

# Chapter 1

## Role of Digital Libraries in the Present Era Challenges and Issues

**Harpreet Kaur**

*Indian Institute of Technology Ropar, India*

### **ABSTRACT**

*The Digital library plays an important role in promoting the use of information. Digital libraries give solutions to main challenges to traditional libraries such as storage. This paper discusses the concept of digital library and how it helps in conserving manuscripts and what type of equipments or software are required in this work. We want digital information in every field so that every library should be a digital library. It highlights the Necessity, Challenges and issues in creating digital library, there are certain issues which should be taken care like copyright and Intellectual Property Right. This article also explores successful digital library project set up in India and what is the future of digital library in Indian scenario.*

### **1. INTRODUCTION**

The integration of the Internet technology is affecting all functions of academic libraries. The mission of library professionals is to provide excellent information service to users, has not changed but technology has added several new dimensions and opened new avenues to their tasks. Present changing and extremely advanced technical environment for information/knowledge management requires everything to be advanced. To cope with this type of environment every field is supposed to accept the fact and implement new emerging technology in it. In case of libraries, digital libraries have emerged with the task of digitization, storage, access, digital knowledge mining, digital reference services, and electronic information services to its technically advanced users.

As the library evolves into the digital library, librarians have been considering how to adjust services to the new environment and new information needs. The trend and change in the information related field especially in relation to the collection, processing, storing dissemination of information resulted into

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the evolution of libraries into digital libraries. Digital library is generally called a global virtual library. Digital libraries are libraries which have a number of machine readable publications and facilities for remote access to several databases. The main concept of digital libraries is to share the resource globally for providing right information to the right user at the right time. It provides information directly to the users in accordance to the needs of individuals with interests in various fields across network. The advent of digital library has made an impact on the role of library and information profession as well as users of information. Digital library occupies less space, needs less manpower to manage and therefore is cost effective.

## **2. DIGITAL LIBRARY**

The “Digital” word means that all knowledge is divided into two digits the binary string of 0s and 1s that make up the genetic code of data. Libraries store materials in electronic format and access the same format. The concept of digital libraries has appeared ‘libraries without wall’ (Dabas, 2008).

A definition of digital libraries is from Digital Library Federation (1999) “Digital Libraries 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 works so that they are readily and economically available for use by a defined community or set of communities.”

According to NSF/ARPA/NASA Digital library initiatives, (FY 1994) states, “Information sources accessed via the internet are ingredients of a digital library. Today, the network connects some information sources that are a mixture of publicly available (with or without change) information and private information shared by collaborators. They include reference volumes, books, journals, newspapers, national phone directories, sound and voice recordings, images, video clips, scientific data (raw data streams from instruments and processed information), and private information services such as stock market report and private newsletters. These information sources, when connected electronically through a network, represent important components of an emerging universally accessible, digital library.”

According to Duguid, Paul, (1997) “The concept of a digital library is not merely equivalent to a digitized collection with information management tools. It is rather an environment to bring together collections, services and people in support of the full life cycle of creation, dissemination, use and preservation of data, information and knowledge.”

According to Gladney, H.M., et.al (1994) “A digital library service is an assemblage of digital computing, storage and communications machinery together with the software needed to reproduce emulates and extend the services provided by conventional libraries based on paper and other material means of collecting, storing, cataloguing, finding and disseminating information.”

A working definition of “digital library” as we assume that digital libraries are libraries with the same purposes, functions, and goals as traditional libraries collection development and management, subject analysis, index creation, provision of access, reference work, and preservation. A narrow focus on digital formats alone hides the extensive behind-the-scenes work that libraries do to develop and organize collections and to help users find information. (Bansal, 2012).

“Digital libraries can exist without a virtual library but virtual libraries cannot exist without digital libraries.” A virtual library provides remote access to digital collections such as electronic documents, digitized pictures, sound, and video. The Digital Library Federation defined digital libraries as:

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