

Study of Selected Digital Libraries at National level

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Abstract

This study mainly describes various aspects of Digital Library its contents, components, characteristics, emerging technologies in Digital library. This study also emphasizes on its genesis, need, digitization process, technical issues, advantages, problems and their future. Today there are umpteen numbers of Digital Libraries worldwide; some of the important Digital Libraries in India have been highlighted here. Major ten Digital libraries were analysed in order to study web pages like authority statement, currency of information included, facilities provided and content coverage links. Points are assigned for grading the Digital libraries.

Keywords – Digital library, Digital Library Projects, India, National.

Introduction

Digital Libraries are electronic libraries in which large number of geographically distributed users can access the contents of large and diverse repositories of e-objects. E-objects include networked text, images, maps, sounds, and videos, catalogues of merchandise and scientific business and Government datasets. They also include hypertext, hypermedia and multimedia compositions. The important characteristics of Digital Libraries are the storage of information in digital form, direct usage of communication networks for accessing and obtaining information and copying by either downloading or online/offline printing from a master file. Digital Library enable managing large amounts of data ,preserve unique collections, provide faster access to information, facilitate dealing with data from more than one location and enhanced distributed learning environments. They also help to perform searches that are manually no feasible or practical and offer to protect content owner's information.

Objectives of the Paper

1. This study work particularly aims to consolidate the Information on digital library and digital library initiatives at national level.
2. To know the scenarios of digital libraries at national level
3. To find out the facilities provided by digital libraries to their users.
4. To Study the Web Pages of digital libraries.

Methodology: The investigative method is followed which further includes surfing the internet on Digital Libraries at National levels. Each Digital Library is accessed from the internet and collects the data regarding the digital resources available, services rendered and number of records available. The Home pages of Digital Libraries were also taken for study.

Limitations: The study is limited to surfing the internet for searching the related websites on digital libraries. The study is restricted to selected digital libraries. Ten digital libraries at National level were analyzed

Major Digital Libraries in India

Digital Library of India: The mission is to create a portal for the Digital Library of India which will foster creativity and free access to all human knowledge. The availability of online search allows users to locate the information.

National library of India: The National Library, India is the largest library in the country. It is an institution of National importance under the 'Department of Culture, Ministry of Tourism & Culture, and Government of India'.

INFLIBNET : Information and Library Network (INFLIBNET) Centre is an autonomous Inter-University Centre of the University Grants Commission (UGC) of India. It is a major National Programme initiated by the UGC in 1991 with its Head Quarters at Gujarat University Campus, Ahmedabad. Initially started as a project under the IUCAA, it became an independent Inter-University Centre in 1996.

Raman Research Institute The Raman Research Institute, Bangalore was set up in 1948 by Dr. C V Raman. Initially, the Institute was involved in conducting research in various areas of physics that was of interest to Dr. Raman. Preserve the printed material produced in relevant information quickly and reliably thus enhancing student's success in their research endeavors.

Nalanda Digital Library: The Library at National Institute of Technology, Calicut, Kerala State, India decided to go digital in 1997. The library started by automating the routine operations of the Library by installing a Library Management Software and by Bar Coding our entire collection of books and back volumes. And then, set up a Digital Library.

Vidyanidhi Digital Library : Vidyanidhi (Meaning 'Treasure of Knowledge' in Sanskrit) is India's premier Digital library initiative to facilitate the creation, archiving and accessing of doctoral theses. Vidyanidhi is an information infrastructure, a portal of resources, tools and facilities for doctoral research in India.

ERNET: ERNET (Education and Research Network) has made a significant contribution to the emergence of networking in the country. It practically brought the Internet to India and has built up national capabilities in the area of net-working, especially in protocol software engineering.

Indian Institute of Science, Bangalore

Indian Institute of Science was Conceived as a research Institute or University of research by Jamsteji Nasserwanji Tata in the Twilight Years of the 19th century. A long Period of almost 13 years was to elapse from the initial conception in 1896 to the birth of the institute on March 27,1909.

Kalasampada: Kalasampada-Indira Gandhi National Center for the Arts (IGNCA) is a Digital Library having resources of Indian Cultural Heritage. The Main Objective of this project is to enhance the accessibility of Indian Cultural resources using digital technology.

Electronic Theses and Dissertations Digital Library : Indian Institute of Technology Bombay has established electronic submission of theses and dissertations (ETD) since 1999-2000, in addition to its printed copy, the Central Library maintains ETD server and help students in online submission at URL. In addition to that Central Library (IITB) digitized abstracts of Ph.D. theses submitted to the institute and made it available on Internet with bibliographic details, using Greenstone Digital Library Software.

The major ten Digital Libraries were analyzed in order to study the parameters like resources available, services provided, Authority Statement, contact details of the authority, currency of the information included, content coverage links on their homepages.

