Chapter 10
Digital Library and Repositories: An Indian Initiative

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ABSTRACT

This chapter discusses digital libraries and repositories. The purpose of this research is to identify digital libraries and repositories in India available in the public domain. It highlights the state of digital libraries and repositories in India. The digital libraries and repositories were identified through a study of the literature, as well as internet searching and browsing. The resulting digital libraries and repositories were explored to study their collections. Use of open source software especially for the creation of institutional repositories is found to be common. However, major digital library initiatives such as the Digital Library of India use custom-made software.

INTRODUCTION

Nowadays, libraries exist in many forms and are of many types. Recent developments in information and communication technologies (ICT), especially computers and the internet, have brought significant changes in the way we generate, distribute, collect, access and use information. Digital technologies and their applications have also come into every part of our daily life. It is accepted that we are now living in a digital world.

The history of digital libraries can be characterized as short and volatile. The digital library is a new form of managing the knowledge record and cultural heritage. Thousands of digital collections have been, and will continue to be, created around the world. Large amounts of research effort and money have been devoted to digital library research throughout the world over the past decade (Chowdhury and Chowdhury, 2003; Arms, 2000). Digital collections

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such as institutional repositories, cultural heritage curated digitally and a variety of versions of digital libraries are blooming worldwide. However, many organizations have found that the pool of information professionals with the expert knowledge and skills to create and manage digital collections is very small. But there is still shortage of supply, a lack of information professionals with the right combination of skills, for specialist areas such as digital librarians (Fisher, 2002; Wilder, 2002). There an urgent need to develop suitable education programs to train and equip new librarians and information professionals who will be capable and comfortable in working in a digital environment. Digital library education can be inducted as the programs or courses specific to the training and educating of students who will be able to build and manage digital libraries after graduation. The combination of social trends and technology is here the push for educational developments for creation and management of digital libraries (Saracevic and Dalbello, 2001).

THE GLOBAL PICTURE

These days, digitization is taking place on a global scale. All organizations, large and small, around the world from many different sectors (museums, archives, libraries, art galleries, government and commercial) are creating or converting resources into digital form for a wide range of patrons. Many of these projects have made significant contributions to preserve and increase access to the knowledge / cultural heritage of a nation.

Developments in digital technologies and interoperability of systems enable cross-sectoral participation and harvesting of metadata, while the internet provides the delivery mechanism. National and overseas major funding opportunities for digitization have encouraged organizations to create digital material and convert existing material into digital format.

HISTORICAL OVERVIEW

Digital libraries have a short yet turbulent and explosive history. A number of early visionaries, such as Lickhder (1965), had a notion of libraries in the future being highly innovative and different in structure, processing, and accessing information through heavy applications of technology. But, besides visionary and futuristic discussion and highly scattered research and development experimentation, nothing much happened in the next two decades. By the end of 1980s digital libraries (under various names) barely a part of the landscape of librarianship, information science or computer science. But just a decade later, by the end of 1990s, research, practical developments and general interest in digital libraries exploded globally.

Borgman's (1999), discussion of computing vision for digital libraries is a good beginning and understanding the forces and players involved.

Digital Library?

A digital library is a computer based system for acquiring, storing, organizing, searching, and distributing digital materials for end user access. It is not network based but designed to attach a network. A digital library is not just a collection of material in electronic form; it includes a browser interface and perhaps a virtual space and society. It requires less space and the data can be made available through communication networks to anyone, anywhere, while facilitating searches with speed. The digital library is not a single entity and as such it is linked to the resources of many such collections.

The term digital library was used first time in print may have been in 1988 report to the Corporation for National Research Initiatives. The term digital library was first popularized by the NSF / DARPA / NASA Digital Libraries Initiative in 1994.