



Development of digital library in India issues and challenges: Role of librarian in digital environment

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Abstract

With the development of multidirectional education system, importance of libraries and information science has been increased. Not only traditional libraries have grown in size but a new concept of libraries called as digital library has come in to existence. Digital library has got lot of changes not only in the library and information services but also in the roles and expectations of the librarians and information professionals.

Increase in technological explosion changes our lifestyle in few decades. Digital Library are playing a vital role for disseminating of information in modern society. Each and every library is slowly setting digitized. A digital library comprises digital collection, services and infrastructure to sport lifelong learning, research, scholarly communication as well as preservation and conservation of our recorded knowledge. In this paper we are focusing on the meaning digital library, needs, its advantage and challenges of digitization of library and the role of librarians in the digital libraries.

Keywords: digital library, librarian, information professional, digitization, information sharing

Introduction

We are in the information age. Our society is moving through a cyber culture. Presently we are living in digital world. Today digital world is concerned with creating sharing and using information in digital form. The right information available to right person at right time is the aim of any modern library. The revolution in the IT sector is influencing the information industry also. Libraries are also changing to meet the demand put on them. The new generation whose demand for information is never met and is always demanding that traditional libraries should be developed as a well equipped and inter connected as digital Libraries.

A digital library is a global virtual library. It can be defined as library with all the information available in the digital form. Digital libraries are being created to day for diverse communities and in different fields e.g. education, science, culture, development, health governance and so on.

Meaning of digital library

The term "Digital library" divided into two parts. One in "Digital" and another is "Library" Digital means, information in any digitized format and library means, a total mechanism for obtaining access to, storing, organizing and delivering information. So, digital library is the library to collect the information with associated services, where the information is stored in digital format like text, video, audio etc. and accessible over a network.

The American digital library federation has defined the digital library as "Digital Library are Organizations that provide the resources, including the specialized staff, to select, structure, offer intellectual access to, interpret, distribute, preserve the integrity of, and ensure that persistence over time of collection of digital works so that they are readily and economically available for use by a defined community or set of

communities".

According to the Brekeley (1990) "The digital library will be a collection of distributed information sources. Producers of information will make available, and consumers will find it perhaps through the help of automated agents".

A "Digital library", terms such as "electronic library", "web library" and "virtual library" are often used synonymously. A digital library is nothing but a large data base for the people who are working on hypertext environment. It is environment, which supports the full life cycle of creation, storage, preservation, land dissemination, use of data, information and knowledge (Association of Research Libraries, 1995).

History of digitization

Digital image processing began with work done through the jet propulsion laboratory in California in the 1960 and consisted of digitizing television image of the moon surface sent by spacecraft, other use included military intelligence urban planning, medicine and course of digital video and photography (Digital imaging 1997).

Development of digital Library in India

India has several digital library initiatives of the institutional, organizational and national level.

- National chemical Laboratory (<http://dSPACE.ncl.res.in>)
- Rajiv Gandhi University of Health Sciences, Karnataka (www.rguhs.ac.in)
- IITNK, Trivandrum ([http://www.itmk.ac.in/digital library](http://www.itmk.ac.in/digital%20library))
- Indian Institute of Technology, Mumbai (<http://www.library.iitb.ac.in>)
- Indian Institute of Technology, Khargapu (<http://www.library.iitkgp.ernet.in>)

- Indian School of Business
(<http://www.isb.edu/irc/index.htm>)
- Traditional knowledge Digital Library (TKDL)
(<http://203.200.90.6/tkd/langdefault/comman/home.asp>)
- National Tuberculosis Institute CNTI, Bangalore
(<http://intindia.kar.nic.in>)
- INDEST, Ministry of HRD Govt. of India
(<http://paniit.ac.in/indest>)
- Nalanda Institute of Technology (NIT)
(<http://nalanda.nite.ac.in>)
- Indian Institute of Management, Kozhikode
(<http://internet.iink.ac.in>)
- Information and Library Network Center
(www.inflibnet.ac.in)
- Center for Education and documentation
(www.ced.org)
- Data Institute of Fundamental Research Digital Library Initiative
(www.tifr.res.in/library)
- CSCS Media and Culture Achieve
(www.cscsban.org/html/media_archive.html)

Need of digital library

Information explosion has increased in all subjects like as science, humanities and social science and libraries facing problem to maintain their service. The role of digital libraries is very important. The present scenario digital libraries are spreading in every part in the world. It is very easy to control the huge data in a single computer. We fulfill over needs and some of these are mentioned below.