Table-1: Major Digital Library projects at National Level

Digital Libraries at National Level	
1	Raman Research Institute
2	Nalanda Digital Library
3	Vidyanidhi Digital Library
4	ERNET
5	INFLIBNET
6	Kalasampada
7	Digital Library of India
8	National Library of India
9	Librarian's Digital Library
10	Electronic Theses and Dissertation Library (ETD)

Table 2: Resources available in Digital Libraries

S.No.	Name of the Digital Library	Resources available in Digital Libraries
1	Digital Library of India	Books, collections, Journals, news papers, Manuscripts.
2	National library Of India	Collections in different languages, Indian, English & foreign languages, Rare Books, Science & research, Indian official document, Foreign official document, News papers & Periodicals, Manuscripts, Maps & Microforms.
3	Raman Research Institute	Books, Journals, , Slides, Audio videos Tapes& CD- ROMs, Theses
4	INFLIBNET	-----
5	Nalanda Digital Library	Books, Journals, General Book bank, Text books, Special collections,WBB, References.
6	Vidyanidhi Digital Library	Indian Theses, Databases, Indian ETD Collections, Indian Expert databases Tools & Resume.
7	ERNET	Journals, Journal gate, Astronomy information, Annual reviews, Digital databases, Health information publications,
8	Indian Institute of Science	Access guidelines, New trial e-resources
9	Kalasampada	Digital images,videos,Recording, papers & essays, Audio recording, research, bibliographies, Manuscripts
10	Electronic These & Dissertation Digital library	E-Theses and Dissertation, Doctoral theses, Master Dissertation

Table 3: Services provided by Digital Libraries

S.No.	Name of the Digital Library	Services provided by Digital libraries
1	Digital Library of India	No option
2	National Library of India	Reading room services,lending,Inter library loan, bibliographies services, Reprographies services for children, training & guidance.
3	Raman Research Institute	Circulation,Reprographies,borrowing daily, current awareness services, literature search online facility
4	INFLIBNET	Document delivery, Reprographic databases-access ,information services
5	Nalanda Digital Library	Books on loan, Reference services,ILL,CAS
6	Vidyanidhi Digital Library	Manuals, tool kits for Theses creation self archiving and publishing tools, Free access to software
7	ERNET	VSAT,Leased links Radio link, Dial up UUCP
8	Indian Institute of Science	Reference services, CAS, ILL, Xerox, Document Delivery, Interaction Services
9	Kalasampada	-----
10	Electronic Theses & Dissertation Digital library	-----

Table 4: Authority details of Indian Digital Libraries on Home pages

Sr. No.	Name of Indian digital libraries	Statement of authority	Credentials	Maintenance authority	Copyright Statements	Points Gained
1	Digital library of India	Yes	No	Yes	Yes	3
2	National Library of India	Yes	Yes	Yes	Yes	4
3	Raman Research Institute	No	No	No	No	0
4	INFLIBNET	Yes	Yes	Yes	Yes	4

5	Nalanda digital library	Yes	No	No	No	1
6	Vidyanidhi digital library	Yes	Yes	Yes	Yes	4
7	ERNET	Yes	Yes	Yes	No	3
8	Indian Institute of Science	Yes	Yes	Yes	Yes	4
9	Kalasampada	Yes	Yes	Yes	Yes	4
10	Electronic Theses and dissertations digital library	Yes	Yes	Yes	No	3

Table 4a: Analysis of authority details of Indian digital libraries

Sr. No.	Criteria	No. of digital libraries having facility
1	Statement of authority	9 (90%)
2	Credentials	7 (70)%
3	Maintenance authority	8 (80)%
4	Copyright statement	6 (60)%

Authority contact details

In analysis of authority details of national digital libraries. It is analyzed that out of 10 national digital libraries 8 digital libraries have statement of authority, 6 digital libraries have credentials on their home pages in Indian digital libraries. Statements of maintenance authority were stated in 7 digital libraries of India and 7 International libraries. 5 digital libraries in India have stated copyright statement.

Table No. 5: Authority Contact details of Digital Libraries India

Sr. No.	Name of Digital Libraries	Contact links	Address	E-mail	Phone	Fax	Points gained
1	Digital Library of India	No	yes	No	No	No	1
2	National library of India	Yes	Yes	Yes	No	No	3
3	Raman Research Institute	Yes	Yes	Yes	Yes	Yes	5
4	INFLIBNET	Yes	Yes	Yes	Yes	No	4
5	Nalanda Digital library	Yes	Yes	Yes	No	No	3
6	Vidyanidhi Digital Library	Yes	No	Yes	No	No	2
7	ERNET	Yes	Yes	No	No	No	2
8	Indian Institute of Science	Yes	Yes	Yes	No	No	3
9	Kalasampada	Yes	Yes	No	No	No	2
10	Electronic These and dissertation Digital Library	Yes	No	Yes	No	No	2

Table 5a: Analysis of authority contact details of digital Libraries India

S. No.	Criteria	No. of Indian Digital Library having the facility
1	Contact Links	9(90%)
2	Postal Address	8(80%)
3	E-mail	8(80%)
4	Phone No.	2(20%)
5	Fax No.	1(10%)

It is analyzed that out of 10 Indian digital libraries 8 have contact links. 7 Indian libraries have stated postal address. 7 Indian digital libraries has mentioned about e-mail. 2 libraries in India have mentioned their phone numbers. 1 library has mentioned their fax numbers.

