infrastructure for sharing of library and information resources and services among Academic and Research Institutions. INFLIBNET works collaboratively with Indian university libraries to shape the future of the academic libraries in the evolving information environment.

The project on information and library networking aims at the establishment of a national network of libraries and information centers in universities, colleges, research and development organization etc. in India.

A. 1 Functions of INFLIBNET :

In order to fulfill the broad objectives, INFLIBNET will do the following:

- ✓ Enable the users dispersed all over the country, irrespective of location and

distance, to have access to information regarding serials, these / dissertations, books, monographs and non-book materials by locating the sources wherefrom available and to obtain in through the facilities of INFLIBNET and union catalogue of documents.

- ✓ Create database of projects, institutions, specialists, etc. for providing on-line information service,
- ✓ Promote and implements computerization of operations and services in the libraries and information centres of the country, following a uniform standard.
- ✓ Evolve standards and uniform guidelines in techniques, methods, procedures, computer hardware and software, services and promote their adoption in actual practice by all libraries, in order to facilitate pooling, sharing and exchange of information towards optimal use of resources and facilities.
- ✓ Evolve a national network interconnecting various libraries and information centers in the country and to improve capability in information handling and service.
- ✓ Provide reliable access to document collection of libraries by creating on-line union catalogue of serials, these / dissertations, books monographs and non-book materials (manuscripts, audio-visuals, computer, data, multimedia, etc.) in various libraries in India.

A. 2 UGC-INFONET

UGC-INFONET is an ambitious programme of UGC to interlink all the Universities in the country with state-of-art technology. The Network will overlay on ERNET backbone and provide Internet and Intranet Services. It is providing Internet Connectivity to 150 Universities in first phase. Another 8 universities are being added in 2008. INFLIBNET is responsible for executing and monitoring the entire project.

A. 3 E-Resources @UGC-INFONET Digital Library Consortium

The UGC-INFONET Digital Library Consortium subscribes to the following resources for its member institutions. All electronic resources subscribed are available from the publisher's Web site. Following is the list of E-Resources with link to their brief introduction.

Such Full-Text Resources are,

American Chemical Society <http://www.pubs.acs.org/>,

American Institute of Physics, http://scitation.aip.org/publications/myBrowsePub.jsp*AIP,

American Physical Society, http://scitation.aip.org/publications/myBrowsePub.jsp*APS

Annual Review <http://arjournals.annualreviews.org/>,

Blackwell Publishing <http://www3.interscience.wiley.com/>,

Cambridge University Press <http://journals.cambridge.org/>,

Elsevier Science <http://www.sciencedirect.com/>

Institute of Physics, <http://www.iop.org/EJ/>

J-STOR <http://www.jstro.org/>

Nature, <http://www.nature.com/>

Oxford University Press <http://www.oxfordjournals.org>

Project Euclid <http://projecteuclid.org/>, **Project Muse** <http://muse.jhu.edu/>

Royal Society of Chemistry <http://www.rsc.org/Publishing/Journals/>

Springer Link <http://www.springerlink.com/>

Taylor and Francis, <http://www.informaworld.com>

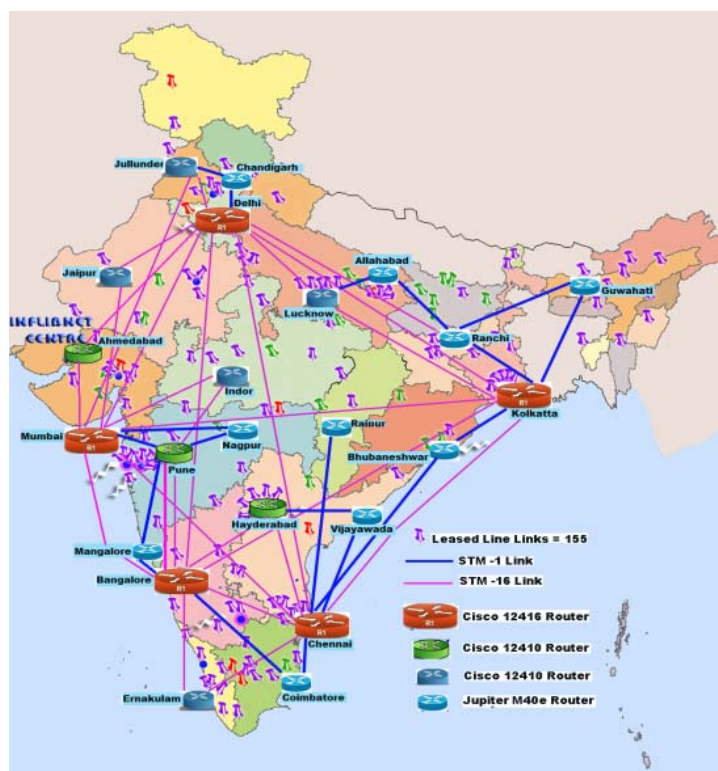


Fig. 2, INFLIBNET Networks in India

DEVELOPING LIBRARY NETWORK (DELNET)

URL: <http://delnet.nic.in/>

DELNET was started at the India International Centre Library in January 1988 and was registered as a society in 1992. It was initially supported by the National Information System for Science and Technology (NISSAT), Department of Scientific and Industrial Research, Government of India. It was subsequently supported by the National Information Centre, Department of Information Technology, Ministry of Communication and Information Technology, DELNET has been established with the prime objective of promoting resource sharing among the libraries through the development of a network of libraries. It aims to collect, store, and disseminate information besides offering computerized services to users, to coordinate efforts for suitable collection development and also to reduce unnecessary duplication wherever possible.

