ROLE OF DIGITAL LIBRARIES IN EDUCATION, CREATION, ARCHIVES AND ACCESS

Shobha Jakher[1] & Narender Kumar Chimni[2]

[1]*Librarian, Department of Library and Information Science, Saraswati Institute of Law, Palwal, Haryana, India,*

[2]*Deputy Librarian, Department of Library and Information Science, Lingaya's University, Nachuali, Faridabad, Haryana, India*

ABSTRACT

Libraries are the collection of all informative sources. In 19th century libraries are becoming the source of information retrieval and access for research and development. But emerging of new technologies and trends, management of the libraries is changing from traditional era to modern conversion of technologies. In change management books, journals, laboratory records, sound recordings, manuscripts, photographs must be converted in electronic form. The Process of digitization involves identification, selection and prioritization of documents. Analog form of documents – books, journals, laboratory records, sound recording, manuscripts, photographs conversion in electronic form. To avoid the damage of traditional knowledge, time demands the new emerged technology reproduction in digital arena. Today is need for more automated support for capturing in explicit data structures. If an organization generates contents, strategies may be adopted to capture date that is "born digital". If the document is available in digital form, it can be easily converted into other formats. In higher education digital libraries including emerging areas of application and future technologies for creating and distributing. Recent years many educators are creating their own digital content to teach the students. Many educational institutions are searching the low cost oriented software's to maintain the digital content. Free open source software's and high quality open-source digital library software's are available in market. How digital libraries software could enhance student's educational experience.

KEYWORDS: *Library, Education, Digital Library, Information*

INTRODUCTION

Higher Education

Education is the basic need of the society and individual growth. Higher education is basically the university education and improves the level of individual development. The higher education system is one of the largest such system in the world. It is estimated that during the five years plan tremendous pressure given on education quality, availability and approach to rural area's students. After getting independence in 1947, the national government of india constituted the University Education Committee in 1948 under the chairmanship of Dr. S.R Radhakrishanan. The committee proposed many suggestions for the development and progress of higher education in the country. One of them was to give extension and empowerment to UGC as University Grant Commission. Which was established in Delhi 1953? Dr. C.D Deshmukh

was its first chairman. Since then UGC has been working as an autonomous institution and doing well for the development of colleges, universities and their libraries of the country. Many committee and commissions were established to give support to libraries like "UGC and Committee 1957", "UGC and Academic Libraries", UGC and National Information Centers in various regions of the country at Delhi, Mumbai, Calcutta, Varanasi and Bangalore to supply the current information for the scientists engaged in research for the development of the country, Establishment of INFLIBNET in 1986 at Ahmadabad having the aim of information communication of the libraries of all the universities, higher educational and research institutions of our country

The following five sub-sections cover important aspects of the deliberations, recommendations and action plans of UGC Golden Jubilee Seminars organized at different Universities in the country: 1. Public/Private Partnership in Higher Education, at University of Calicut, Kozhikode, Kerala; 2. Governance of higher Education, at University of Jammu, Jammu, J&K; 3. Access and Equity in Higher Education, at G.C.D .University, Bilaspur, Chhattisgarh; 4. Export of Higher Education, at J.N.V. University, Jodhpur, Rajasthan and 5. Policy Planning for Higher Education under WTO and GATT regimes at North Bengal University, Darjeeling, West-Bengal. 6. Economics of Higher Education, at N. E. Hill University, Shillong, Meghalaya.

Creation of Digital Libraries

In creating the digital libraries first learn how to use the software for digital libraries. Free open source software is a key component of this strategy, and high –quality open –source digital software is already available in the market. Digital components can be available in the form of web site or a self- installing CD-Rom

Digital library software's are OCR, DOI, Image Editing Software's and other software's like Operating System, Data Base Management System Software, Programming/ Scripting Language, Firewall & Protection Software. The concept of digital libraries shows examples in an electric range of areas, with an emphasis on cultural, historical and humanitarian, applications, as well as technical ones. Digital libraries are being used in education and explore potential uses. Main steps involved in digitization are Scanning, Indexing, Storing and Retrieving.
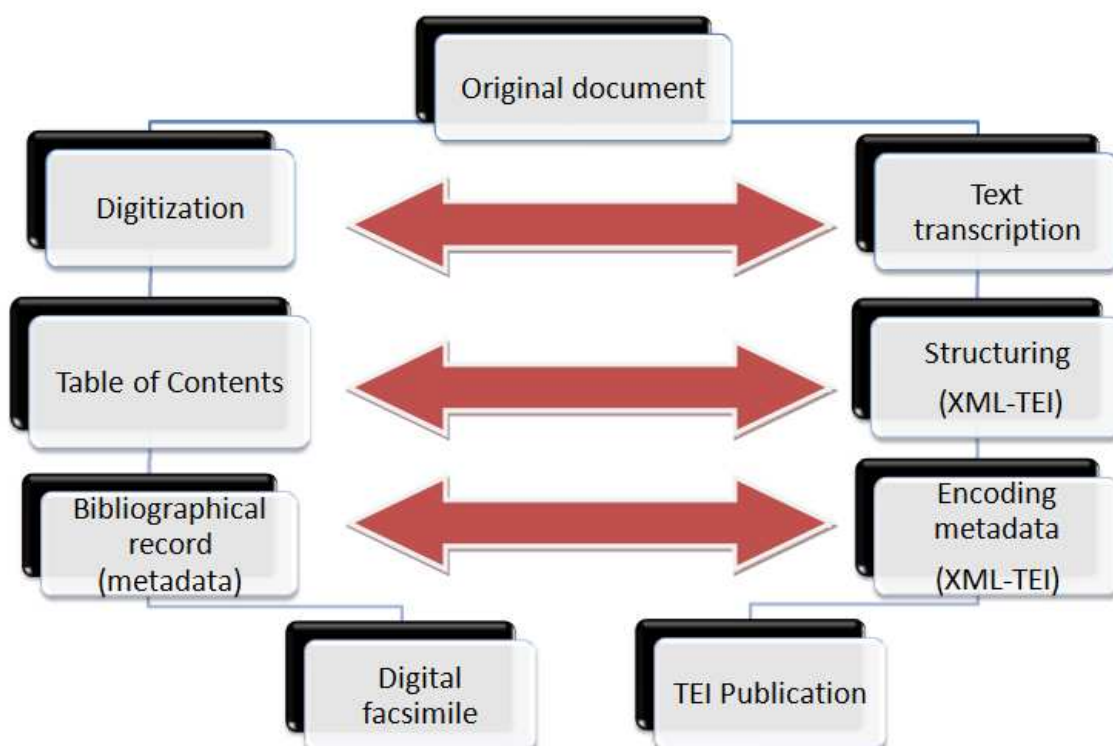
Figure 1

Softwares for Digital Libraries

DSpace is digital library system to capture, store, index, preserve and redistribute the intellectual output of a university research faculty in digital formats. Dspace has been developed jointly by MIT libraries and Hewlett-Packard, HP. This software is freely available to research institutions world-wide as open source system. Dspace is the sortware of choice for academic, non-profit, and commercial organization building open digital repositories. It is free easy to install "out of the box" and completely customizable to fit the need of any organization. It preserves and enabled easy and open access to all types of digital content including text, image, moving images, mpegs and data sets.

Eprint is generic archive software under development by the University of Southampton. It is intended to create a highly configurable web- based archive. Eprint primary goal is to be set up as an open archive for research papers, but it could be easily used for the other things such as images, research data, audio archives- anything that can be stored digitally by making changes in configuration

Greenstone is a suite of software for building and distributing digital library collections. It provides a new way of organizing in formation and publishing it on the Internet or on CD-ROM. It is available for both Windows and Linux O/S. It requires Perl software to build collections.

Greenstone is produced by the New Zealand Digital Library Project at the University of Walkato. The aim of Greenstone software is to facilitate the users of public and private sectors.

Software Greenstone developed by New Zeeland National Commission for UNESCO
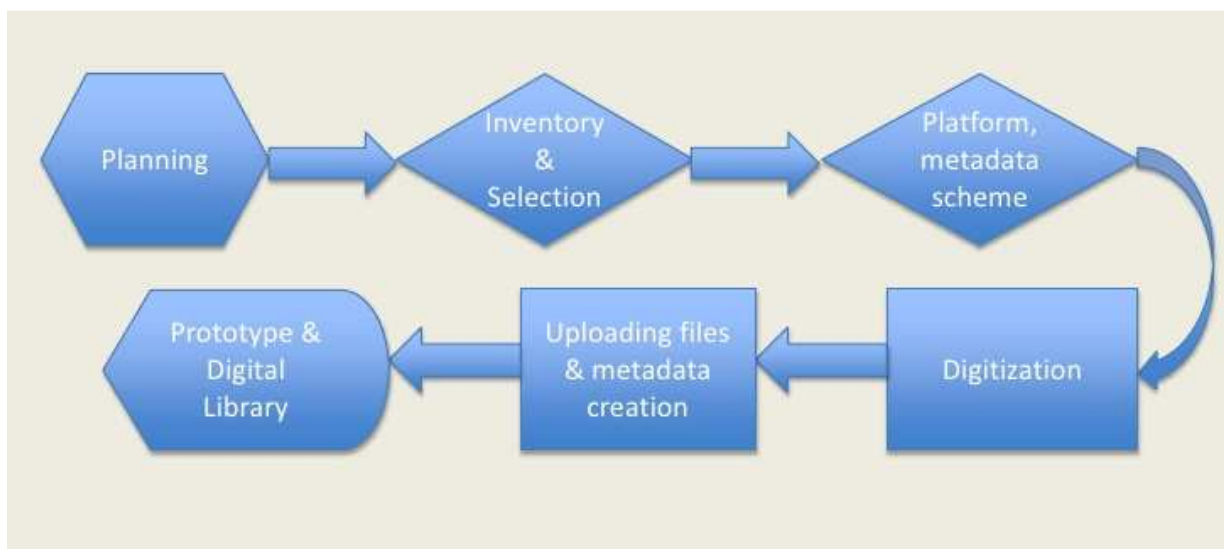
Process of Digital Libraries

Figure 2

In the Process of Facilitating the Users by Digitations Many Questions arises Like

- How the digital libraries being used in education

- What metadata techniques is available, and how it helps in organizing digital libraries;

- The different formats in which electronic documents are represented;

- How multimedia can be used in digital libraries;

- How to build and manage digital library collections; and softwares;

- What systems are available for constructing institutional document repositories and achieves.

Will the digital library be successful to fulfill expertise? Millions of users would like to enhance the description of catalogue of an item. What filter methods for attributing enhancement without violating, privacy or other protection against misuse could support this enhancement of the resources?

Facing all these problems still digital content provide the ease access to users and giving the new age to libraries and librarian. Today all information is quickly available and reachable for researchers. So we can say despite of many doubts and problems, still new technologies are quite useful for society.

Role of Digital Libraries in Education

The role of digital libraries in teaching and learning focus on needs of teaching resources because wide variety of strategic, policy and organizational issues that confront librarians and educators who actively address the increased use of information and communication and technologies in higher education. Information transport has been a key issue in both past and present. How we move information from one person to another.

How we preserve it from one generation to another are persistent questions. Unfortunately attempts to manipulate information transport another persistent issue

In higher education digital libraries play vital role in finding the information. Digital library software enables the non specialized persons to conceive assemble and disseminate new information collections. These are the large, organized collection of information. The Rising WWW is changing society's view of information by making unprecedented volumes of information available. Many educational establishments, international organization, social groups, nonprofit societies make it their business to create sites on which they collect and organize information.

The target audience consists of Teachers, Educators, Tutors, Teacher Trainers, information professionals, librarians, software developers, students, researchers, and information system managers.

National Digital Library of India

Ministry of Human Resource Development under its National Mission on Education through Information and Communication Technology has initiated the National Digital Library (NDL) project to develop a framework of virtual repository of learning resources with a single-window search facility. It is being developed at IIT Kharagpur

NDL is single –window search facility developed a framework of virtual repository of learning resources. NDL India is designed to hold content of any language. Users preparing for competitive examinations can take help from NDL. Repositories are arranged to provide interface support for all academic levels including researchers and life-long learners. Users registered to NDL can access content available freely. User registration is open to users from around the world. Some registration only works from sources like- World eBook Library, South Asia Archive, OECD library, Satyajit Ray Society. Access of documents is available in PDF, e-reader, ePub. HTM/HTML, MP3, FLV, MP4/MPG4, DOC/DOT, OGG, TIF/TIFF.

Salient Features of National Digital Library

- More than 7 lakh books by 3 lakh authors available in 70 languages

- More than 3 lakh authors by more than 2 lakh authors from different publishers

- More than 95000+ thesis by researchers from different Indian institutes.

- Manuscripts from Satyajit Ray Society, Vidya Prakshan Mandal and others available.

- More than 262 audio lectures in English and Tamil languages.

- All educational material is available for users from primary to post graduate level

- This site has been designed to facilitate all types of users like teachers, librarians, professionals, differently abled users etc.

- Multiple subjects' domains are available on this site in different subjects like; Technology, Science, Humanities, Agriculture and many more.

- NDL is a customized service provided in a 24*7 integrated environment.

- Choice of language, difficulty level, media of content like factors are available where learners can find the right resource with least efforts and in minimum time.

- All information can be personalized by users based on the educational level.

- Available information is in more than 70 language, and more than 60 types of learning resources are available- books, article, manuscripts, video lectures, thesis, etc.

- NDL repository integrates contents from different Indian institutional repositories

How to Access the National Digital Library

To login the NDL one need to register with a user ID and password. The NDL system is accessible to all users for general browsing.

The URL for NDL: http://ndl.iitkgp.ac.in

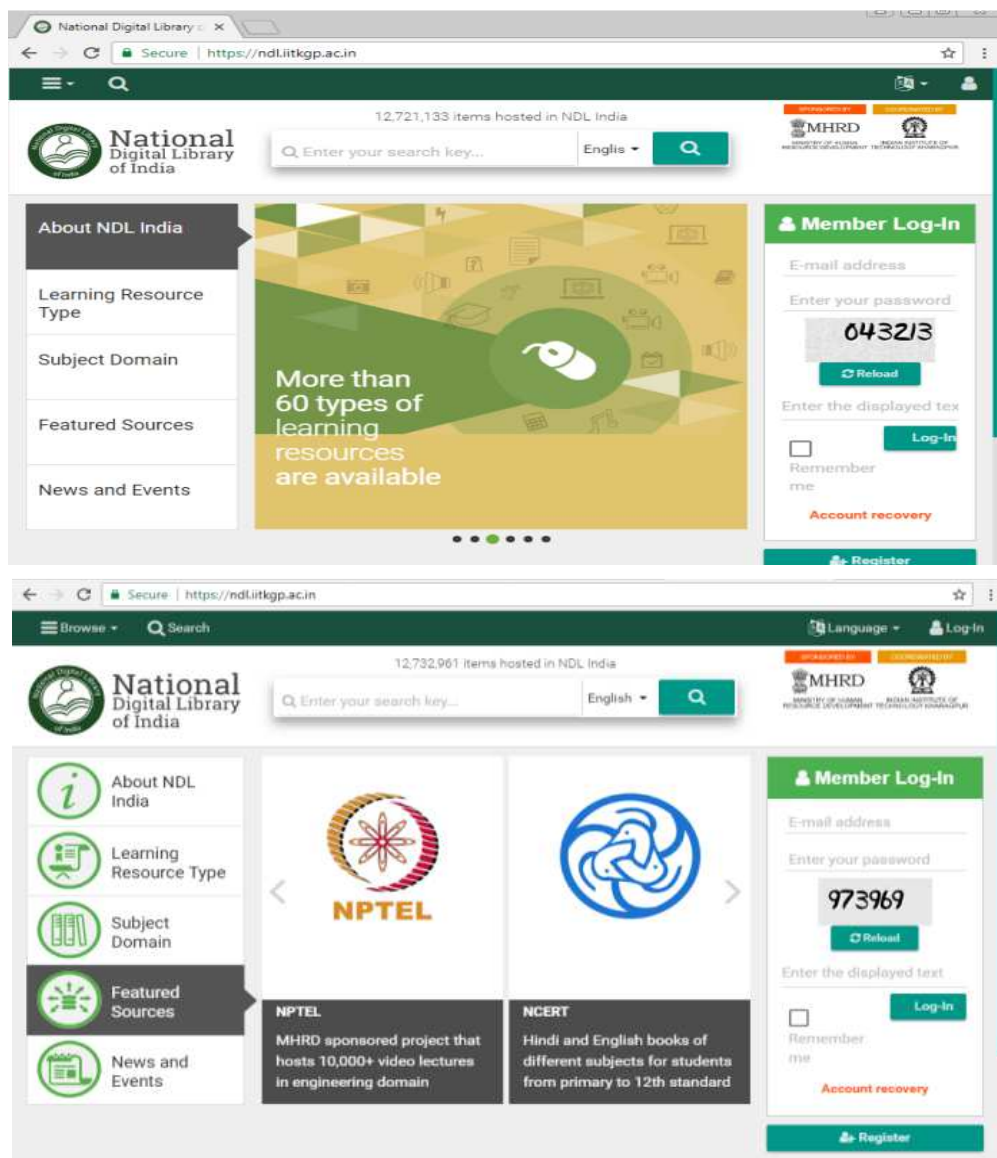**Screen Shot of National Digital Library of India**

Figure 3

Some Examples of Digital Achieves

- **Digital Colonial Documents (India)**

The Digital Colonial Documents Project is intended to promote study of rare seminal documents. Many reports 1871 onwards Topic: Census of India in multiple volumes historical rare documents notions of nation, state and culture during colonial period. All documents in the link are available to browse or search.

