ADVANTAGE TO ENGINEERING COLLEGE LIBRARIES IN *THE DIGITAL ERA*

Dr. Eswaran
Librarian, Government Polytechnic College, Purasawalkam, Chennai

G. Muruganandham
Research Scholar, Bharathidasan University, Trichy

Abstract
Users of modern digital libraries (DLs) can keep themselves up-to-date by searching and browsing their favorite collections, or more conveniently by resorting to an alerting service. The alerting service notifies its clients about new or changed documents. So far, no sophisticated service has been proposed that covers heterogeneous and distributed collections and is integrated with the digital library software.

During the past recent years, there has been tremendous development reaming the concept of digital libraries - a knowledge base that can be stored and retrieved through on - line networks. Digital libraries are the most complex form of information systems that support digital document preservation, distributed database management, hypertext, filtering, information retrieval and selective dissemination of information. This has really overcome geographical barrier offering wide range of academic, research and cultural resources with multimedia effects which can be accessed around the world over the distributed networks. The paper examines the concept of Digital library, the technology that has enabled its emergence & architecture of digital library system.

Keywords: *Engineering College libraries, digital library services, Resource sharing, Academic libraries*.

Introduction

With the advancement of science and technology, country has witnessed an Unprecedented growth of information resulting in information explosion and the information being generated in different formats has further created havoc in providing cost - effective information services to the user community. As a result, libraries have been constantly facing the problems of space, escalation in cost of books & journals, budget shrinkage, inability to provide multiple copies and most important is retrieval efficiency of user being endangered for want of information. The urge to overcome these problems has called for adoption of technology in libraries. These technologies includes

- CD -ROMs and Digital Video Disk Read Only Memory (DVDROMs)
- Networking of Computers
- Image/Text compression
- Multimedia technology
- Powerful processors

The powerful technology has enabled Library/Information Centres to create multimedia information databases which provides easy retrie val & access with personal computer connected to the network. This has led to the concept of "Digital Library". In digital libraries, the question of loss of documents is overruled while the searching of information is effective and efficient due to global indexing & search engines.

Objectives of Digital Library

The main objectives of the digital library are

- To capture, store, manipulate and distribute information

ADVANTAGE TO ENGINEERING COLLEGE LIBRARIES IN THE DIGITAL ERA

- To introduce and produce new services
- To have large number of databases to CD's
- To avoid routine and redundant activities
- To provide facility for networking and resource sharing
- To access National and International journals which are being published in machine readable form
- To improve the cost effectiveness of library operations
- To support library functions such as circulations, serial contrl, acquisition control, stock maintenance and other routine office works in developing in house databases.

Digital Libraries: Features

Digital library is a collection of textual, numeric data, scanned images, graphics, audio & video recordings that provides access to digital collection for ease of retrieval of information to the users.

Digital library is characterized by

- Library is at the disposal of users that facilitate access of information by just push of a button.
- Information sources is digitized, compressed and stored in textual/numeric, audio, Video, Graphic form.
- Time saving device for user community
- Computer assisted search
- Geographically distributed creating the concept of world as a global village
- Alerts users based on their subject interests.

Service of the Digital Library

- Online catalogue of Library and information centre: The machine readable catalogue of the library and information centre can be made available through internet web;
- Shared cataloging: A Librarian and information manager to use the catalogue information available major universities. Library or a resource center for cataloguing new publication added to the library. A document is catalogued only once at the time of entry into the network, of other libraries, which procure that documents later need not spent time in cataloguing if but can, download the cataloging information from the network.
- Electronic mail (E-mail): E-mail was originally described for communication between pairs of individual. It has been extended to provide communication among group and to provide communication with a computer program. As a result E-mail has become one of the most widely used services on the internet.
- Current Awareness Services (CAS): List of latest edition to the library namely books, patents, periodicals, standards, audio visual, web for user attention.
- Selective Dissemination of Information (SDI): User request are collect through E-mail. The descriptor and matched against latest available documents and the required users are contended through e-mail.

ADVANTAGE TO ENGINEERING COLLEGE LIBRARIES IN THE DIGITAL ERA

- Bulletin Board Service (BBS): The major Bulletin Board Service available on the Internet is known as network news. Network news consists of thousand individual bulletin boards on topics as diverse as education, hobbies, science, politics, entertainment and employment opportunities.
- World Wide Web (WWW): Internet browsing service enhances information access in significant way. It uses an interactive paradigm that allows a user to view document from remote computer pre term tidings file transfer.
- The Document Supply / Delivery Services: It will enable library to request to another library for a copy of document to be transmitted via E-mail.

Advantages of Digital Libraries
- Helps in resource sharing facilities saves the library man power and funds.
- Helps in Inter Library Loan (ILL)
- Helps to research information of their users at faster rate through on-line communication
- Minimizes the duplication of new invention.
- Helps the libraries to get recent publications from the publishers
- Researchers, information scientist will get information within minimum time
- Helps to get bibliographical information, retrospective search, and union catalogue, abstracting and indexing of periodicals.
- E-publications provide aids for connectivity, audio visualization, customizability, creation and revision of documents, interactivity and rapid information retrieval.
- Multiple users can be used simultaneously by the same resources at a time.

Disadvantages of Digital Libraries
- Compatibility and standardization problems are likely to be faced due to the use of a variety of hardware, software, information collection, and storage and retrieval methods.
- A problem frequently encountered and different to overcome will be the one of the copy right and intellectual property rights issues.
- Problems in the scholarly publishing.
- Non availability of hard copy.
- Research activity/project is getting delayed due to Non-availability of network connectivity.

