

DIGITAL LIBRARY

A **digital library** is a special library with a focused collection of digital objects that can include text, visual material, audio material, video material, stored as electronic media formats (as opposed to print, microform, or other media), along with means for organizing, storing, and retrieving the files and media contained in the library collection.

Digital library are those libraries which are fully automated and all resources are in digital form and the access to the information available is provided to a remote user as well as conventional user electronically.

It is repositories of institutional books, papers, these and other materials. It is immensely in size and scope, maintained by individuals, organizations, or academic institutions. The digital content may be stored locally, or accessed remotely via computer networks. An electronic library is a type of information retrieval system.

Key Components

- Geographically Distributed Digital Information Collection
- Geographically Distributed Users.
- Information Represented by a Variety of Digital Objects.
- Large and Diverse Collections.
- Seamless Access.

Characteristics of Digital Libraries

- The storage of information in digital form.
- Usage of communication networks to access and obtain information.
- Copying either by downloading or online/off line printing from master file.

Objectives

- To capture, Store, Manipulate, and Distribute Information.
- To Have Large Number of Databases in CDs.
- To Provide Facility for Networking and Resources Sharing.
- To Access Machine Readable National and International journals
- To Digitize the Documents for Preservation and for Space Saving.

Function of Digital Libraries

- Provide Access to a very large Information collection.
- Support Multimedia Content.
- Network Accessible.
- Provided User-friendly Interface.
- Unique Referencing of Digital Objects.
- Support Advance Search and Retrieval.
- Information is Available for very Long Time.

It is two types:

- Complete digital library
- Hybrid library (have both physical and electronic collection)

Software implementation

- Institutional repository software is designed for archiving, organizing, and searching a library's content.
- Popular open-source solutions include
 - DSpace
 - EPrints
 - Digital Commons
 - Fedora Commons-based systems Islandora
 - Hydra

Copyright and licensing

- Digital libraries are hampered by copyright law.
- The republication of material on the web by libraries may require permission from rights holders.
- The Digital Millennium Copyright Act of 1998 was an act created in the United States to attempt to deal with the introduction of digital works.

Factor Responsible for Emergence of Digital Libraries

- Well-informed and Computer Literate User.
- Lack of User Concerned Material.
- Lack of Appropriate Library Budget.
- To Provide Access to Resources.

Advantages of digital library

- Easy and rapidly accessing books, archives and images
- No storage space problem
- Maintenance cost is much lower (money paying to staff, book maintenance, rent etc.)
- No physical boundary
- Round the clock availability (you can access 24 hours)
- Multiple access (same resources can be access by number of user and institutes)
- Information retrieval (user use any search term such as word, phrase, title, name, subject for search entire collection)
- Preservation and conservation (long-term preservation)
- Space
- Added value (digital document don't have stain and discoloration problems)

- To provide Facility for Downloading and Printing.
- Providing Universal Accessibility.

Disadvantages

- User authentication for access to collections
- Copyright
- Digital preservation (see above)
- Equity of access (see digital divide)
- Interface design
- Interoperability between systems and software
- Information organization
- Inefficient or non existent taxonomy practices (especially with historical material)
- Training and development
- Information Accuracy.
- Compatibility of Hardware/Software.

WORLD DIGITAL LIBRARY

Launched in 2009, the World Digital Library (WDL) was a project of the U.S. Library of Congress, with the support of UNESCO, and contributions from libraries, archives, museums, educational institutions, and international organizations around the world. The WDL sought to preserve and share some of the world's most important cultural objects, increasing access to cultural treasures and significant historical documents to enable discovery, scholarship, and use.

After more than 10 years of operation, WDL is now celebrating its success as a world-wide collection of cross-cultural treasures by transitioning into a sustainable home for perpetual access on the Library of Congress's main website. This transition is expected to be completed by the end of calendar year 2021, providing a view these resources as a coherent collection, while allowing the WDL material to benefit from ongoing enhancements.

The Collection

The materials collected by the WDL make it possible to discover, study, and enjoy cultural treasures and significant historical documents including books, manuscripts, maps, newspapers, journals, prints and photographs, sound recordings, and films.

Content in the WDL was selected by partner institutions in accordance with guidelines set by the WDL Content Selection Committee. Content was chosen for its cultural and historical importance, with due regard to recognition of the achievements of all countries and cultures over a wide range of time periods.

Books, manuscripts, maps, and other primary materials on the site are presented in their original languages. More than 100 languages are represented in the WDL collection, including many lesser known and endangered languages.

NATIONAL DIGITAL LIBRARY OF INDIA (NDLI)

National Digital Library of India (NDLI) is a virtual repository of learning resources which is not just a repository with search/browse facilities but provides a host of services for the learner community. It is sponsored and mentored by Ministry of Education, Government of India, through its National Mission on Education through Information and Communication Technology (NMEICT). Filtered and federated searching is employed to facilitate focused searching so that learners can find the right resource with least effort and in minimum time. NDLI provides user group-specific services such as Examination Preparatory for School and College students and job aspirants. Services for Researchers and general learners are also provided. NDLI is designed to hold content of any language and provides interface support for 10 most widely used Indian languages. It is built to provide support for all academic levels including researchers and life-long learners, all disciplines, all popular forms of access devices and differently-abled learners. It is designed to enable people to learn and prepare from best practices from all over the world and to facilitate researchers to perform inter-linked exploration from multiple sources. It is developed, operated and maintained from Indian Institute of Technology Kharagpur.

Libraries are the storehouse of knowledge as they maintain the book and other knowledge resource available - mostly in printed form. However, with the advent of digital technology and Internet connectivity, the library scenario is changing fast. Digital technology, Internet connectivity and physical content can be dovetailed resulting in Digital Library. Data available in physical form has been preserved digitally in Digital Library. Digital Libraries have the ability to enhance access to information and knowledge. They also Bridge barriers of time and space.

In the past initiatives have been taken by different Ministries / Departments / organizations for digitizing and preserving data available in physical form. However, this activity has been restricted mostly in the area of the work / interest of the organization. Department of Electronics and Information Technology (DeitY) too has in the past, supported projects in the area of Digital Library Initiatives. The initiatives have been essentially of two types:

- Setting up of Mega Centers and Scanning Centers in coordination with Indian Institute of Science, Bangalore and in collaboration with Carnegie Mellon University, USA. Under the collaborative management, scanners for these centers were provided by Carnegie Mellon University, USA, under its Million Book Universal Digital Library Programme. Indian Institute of Science, Bangalore is coordinating this Programme under the guidance of Professor N. Balakrishnan, Associate Director. DeitY provided financial support for computers, training, manpower, tariff etc.
- Digitization with the full financial support from Department of Electronics and Information Technology

The digital data for 5.5 lakh of books have been generated by these scanning centers under this activity. The data has been transferred to National Digital Library, IIT Kharagpur and web enabled under the umbrella of MHRD with URL as <https://ndl.iitkgp.ac.in/>