Digital Library: The Boon of Information Era

Digital libraries depend on people and cannot be introduced faster than people and organizations can adapt. This applies equally to the creators, users and the professionals who support them. The relationships amongst these groups are changing. With digital libraries readers are more likely to go directly to information without visiting a library building or having any contact with a professional intermediary. Authors carry out more of preparation of a manuscript. Professionals need new skills and new training to support these new while others can be taught. Since librarians have a career path based around schools of librarianship, these schools are adapting their curriculum but it will be many years before the changes work through the system.

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Introduction and Background Digital Library:

"Digital Library" has a multiplicity of probable 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 information need and useful to all possible users. Nowadays library material is include information stored on physical carriers such as micro film, video, tape CD ROM. DVDs etc. As the WG discussed possible scenarios and challenge, problems to drive our discussion of matrices, 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.

Much of the question about the scope of the term is how broad a view should be taken of the digital library. Does it encompass all of information management or is 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 structure of this document is as follows. In the first section, a brief definition of the term "Digital Library" is given, as a set of characteristics. The remainder of the document elaborates each of those characteristics.

Concept of Digital Library:

(i) A digital library is an electronic library: Information is acquired, store, and retrieved in digital form (Modern form).

(ii) Digital Library is a group of interlinked workstations connected to high speed networks.

(iii) Digital Library includes text, photographs, drawings, artwork, numeric data, and images with sound.

Definitions: There are many definitions of a 'Digital Library' terms - such as 'Electronics Library' an 'Virtual Library' are often used synonymously. The elements that have been identified as common to these definitions are:

According to Wiederhold a digital library is popularly viewed as an electronic version of a library where storage is in digital form, allowing direct communication to obtain material and copying it from a master version.

According to Oppenheim and Smithson a digital library is: "An information service in which all the information resources are available in computer processable form and 'i.e functions of acquisition, storage, preservation, retrieval, access ad display are carried out through the use of digital technologies.'

Components of the Digital Library:

(i) Gateway registry/metadata.

(ii) Building content and tools (TULIP, PEAK, Core Journal, Text initiatives).


(iv) Production services.

(v) Conversion and preservation.

(vi) Research and development.

(vii) Requirement for digital libraries.

Aims, Objectives & Goals of Digital Library:

(i) To provide library and information services to its users, anywhere, anytime, anyplace (24x7).

(ii) Better utilization of the resources as the Digital Library is time and space independent.
(iii) Share the resources globally.
(iv) To increase the access both online and offline.
(v) To preserve the documents and manuscripts.
(vi) To collect, store organize, access, information in digital form.
(vii) Better and value added library services.
(viii) The overall objective is to provide efficient, economic, qualitative, and pin pointed services.
(ix) To have the maximum storage of information and retrieve information.
(x) Space saving.
(xi) Resource sharing through networks.
(xii) To provide remote logon facility.

Impact of Digital Libraries:
(i) Improved use of Information.
(ii) Reeducation of Digital Library.
(iii) Brings information to the user.
(iv) Improved searching & manipulation.
(v) Improved facilities for information sharing.
(vi) Timely access to information.

Need of the Digital Library:
Information Explosion: There is explosion of information generation and publication. Searching problem in traditional libraries: In traditional libraries, it is not easy to find the pinpoint information to the right user at the right time.

Low Cost of Technology: Technology needed for digital library is decreasing and efficiency is increasing.

Environmental Factors: The use of electronic resources decreases the paper publishing and it automatically saves the trees.

New Generation Needs: Today users are demanding information in electronic form and minimum time.

Features of the Digital Library:
(i) It focuses on providing access to primary or complete information not merely indexes.
(ii) It supports multimedia content.
(iii) It Provides User friendly interface.
(iv) It Provides access to very large collection of information.
(v) Network accessible.
(vi) It supports the advance search & retrieval.
(vii) Enable link representation to local, external object.
(viii) Clearly separates the user interface by employing client server architecture.

Merits of the Digital Library:
(i) Information Retrieval Cost.
(ii) Multiple Access.
(iii) Networking No Physical Boundary.
(iv) Preservation and Conservation.
(v) Space.
(vi) 24 x 7 Service.

Demerits’ of the Digital Library:
(i) Initial Cost Is High.

References: