

## DIGITAL LIBRARY FOR THE GROWTH OF LIBRARY AND INFORMATION SCIENCE

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### ABSTRACT:

*This article is discusses an impact of digital library for the growth of library and Information Science and also highlighters on Characteristics of Digital Libraries .This is the era of automation and technology. All the libraries are in the process of automation .The development in technology have facilitated the access and utilization of knowledge more effectively than before. Knowledge environment facilitates collaborative knowledge building and decision making. Development in the information and communication technology have enabled libraries to provide access to all and also bridge the gap between the local, the national and the global knowledge .*

*Digital libraries are a set of electronic resources and associated technical capabilities for creating , searching , and using information. They are an extension and enhancement of information storage and retrieval systems that manipulate digital date in any medium and*

*exist in distributed networks. Almost all digital libraries are made up of a number of virtual elements including the internet and intranets, access to electronic publications; electronic document delivery; resource sharing cooperative developments; and , end-user services.*

**KEYWORDS:** *Digital Library, Knowledge society, Information Science.*

## **INTRODUCTION:**

In the 21<sup>st</sup> Century a new society is coming into existence where knowledge is the primary factor of productions compared to capital and labor. In knowledge society, human activity as a major creative force and center of economy. The developments in technology have facilitated the access and utilization of knowledge more effectively than before. Knowledge environment facilitates collaborative knowledge building and decision making. Development in the information and communication technology have enabled libraries to provide access to all and also bridge the gap between the local, the national and the global knowledge <sup>[1]</sup>

**By William Arms: *Digital Libraries* :**

"An informal definition of a digital library is a managed collection of information, with associated services, where the information is stored in digital formats and accessible over a network. A crucial part of this definition is that the information is managed. A stream of

data sent to earth from a satellite is not a library. The same data, when organized systematically, becomes a digital library collection. Most people would not consider a database containing financial records of one company to be a digital library, but would accept a collection of such information from many companies as part of a library. Digital libraries contain diverse information for use by many different users. Digital libraries range in size from tiny to huge. They can use any type of computing equipment and any suitable software. The unifying theme is that information is organized on computers and available over a network, with procedures to select the material in the collections, to organize it, to make it available to users, and to archive it."

There are many definitions of a "digital library." Terms such as "Electronic Library" and "Virtual Library" are often used synonymously. The elements that have been identified as common to these definitions are:

- The digital library is not a single entity;
- The digital library requires technology to link the resources of many;
- The linkages between the many digital libraries and information services are transparent to the end users;
- Universal access to digital libraries and information services is a goal;
- Digital library collections are not limited to document surrogates: they extend to digital artifacts that cannot be represented or distributed in printed formats.

The definition used initially for the classes rested heavily on the IMLS model and also aimed to reaffirm the connection between digital and traditional bricks-and-mortar libraries with predominantly paper collections: A “digital library” is fundamentally a resource that reconstructs the intellectual substance and services of a traditional library in digital form. Digital libraries consist of digital contents (which are sometimes but not necessarily text-based), interconnections (which may be simple links or complex metadata or query-based relationships), and software (which may be simple pages in HTML or complex database management systems). A single, simple, stand-alone web page is probably not a digital library in any meaningful sense, any more than a single page or a single book is a traditional library. A mass of raw data such as comes from the Hubble telescope is probably also not a digital library, though its contents arguably belongs in one. Digital libraries are not replacements for traditional libraries. They are rather the future of traditional libraries, much as medieval manuscript libraries simply became a specialized and much revered part of the larger print-based libraries that we have today (Seadle, 2006).<sup>[2]</sup>

### **Why Digital Libraries ?**

Growth and development of libraries and application of information Science have renamed the traditional libraries though functioning, management and services as “Automated Library”, “Electronic Library”, and “Digital Library”. The growth and

popularity of “Digital Library” has been primarily for three reasons’) Access: the unlimited access to information resources by the users anywhere, any time and any format, B) Content: Variety and huge quantity of contents, C) Cost: Eliminating duplication of money, manpower and material .

Digital libraries extend traditional library services and offer many new options. Like any library, they should feature a high degree of selection of resources that meet criteria relevant to their mission , and they should provide services that facilitate use of the resources by their target community.

What do digital libraries offer users that cannot be found in traditional libraries? First and foremost, they are often able to provide access through distributed networks to a range of information that would prove impossible for even the greatest of the world’s traditional libraries. Also high on the list of attractions for many users is the opportunity to consult digital libraries from multiple locations.

Overcoming the digital divide is a challenge that beings faced in may countries. Librarians ,Scholars and educators in many countries feel they have a role to play in bridging the digital divide by creating appropriate digital libraries and by ensuring that their users are information literate .<sup>[4]</sup>

**SCOPE OF DIGITAL LIBRARY:** the term is how broad a view should be taken of the digital library. Does it encompass all of information management or is a more tightly constrained view appropriate? In this document, and for the purposes of the deliberations of the WG, we choose to take a very broad view. This is driven by the recognition that to do otherwise would require setting boundaries that are fairly artificial.

The term "Digital Library" has a variety of potential meanings, ranging from a digitized collection of material that one might find in a traditional library through to the collection of all digital information along with the services that make that information useful to all possible users. As the WG discussed possible scenarios and challenge problems to drive our discussion of metrics, we found the need to come to at least a loose agreement on the scope of the digital library. This document is intended to serve that purpose.

### **CHARACTERISTICS OF DIGITAL LIBRARIES:**

Recent developments in library technology and practices have helped bring some of Lancaster 's paperless society to reality. The effects that digital technology has brought include: **(Jebaraj and Deivasigimani 2003)** Digital library collections contain permanent documents. The digital environment will enable quick handling and/or ephemeral information. Digital libraries are based on digital technologies. The assumption that digital libraries will contain only digital materials may be wrong. Digital libraries are often used by

individuals working alone. The physical boundaries of data have been eliminated. Support for communications and collaboration is as important as information-seeking.

Compression of data storage is enabling publication and storage of digital information. Telecommunications is facilitating the storage, retrieval, use, and exchange of digital resources.

### **1. Function of Digital Library:**

Access to large amounts of information to users wherever they are and whenever they need it.

2. Access to primary information sources.
3. Support multimedia content along with text
4. Network accessibility on Intranet and Internet
5. User-friendly interface
6. Hypertext links for navigation
7. Client-server architecture
8. Advanced search and retrieval.
9. Integration with other digital libraries.

## **2. Usability of Digital Library**

Expedite the systematic development of procedures to collect, store, and organize, information in digital form.

1. Promote efficient delivery of information economically to all users.
2. Encourage co-operative efforts in research resource, computing, and communication networks.
3. Strengthen communication and collaboration between and among educational institutions.
4. Take leadership role in the generation and dissemination of knowledge.

## **3. Accessibility of Digital Library**

### **A. Planning for Digital Library**

A digital library committee should be formed to plan for its creation and maintenance. The members must be from various library departments, and, if necessary, consultants can be hired. There are at least two ways of developing a digital library: converting a traditional library into a digital library, and direct development of a digital library.



Planning includes:

- IT Infrastructure
- Digitization
- Access
- Staffing
- Furniture, equipment, and space
- Services
- Funding

B. Creation of Digital Resources

- Database of digital material that is open to all users over the campus-wide LAN.
- High bandwidth Internet connectivity
- Focus selectively on acquiring digital resources
- Electronic journals, and gradual elimination of print subscriptions
- Licensed databases
- Creation of local digital content available within the university.<sup>[3]</sup>

## **CONCLUSION:**

Digital libraries are in fact probably too young to define in any permanent way, but how we think about them will have a great deal to do with how future generations of librarians conceptualize their mission in the digital world. A digital library build in the image of the NSF definition for the Digital Library Initiative projects may turn out to be a technological marvel, but if it fails to organize meaningful collections or to provide access to information intelligible to end-users, it fails to meet key tests in the student definitions. More importantly, if digital libraries fail to carry out that vital mission to preserve information resources for future generations, they fail in an historically well-recognized task for all major research libraries.

Student definitions are not, of course, quite the same as the carefully-weighted utterances of active scholars and professionals. But these students see the problems with fresh eyes and live in the digital world. We who have spent years building up digital library resources may be too close to our own modest works to put them in perspective or even to know what we have (or have not) created.

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