- To provide Quality based service and fulfill the users requirement.
- Digital library save the library staff and time.
- Digital library will be able to retrieves information specifically.
- Digital library is more convenient for distance learning.
- Digital library is able to handle the problem of information explosion.
- Digital library is low cost technology then the traditional libraries.
- Multiple functions of same digital information structured and organized by using hypertext in digital libraries.

Advantages of digital library

A digital library is not confined to a particular location or so called building it is virtually distributed all over the world. The user can get his/her information on his own computer screen by using the internet of multimedia system, which provides fingertip access.

- No physical boundary in digital libraries. The user of a digital library need not to go the library physically, users from all over the world could gain access to the same information as long as an internet connection is available.
- Digital libraries can be accessed at any time, 24 hours a day and 365 days of the year.
- In the digital library number of users can be used same resource at the same time.
- Digital library will provide very user friendly interfaces,

giving click able access to its resources.

- Traditional libraries are limited by storage space but digital libraries require very little physically space. When the library had no space for extension digitization is the only solution.
- Resource sharing can be achieved in the digital libraries by providing the link to any other resources of other digital library very easily.
- The cost of maintaining a digital library is much lower than a traditional library. A traditional library must spend large sums of money paying far staff, book maintains and additional books. Digital libraries do away with these fees.

Challenges of digitization of library

Digital library provides variety of service to its users. Information objects is the basis of the digital library plays very important role in the society. But there are so many challenges in digitization of library.

- Copyright is the most important problem in the field of digital libraries. The thought content of one author can be freely transfer by other without his acknowledgement so, digitization violates the copyright law.
- In digital libraries so many computer are connected to the internet its speed of access reasonably decreasing.
- Initial cost of digital library is very high i.e. the cost of hardware, software; leasing communication circuit is generally very high.
- Reading of printed material to be easier then reading on a computer screen. Digital libraries cannot reproduce the environment of a traditional library.
- Digital library will need high band for transfer of multimedia resources but the band width is decreasing day by day due to its over utilization.
- Due to technological revolution, a digital library can rapidly become out of date and its data may become inaccessible.

Role of librarian in digital environment

The role of librarian in digital environment especially as information manager, knowledge manager, intermediary, facilitator, end-user trainer, web site builder, researcher, interface designer, information scientists and sifter of information resources. In the rise of digitized information the role of librarian and leads to the emergence of a new breed librarian called: "Cyber librarian" or cybrarian" (Hawthorn, 1997) (2).

The increasing role of technology in libraries has a significant impact on the changing roles of librarians. New technologies are increasing the accessibility of information and librarians are adapting to the evolving needs of users. In the new environment it will be very difficult for the librarian to decide what should be organized and how to organize the collection? How to give citation? etc. Because the new environment will be really challenging for the librarian to decide who are author's publishers and users? In the new environment anyone who has access to the network of digital libraries can be a publisher by nearly posting messages to an online discussion group. In same cases librarians have the opportunity to

digitize unique material in their libraries collections which can than we made accessible to users of the web at large.

Conclusion

Librarian and information professionals face challenges that will lead to improved systems. Information explosion has increased in all subjects like as science, humanities and social science and libraries facing problem to maintain their service of at the role of digital libraries is very important.

The initial cost of digitization is high but experiment shows that one's digitization is introduced then the cost to manage this collection will be cheaper than that of any traditional library. Day by day, the cost of digitization is decreasing and the online publication is increasing therefore the need of user are shifting towards a different environment that after one or two years the libraries will have to be digitized so it's the pick time to all informational and library professional that they gear themselves to take the challenge.

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