Importance of Digital Library in Engineering College
The increased electronic publishing activity and the education and training activities in the country have focused on the application of new technology in the libraries. It is now possible through a computer to read and download information text of articles and reports of other materials. This has brought a revolutionary change in the way libraries adopt and functioning shifting from print to electronic information. These libraries are addressed as digital libraries. Digital libraries are electronic libraries in which large number of geographically distributed users can access the content of large and diverse repositories of electronic objects. Electronic objects include networked text, images, maps and sounds. Key advantage of digital library is ubiquity. A single electronic copy can be accessed from many locations by many simultaneous

users. Since readers get a screen display of the object rather than a physical object loss rates by theft are eliminated. Digital library has a one step, equitable and timely access to vast amount of diverse resources in a shard mode in a given specialty lifting traditional barriers of time and space.

Information Communication Technology (ICT)

It is widely accepted that technology advances always bring revolution in all disciplines and convert our dreams into reality. Similarly advances in information communication technology are full with solutions for day to day problems of engineering college libraries. Now all the job involve in information processing can be done more effectively, efficiently and economically with in less possible time with the help of computers and user friendly software. Besides this Compact Disks or electronic media is an excellent solution for storage due to space problem but it is also capable to make information accessible anywhere and anytime. Further, maximum utilization of available information or library's collection is now possible due to LAN, VAN or Networking.

Use of Internet

Internet has now emerged as a very powerful communication and publishing medium and it has changed the overall ways, means, mode and methods of information dissemination. Like other libraries, engineering college libraries as a disseminators of information too has made a great impact. Many people consider internet like a global library without walls that can be accessed anywhere by any one at any time to get any type of information.

Electronic books

Electronic books are digital objects containing electronic representations of a book that means they are converted into a digitized form in order to be read by a computer. Print versions of late have become very expensive as the number of copies printed has been coming down. Many reference books, which occupy major space in libraries, will one day be replaced my machine readable formats and reference area will completely disappear in the libraries. E-books are distributed via internet and sold in many ways.

Electronic Journals

In recent decades the price of print journals especially scientific journals has continued to rise beyond affordable limit and thus has prompted the librarians to look for an altenative mainly "Free electronic Journals". E-journals have almost all the characteristics of the print journals and would be available either online or offline or both.

AICTE Mandatory Based Subscription

Mandatory based subscription to electronic resources is a part of "Library Consortium" and it can be viable solution in order to increase the access to electronic resources across institution at cost basis. Engineering college libraries need to form consortia of all types at all levels with an objective to take advantage of global network to promote better, faster and more cost

effective ways of providing electronic information resources to the users of the library. These models which offer new opportunities for corporation and collaboration among colleges and university libraries, I think this subscription should be seriously considered by all the engineering college libraries if they desire to position themselves strategically for new challenges.

Library Home Page

Developing a web site is one of the best tools to integrate and communicate all the library resources and services effectively to a wide range of users, irrespective of the place and future trends. Engineering college library by developing home page can disseminate a wide range of information to user's community. It is the best way to keep users abreast about latest development of library resources and services with the introduction of pictures, graphics 3D images, Audio and video. Resources like library databases online data bases and other useful websites can be linked which will be useful for book selection and link of other library databases may be useful for inter library loan.

Expectations of Users

Traditional models of library services are in sufficient to meet current requirements of users. The increasing online environment resulting in users who are more technology and they are demanding and expecting more from the library. The potential of delivery information any time, any place challenges libraries to reexamine how space is organized and used. It is necessary to create new modes to deliver services to the user desktops even outside the campuses. Users would like to see their library on the internet, able to meet their information needs not only on demand but also I anticipation of demand.

Role of Library Professionals in Digital Era

Staff plays a major role in any digital library. No library can run without adequate and trained man power. In the present situation the libraries have to train the existing staff to meet the challenges of IT and also recruit IT people to develop and build digital libraries which are a major problem in our engineering college libraries. Librarian plays a crucial role in implementing all these new technologies. Modernization of the library includes automation of library services, building digital resources and internet access with adequate speed for accessing information. The main problem for any new development is the finance. The librarian should be able to convince the management in getting the necessary funds in improving the quality of services. The librarian has to perform dynamic nature of role like teaching, administrative etc. Library professional's continuous training through workshop, seminar, symposia, conferences, orientation programs, refresher courses, special trainings and development is needed to improve performance and output. All these are necessary to improve work performance, refresh their knowledge and to know the technological development in library profession.

ADVANTAGE TO ENGINEERING COLLEGE LIBRARIES IN THE DIGITAL ERA

Conclusion

The modern libraries belong to traditional libraries is an automated environment. The present libraries are drifting towards a digital environment. Though digital library is on the nascent stage, most of the libraries are trying their level best to convert most of their holding into the digital. The digital libraries help the readers to get the information quickly though the national and international level without delay and with limited cost. The paper discusses types of functions of digital library. It presents digital library services and advantages and dis-advantages. It also describes the role of library professionals in digital era. Further it highlights the importance of digital library in engineering colleges.

References

1. Kanadiya, Praytrkar, K. *Digital Library Services*, Journal of Library and Information Technology, 2(2) (2005) 5-9.
2. Raj, Janak and Verma, Rama *Engineering College Libraries in India: A survey*, ILA Bulletin, Vol.XXVIII 91-21.21.1992, PP.16-23.
3. Bavakutty. College *Library: How it should be*, Library Herold, 1986, Vol.24 (3&4).PP219-226.
4. Bazillion, Ricahrd J. *Academic Libraries in the digital revolution*. Deucause quarterly, 21.1.2001, 51-55.
5. Konnur, P.V and Bhandi, M.K. *Academic Libraries for 21st Century*, 2nd international CALIBER 2004, New Delhi, 2004.PP 7-11.