

Chapter 8

Digital Library Initiatives in India

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ABSTRACT

Digital libraries play an important and indispensable role in educational and research development of higher educational institutions such as colleges, universities, and institutes of an academic and research nature. The aim of the digital library is to provide instant access to digitized information and consists of a variety of information sources, paper to paperless including multimedia. Digitization implies conversion of documents in text, sound, graphical, or pictorial form into the language of digits (zero and one). Once the information sources are available in digital form, they can then be accessed, distributed, and transmitted easily in almost no time with no cost to the end-users over the global information network. It not only facilitates the library functions but also saves the time, strength, and energy of the users. A databank of digital cultural heritage from libraries, archives, and museums has been established with online service for national and worldwide users. The chapter highlights some features of digital libraries and the Indian Scenario of Digital Libraries.

INTRODUCTION

Digital libraries are an essential part of the information infrastructure of the 21st century. They have revolutionized the way of storing, retrieving, and expanding information and knowledge in developed countries with their multiple features. Digital Libraries promise new societal benefits, giving people access to a diverse source of knowledge at any time from anyplace in the world. The development of any society is directly

dependent upon the extent of adoption of a changing environment (Varniene & Daugiala, 2007). Some countries recognized the key development factor of Digital Libraries and started to adopt the new technologies of Digital Libraries and succeeded in implementing them in their traditional library systems (McCray & Gallagher, 2001). The communities of countries to reap the benefits of Digital Libraries as a major source of international development, they will have to integrate the development of Digital Library as a strategic factor

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in their Information Technology and Development strategy, and providing right information to the right users at the right time has been the motto of information professionals. Today, the development of digital libraries is fast picking up both in developed and developing countries using both commercial and open source software. This has changed the way in which information is being delivered to end users by the libraries.

Libraries all over the world are undergoing transformation, especially owing to the development in information and communication technologies. Traditional libraries are changing to digital libraries and new libraries that are being set up are increasingly of the digital kind. As a result, there is widespread interest, and consequently, a lot of research and development activities are being carried out in this area world over. In India, a number of institutions are also in the process of setting up digital libraries and many scholars and practitioners are conducting research on digital libraries.

DEVELOPMENT OF DIGITAL LIBRARY

The concept of Digital Library has been evolving since the inception of the Internet. As the World Wide Web became a universal means for wide areas' interconnection to information (Benejelloun, 2007), Digital Libraries emerged as the best way to allow organized collection of information that can be retrieved remotely through online networks (Ranjita & Sophiarani, 2008). The term Digital Library, also called Virtual Library or Electronic Library, integrates two different concepts: Digital, which refers to information presented in a digital format, and library, which refers to the total mechanisms of traditional libraries for obtaining access to, storing, organizing, and delivering information. Digital Libraries help users take advantage from the Information Communication Technologies to have access to integrated electronic resources

that include databases, books, electronic journals, multimedia files and everything that can be digital and stored.

The development of Digital Libraries is recent and has been retarded because of the world's inability and resistance to move away from the print technologies (Xiaolin, 2005). However, the hypertext capabilities of the Internet and its client-server architecture acted as a catalyst for the growth of Digital Libraries. They offered relevant mechanisms for linking related documents and transmitting data in a form that is searchable and deliverable across the Internet, whereas documents were able to be located in many different places, and yet searchable through a single mechanism.

DEFINITIONS

A digital library to be an electronic collection or virtual resources, which may also be available elsewhere. A digital library may allow either online or offline access to the elements it organizes and houses, and may include multimedia as well as multilingual data.

Borgman further opined that the first research-oriented definition of digital libraries came in 1992 when the phrase 'electronic library' was used. The phrase 'electronic library' is now used as digital library (Chen, 2003).

Rosenberg defined digital library as one where users access resources by electronic means, and where information is delivered to users electronically.

Gladney et al. defined the digital library as

a digital library is an assemblage of digital computing, storage and communications machinery together with the content and software needed to reproduce, emulate and extend the services provided by conventional libraries based on paper and other material means of collecting, cataloguing, finding, and disseminating information (Ambati, Sankar, Pratha, & Jawahar, 2005).

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