



DIGITAL LIBRARIES IN INDIA

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Abstract

In India, a number of national level institutions are digitizing their own information resources and some rare items. The emergence of digital technology and computer networking have provided means whereby information can be stored, retrieved, disseminated and duplicated in a very fast manner. Digital libraries have made considerable advances, both in technology and its applications. Digital libraries are a way of making educational and research data and information available to faculty, researchers, students, and others at the institutions and worldwide. Further it suggests that in a developing country like India where resources are limited, funds are inadequate the library and information professionals should develop their skill and proficiency to meet the challenges of technological developments and changes emerging out of digital library services.

INTRODUCTION

Information and Communication Technologies (ICTs) have brought significant changes in all-round development of the society through transmission of information. Application of information technology to Library and Information Science has provided wider opportunities in archiving and accessing knowledge in the digitized form besides conservation and preservation of the traditional knowledge. Digitization of materials will provide enhanced access to the electronic information sources and the users can access the digital content irrespective of time and space boundaries. Library occupies an important role in the modern education system. It has now become an integral part and indispensable agency for imparting informal education. A **digital library** is a library in which collections are stored in digital formats (as opposed to print, microform, or other media) and accessible by computers. The digital content may be stored locally, or accessed remotely via computer networks. A digital library is a type of information retrieval system. The term digital libraries were first popularized by the NSF/DARPA/NASA Digital Libraries Initiative in 1994. The DELOS Digital Library Reference Model defines a digital library as: An organization, which might be virtual, that comprehensively collects, manages and preserves for the long term rich digital content, and offers to its user communities specialized functionality on that content, of measurable quality and according to codified policies. McMillan (2000) later refined her definition of a digital library to one that 'should be a seamless extension of the library that provides scholars with access to information in any format that has been evaluated, organized, and preserved' and that the digital library 'adds value and saves time while extending the hours of access' The collection of books, journals, theses, reports, standards, pamphlets and other reading material is the best and biggest asset of the library. It is used not only by our own students and faculty, but also by corporate / industrial houses, educational institutions and others who walk-in to use our library in large numbers. But again, as a developing country, the economic conditions for libraries and information centers are poor in this regard, especially by comparison with the developed world.

TYPES OF DIGITAL LIBRARIES

The term digital library is diffuse enough to be applied to a wide range of collections and organizations, but, to be considered a digital library, an online collection of information must be managed by and made accessible to a community of users. Many of the best known digital libraries are older than the web including Project Persues , Project Gutenberg, and ibiblio. Nevertheless, as a result of the development of the internet and its search potential, digital libraries such as the European Library and the Library of Congress are now developing in a Web-based environment. Public, school and college libraries are also able to develop digital download websites, featuring eBooks, audiobooks, music and video, through companies like Overdrive, Inc.

Digital libraries can immediately adopt innovations in technology providing users with improvements in electronic and audio book technology as well as presenting new forms of communication such as wikis and blogs. An important advantage to digital conversion is increased accessibility to users. Therein also availability to individuals who may not be traditional patrons of a library, due to geographic location or organizational affiliation.

- **No physical boundary.** The user of a digital library need not to go to the library physically; people from all over the world can gain access to the same information, as long as an Internet connection is available.



- **Round the clock availability.** A major advantage of digital libraries is that people can gain access to the information at any time, night or day.
- **Multiple accesses.** The same resources can be used simultaneously by a number of institutions and patrons
- **Information retrieval.** The user is able to use any search term (word, phrase, title, name, subject) to search the entire collection. Digital libraries can provide very user-friendly interfaces, giving clickable access to its resources.
- **Preservation and conservation.** Digitization is not a long-term preservation solution for physical collections, but does succeed in providing access copies for materials that would otherwise fall to degradation from repeated use. Digitized collections and born-digital objects pose many preservation and conservation concerns that analog materials do not. Please see the following "Problems" section of this page for examples.
- **Space.** Whereas traditional libraries are limited by storage space, digital libraries have the potential to store much more information; simply because digital information requires very little physical space to contain them and media storage technologies are more affordable than ever before.
- **Added value.** Certain characteristics of objects, primarily the quality of images, may be improved. Digitization can enhance legibility and remove visible flaws such as stains and discoloration.

PROBLEMS

With the ever-expanding digital collections in today's library's and archives we are facing new preservation challenges that seem to have no concrete solutions or universal standards in which to guide us. For centuries we have seen the evolution of paper based materials and have been able to successfully meet many of the challenges that these materials present to the realm of preservation. Our digital world, however, is far too young and mercurial to have any long-term sense of how this new media can be preserved for long-term future access. On one hand multiple copies of a physical volume can exist in different libraries, but can only be viewed by visiting the library or repository directly. On the other hand, a digital object can be viewed from multiple locations but more than likely exists only as a single copy in a single location on one server. Access to digital libraries and their collections is dependent upon a stable information technology infrastructure (power, computers, communications links etc.). Hence, despite the egalitarian potential of the digital library, many of those who could most benefit from its global reach (for instance in the Third World) are not able to do so.

There are countless artifacts sitting in libraries all over the world that are essentially useless because the technology required to access the source is obsolete. In addition to obsolescence, there are rising costs that result from continually replacing the older technologies. This issue can dominate preservation policy and may put more focus on instant user access in place of physical preservation. Some people have criticized that digital libraries are hampered by copyright law, because works cannot be shared over different periods of time in the manner of a traditional library. There is a dilution of responsibility that occurs as a result of the spread-out nature of digital resources. Complex intellectual property matters may become involved since digital material isn't always owned by a library.

CONCLUSION

The state of digital libraries varies between different parts of the country. In particular the condition of the majority of digital libraries in rural areas is poor. It is clear then that the digital library scenario is not uniform in India. Large scale digitization projects are underway at Google, the Million Book Project, MSN, and Yahoo!. With continued improvements in book handling and presentation technologies such as optical character recognition and ebooks, and development of alternative depositories and business models, digital libraries are rapidly growing in popularity as demonstrated by Google, Yahoo!, and MSN's efforts.

In a country such as India so rich in content of indigenous research and development in disciplines varied from science and technology to social science, humanities and spirituality, there is tremendous need for hosting full-fledged digital libraries by appropriately tagging the content with affordable information technology.

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