

A study on the Significance of Digital Library in the information retrieval process with special reference to D space, Greenstone and Koha Library Management Softwares

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Abstract:

The modern libraries and information centers have been adopting a tremendous change in the collection, dissemination and retrieval of information. Present age is an age of information revolution. Speed, time and accuracy are to be taken into account while providing information services. Due to the increased use of web based services, the role and significance of digital library is also increasing. The present research paper examines the relevance of digital library software in the process of information retrieval system with special reference to D Space, Greenstone and Koha Library Management Software.

Key Words: Digital Library, Digital Library Management Software, DSpace, Greenstone, Koha- Information Dissemination-

Introductction:

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 digital library includes a number of search or navigation aids that both operates within that particular library and allow access to the collection of information connected by network worldwide. Embedding new technology into library services is considered as a digital library service. Digital libraries offer library services in real- time via technology. Stakeholders of libraries are now able to have access to information that previously could not be accessed easily. Also, undoubtedly, the digital environment enables library users to access the stored digital collections online via the internet for teaching, learning, and research.

Features of Digital Libraries

- Library is at the disposal of users that facilitate access of information by just push of a button.
- Information sources is digitised, compressed and stored in textual/numeric, audio, vedio,graphic form.
- Time saving device for user community
- Computer assisted search
- Geographically distributed creating the concept of world as a global village
- Alerts users based on their subject interests.

Advantages of Digital Libraries

- No Physical boundaries
- Round the clock availability
- Multiple access
- Quick and easy Information Retrieval
- Preservation and Conservation
- Space Saving
- Time saving
- Academic and Research Visibility of Authors as well as Institutions

Hardware Components

- A Computer Server (Offline /Cloud) with latest configurations
- PC s or Laptops or tablets or computer nodes connected in a LAN
- Image capture devices such as scanners, cameras etc
- Video making studios or media labs and related devices
- Uninterrupted power supply
- Uninterrupted high speed Internet Connectivity
- Printers or Output devices like headphones etc.
- LAN /WAN as per the institutional requirements.

Software Components

- Digital Library Software like D Space ,Greenstone etc.
- Operating system for example Windows/Linux etc. compatible with the Digital Library Software
- OCR Software like ABBY Fine Reader, Adobe Acrobat Pro DC,Kofax OmniPage etc.
- Scanner Software like VueScan, CamScanner etc.
- PDF Reader like Adobe Acrobat Reader
- Web designing softwares like Java, pearl etc.
- RDBMS like Oracle, MySQL etc.
- Search Engines to access digital resources like Google, Google Scholar, ChatGPT, Microsoft Academic etc. or any semantic search engines.

Digital Library softwares

- **Koha**

Koha is a Web based Integrated Library Management Software which allows automation of Library inhouse operations as well as integrating digital services to library through its web-based Interfaces. Koha integrated library system is the world's first and the most popular open-source library management software in the world. It is used by thousands of libraries around the globe, from small libraries to big ones.

- **D Space**

DSpace: DSpace is designed and developed by Massachusetts Institute of Technology (MIT) Libraries and Hewlett-Packard (HP) DSpace was designed as an open source application that institutions and organizations could run with relatively few resources. It is to support the long-term preservation of the digital material stored in the repository. It is also designed to make submission easy. DSpace supports submission, management, and access of digital contents of almost all filetypes.

- **Greenstone**

The Greenstone digital library software is an open-source system for the construction and presentation of information collections. It builds collections with effective full-text searching and metadata-based browsing facilities that are attractive and easy to use. Moreover, they are easily maintained and can be augmented and rebuilt entirely automatically. The system is extensible: software "plugins" accommodate different document and metadata types. Greenstone is produced by the New Zealand Digital Library Project at the University of Waikato, and developed and distributed in cooperation with UNESCO and the Human Info NGO. It is open-source, multilingual software, issued under the terms of the GNU General Public License. The aim of the Greenstone software is to empower users, particularly in universities, libraries, and other public service institutions, to build their own digital libraries.

- **Eprints**

EPrints is a free and open-source software package for building open access repositories that are compliant with the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH). It shares many of the features commonly seen in document management systems, but is primarily used for institutional repositories and scientific journals. EPrints has been developed at the University of Southampton School of Electronics and Computer Science and released under the GPL-3.0-or-later license

- **Libraonix**

The Libronix Digital Library System developed By Logos Bible Software is a technology used to deliver digital libraries of books and interactive study tools. Books from multiple publishers are automatically integrated into a single digital library on system.

We can expand library with tools and content from different publishers and everything works together automatically.

Digital Library Services

- Access of in house CD ROM based information retrieval services in a digital network environment LAN/WAN.
- OPAC (Online Public Access Catalogue)/WebOPAC.
- Provision for Online Circulation Services like reservation, renewal or queries.
- Online journals and e-books sharing through consortiums
- Access to institutional and subscribed databases and institutional repositories
- Providing Indexing and Abstracting databases and services
- Providing news and information about parent institution.
- Content page services like library blogs, book reviews, activities display etc
- CAS (Current Awareness Service) and SDI(Selective Dissemination of Information) Service through e-mail alert or through group messaging.
- Document Delivery of Digital Content on Demand
- Indexing of Journal Articles
- Alert on Newly added documents

There are numerous services again which can be offered through digital library. Only few are listed out here.

Some Important Digital Libraries In India

1. NDLI

The **National Digital library of India** is a virtual repository of learning resources which is not only just a repository with a search/browse facilities but also provides a host of services containing textbooks, articles, videos, audio books, lectures, simulations, fiction and all other kinds of learning media for the learners/users community. It is a project under [Ministry of Education, Government of India](#), through its National Mission on Education through Information and Communication Technology (NMEICT).

<https://ndl.iitkgp.ac.in/>

2. Shodhganga

A reservoir of Indian theses is a digital repository of theses and dissertations submitted to universities in India. <https://shodhganga.inflibnet.ac.in/>

3. Shodhgangothri

Repository of Indian Research in Progress/Synopses
MRPs/PDFs/Emeritus Fellowship. <http://shodhgangothri.inflibnet.ac.in/>.

4. Cusat Library

Dyuthi, Digital Repository of Cochin University of Science and Technology.
<http://library.cusat.ac.in/>

5. RCSS Open Knowledge Gateway (ROKG)

provides a platform to the researchers, faculty members and students of RCSS to access the free academic open access resources available on the internet without geographical limitations. Team @ Fr. Moses Library organized all these resources /Links and put it together on the platform of OKG
<https://rajagiri.edu/library/rcss-open-knowledge-gateway>

Conclusion

In India, many libraries have already started converting traditional print resources into digital resources. Likewise, many schools, colleges, and universities have already set up digital libraries that allow readers to access materials and resources in varying digital formats – e books, PDF documents, static images, info graphics, audio books, videos, journals, quizzes, and simulations. In the post-pandemic world, libraries have been converting materials and resources from hard copies to digital copies consistently. Similarly, many educational and academic institutions have been setting up online libraries using digital library solutions. That is why; the list of digital libraries in India is being expanded regularly. The steady increase in the number of digital libraries in India enables readers to access the content of varying types and in varied formats remotely and seamlessly over the internet.

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