In order to provide efficient services to users in earth library in Delhi and enhance scope of the services, DELNET stands for significantly improving resource sharing among the libraries in Delhi and its plans provided automation facilities.

CALCUTTA LIBRARY NETWORK (CALIBNET)

URL: <http://www.calibnet.org/>

To promote sharing of resources among the libraries in Calcutta by developing a network of libraries, by collecting, storing and dissemination of information and offering computerised services to the users and found accounting.

AHMEDABAD LIBRARY NETWORK (ADINET)

URL: <http://www.alibnet.org>

ADINET is an Immolation Network of Libraries in and around Ahmedabad. ADINET was registered as a Society in October 1994. Initially it was sponsored by National Information System for Science for Science and Technology (NISAT), Department of Scientific and Industrial Research, Government of India.

EDUCATION AND RESEARCH NETWORK (ERNET)

URL :-www.ernet.in

ERNET-India is an autonomous scientific society of Ministry of Communication & information technology (Govt. of India). ERNET has made a significant contribution to the emergence of networking in the country. ERNET is largest nationwide terrestrial and satellite network with point of presence located at the premiere educational and research institutions in major cities of the country. Focus of ERNET is not limited to just providing connectivity, but to meet the entire needs of the educational and research institutions by hosting and providing relevant information to their users. Research and Development and Training are integral parts of ERNET activities. The activities at ERNET India are organized around five technology focus areas:

- ✓ National Academic and Research Network
- ✓ Research and Development in the area of Data Communication and its Application
- ✓ Human Resource Development in the area of High-end Networking
- ✓ Educational Content
- ✓ Campus-wide High Speed Local Area Network

TECHPEDIA

URL : <http://techpedia.in/blog.php>

Techpedia is Portal of technology projects by students to ling the needs of industry and grassroots innovations with young minds to promote collaborative research. Techpedia is a initiative of SRISTI (Society for Research and Initiatives for

Sustainable Technologies and Institutions) which has led to mapping of the mind of engineering youth of our country in an unprecedented manner.

There are more than six lacks technology students in the country, each one of whom does a project in the final year. If there is a single platform to put such project in networks, the industrialists can aware from these projects with their interest and call the student for further improvement in their companies. Thus the outcome of project and student will be there. Thus we could improve productivity on one hand and help engineers become better professionals on the other. Right now more than 100, 000 projects by 350, 000 students from 500 colleges are available freely in Techpedia website.

Other useful library networks in India through which we can learn better are. . . .

- ✓ Bangalore University Academic Library Network (BALNET)
URL: <http://library.bub.ernet.in/sub/balnet.html>
- ✓ Indore Library Network (INDOLIBNET), URL: <http://indolibnet.blogspot.com/>
- ✓ Lucknow Library & Information Centres Network (LUCKLIBNET) URL: <http://lucklibnet.com/>
- ✓ Management Libraries Network (MANLIBNET) URL: <http://manlibnet.in/>
- ✓ Mysore Library Network (MYLIBNET), URL: <http://www.mylibnet.org/>
- ✓ National Open and Distance Learners' Library and Information Network (NODLINET)

URL: <http://nodlinet.blogspot.com/>

- ✓ Pune Library Network URL: <http://202.41.70.20:6588/punenet>

Useful Consortia for e learning:-

In India, a number of Library Consortium operates to share e-Resources among the libraries to serve their library users. The important Consortia that are being operational are, I

- ✓ CSIR Library Consortia, URL: <http://ejournal.niscair.res.in/>
- ✓ FORSA (Forum for Resource Sharing in Astronomy and Astrophysics)
URL: <http://www.ncra.tifr.res.in/library/forsaweb/index.htm>
- ✓ Health Science Library and Information Network (HELINET) Consortium URL: <http://www.rguhs.ac.in/HELINETHOSTCONSORTIUM/homehelinethost.htm>
- ✓ ICMR Library Consortium, URL: <http://icmr.nic.in/icmrnews/htm>
- ✓ INDEST AICTE Consortium, URL: <http://paniit.iitd.ac.in/indest/>
- ✓ UGC InfoNet Digital Library Consortium, URL: <http://www.inflibnet.ac.in/econ/>
- ✓ VIC Consortium of ICICI Knowledge Park, URL: <http://www.iciciknowledgepark.com/>

CONCLUSION

The new environment of digital media has made significant change in traditional library. The information needs of the users are also changing from traditional document to the digital information as it is available instant in the form of digital

whether it should be from internet or from in-house digital sources. Digital libraries promote E-learning, by providing the scholars to know more about the courses, course contents and related information. E-Learning through Digital Libraries would save the time of the users in getting information resources quickly in international level with limited cost. Digital Library is the boon for all higher education scholars.

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