Currency Statement

Any one can put anything on the internet. Internet is a media which are not govern by any law or constitution. The site which is available to day on the internet may not be there tomorrow. It is necessary to observe the last update of updating the information before consulting any web documents. It has been observed the Digital Libraries provide the information about last update on their home pages.

Table 6: Currency details of Indian Digital Libraries

Sr. No	Name of Indian Digital Libraries	Last Access Date	Last update Date	Update frequency	Points gained
1	Digital Library of India	No	No	No	0
2	National Library of India	No	Yes	No	1
3	Raman Research Institute	No	Yes	No	1
4	INFLIBNET	No	No	No	0
5	Nalanda Digital Library	No	No	No	0
6	Vidyanidhi Digital Library	No	No	No	0
7	ERNET	No	No	No	0
8	Indian Institute of Science	No	No	No	0
9	Kalasampada	No	No	No	0
10	Electronic Theses and Dissertations Digital Library	No	No	No	0

Content Coverage Links

The Digital Libraries selected for the study are rich in their content when its motto is to serve the user. It should cover the information about all the major subjects. The content coverage links of these Digital libraries are analyzed during the study. The observations are reported in Table below

Table 7 Statements of contents coverage link in Indian and International Digital libraries

Sr No	Name of Digital libraries	Search engines
1	Digital Library of India	Title, Author, Subject, Year, Language, scanning centre vendor, source library, scanning location
2	National library Of India	-----
3	Raman Research Institute	-----
4	INFLIBNET	Books, serials, Theses, Search eJournals, e-Consortium, expert databases, site search Research project databases
5	Nalanda Digital Library	-----
6	Vidyanidhi Digital Library	-----
7	ERNET	Search www, Search Yahoo, Search go to, searchis.ernet, Search planetvidya
8	Indian Institute of Science	E journal search engine, NDLTD, oaister, E-book, complete planet
9	Kalasampada	-----
10	Electronic Theses & Dissertation Digital library	-----

Table- 9 Rating of Selected Digital Libraries at National level.

Sr.No	Names of Digital Libraries	Table 2	Table 4	Table 6	Table 8 and 9	Total points
1	Digital library of India	3	1	0	3	7
2	National library of India	4	3	1	0	8

3	Raman Research Institute	0	5	1	1	7
4	INFLIBNET	4	4	0	2	10
5	Nalanda Digital Library	1	3	0	4	8
6	Vidyanidhi Digital Library	4	2	0	2	8
7	ERNET	3	2	0	1	6
8	Indian Institute of Science	4	3	0	3	10
9	Kalasampada	4	2	0	1	7
10	Electronic Theses & Dissertation Digital Library	3	2	0	0	5

Table 10: Ranking of 10 selected Digital Libraries according to points gained from their home pages.

S. No.	Names of the Digital Libraries	Score
1	INFLIBNET	10
2	Indian Institute of Science	10
3	Nalanda Digital Library	8
4	Vidyanidhi Digital library	8
5	National Library of India	8
6	Digital Library of India	7
7	Raman Research Institute	7
8	Kalasampada	7
9	ERNET	6
10	Electronic Theses & Dissertation Digital Library	5

From the above Table it is observed that INFLIBNET and Indian Institute of Science scored maximum followed by 8 points gained by three above libraries.

Observations

Home pages of 10 Digital libraries were studied by using following criteria

Authority statement, Contact detail, Content coverage links, Currency statement and the following observations were drawn.

- o It has been observed that 8 Indian Digital libraries are having statement of authority on their home pages. So it is analysed that maximum number of home pages of Indian Digital libraries have indicated statement of authority on their Home pages.
- o Out of 10 Digital libraries 5 have copyright statements on their home pages.
- o It has been observed that in maximum number of home pages gives information about their contact links.
- o It has been observed that only 3 Indian Digital Libraries provide information about last update date on their home pages.
- o It has been observed that the Digital Libraries under study do not show any such page where there is no single link and the user has to use back button of the explorer to get out of that page.
- o Images are used in all Digital libraries but it has been found that the images slow down the down loading in 50% cases.
- o INFLIBNET and Indian Institute of Science scored maximum.

Conclusion Digital Library is nothing but an organized collection of digitized material accessible from a computer over a network. Fortunately most of new information created today is already in digital form and may just require conversion to formats appropriate to Digital library. Digitisation projects have been important for libraries aiming the digitization of manuscripts, theses, dissertation, special collections which are special in nature. For any Institution digitization is need of the hour. Every Libraries should Digitize their collection to provide a wide and dynamic access of their resources available to the users in effective way. Yet efforts are to be made by libraries in India and in International level also. It will provide solution to their several problems like space, preservation of old age and fragile materials, user's satisfaction, time etc.

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6(23%)

60%