- **Gandhi Heritage Site**

Gandhiji moved incessantly across the India subcontinent to carry his message of trouth, non- violence, Satyagraha, Swadeshi and equality for all. Gandhi Heritage site portal is the single largest collection of Bapu's original works. It is the collection of works, images of newspapers and journals. Portal includes Indian Opinion, Navajivan, Young India, Harijan, Harijan Bandhu and Harijan Sevak. The portal shows the maps consisting of multiple layers Bapu visited during his lifetime journey.

- **GRETIL e-library**

This is Gottingen Register of Electronic text in Indian Languages and related ideological materials from Central and Southeast Asia. It is the collection of electronic editions of Indian literature, historical and related subject.

- **Internet Archive:**

It is non-profit library of millions of free books, movies, software, music websites and more. The mission of this site is to provide universal access to all knowledge. This site pay special attention to books and provide digital version of books. Books published prior to 1923 are also available for download, and thousands of modern books can be browsed through this site.

- **Khuda Baksh Oriental public Library**

This is country's first library to computerize its hand written collection for digital use. Library has donated his entire collection to the people of Patna by a deed of trust. Acknowledging the immense historical and intellectual value of its rich and valued collection, the Govt. of India declared the Library an Institution of National Importance by an act of Parliament in 1969. The Library is now fully funded by the Ministry of Culture (Govt. of India).

- **Kitab Ghar**

This site is for Urdu language books, novels, fictions, poetry, history and other many fields. Many digital books are also available for on line reading, PDF download e-books.

- **Muktabodha Indological Research Institute**

On line availability of literature, religious and philosophical tradition of classical India accessible for study and scholarship worldwide. Muktabodha digital library consisiting of rare Sanskrit texts, initially focused on Kashmir Shaivism, then broadening to Trika-Kaula, Saiva-Siddhanta, Pancaratra, Natha Yoga and other tantric works.

- **Punjab Digital Library**

Punjab digital library is the collection of manuscripts, books, magazine, newspaper, photographs, pamphlets, images, including services of media room, newsletter, current projects, data mining, preservation, exhibitions, downloads case studies, etc. PDL has developed expertise, efficiency and indigious development of equipment. PDL has marked numerous milestone with exponential growth in terms of digitations output and resources. PDL has promoted an entirely new culture of awareness.

Tasveer Ghar

Tasveer Ghar is the collection of visual essays and galleries, newsletters, digital texts of various author's poster with deep explanation their cultural and historical view. A site for collecting, digitizing and documenting popular visual sphere including posters, calendar art, pilgrimage maps, cinema hoardings, advertisements and other forms of street and bazaar art.

- **The Tibetan and Himalayan Library**

It is a publisher's website. Site is providing information services and network facility relating to the Tibetan plateau and southern Himalayan regions. The library of this site is consisting of a broad array of collaborating individuals, institutions and communities. This group has international advisory board consisting of librarians, technologists, community leader, scholars in the field of Tibetan and Himalayan studies worldwide.

- **Naval Kisore Press**

This portal is collection of Sanskrit and Hindi texts. There is digital reproduction of documents and available for downloading.

CONCLUSIONS

Traditional libraries should promote the use of digital content. Resources are needed to digitize vast amount of materials. Education is often held up as a prime beneficiary of digital libraries. Using this approach digital content should be used by a large number of people, thereby justifying the large costs associated with digitization. Lofty expectations for an educational revolution resourced are therefore needed to develop effective access formats. If such resources are not made available or found then it is indeed foolhardy to believe that digital libraries will make much impact?

REFERENCES

1. *https://en.wikipedia.org/wiki/Digital_library*

2. *http://www.dlib.org/dlib/november09/koelen/11koelen.html*

3. *http://www.irphouse.com/ijla/ijlav1n1_01.pdf*

4. *http://vikaspedia.in/education/interactive-resources/national-digital-library-of-india*

5. *West, Jessamyn C(2011), Wihout A Net Libarians Bridging the Digital Divide, Libraries Unlimited, An imprint of ABC-OCLC, LLC, Oxford England.*

6. *Lesk Michael(1997), Practical digital Libraries: Books, Bytes & Bucks,Morgan Kaufmann Publisher, San Francisco, California.*

7. *Rekha D. Pai, Building a Sustainable Digital Library, International Journal of Library Science and Research (IJLSR), volume 5, Issue 2, March-April 2015, pp. 1-6*

8. *Linckels, Serge and Meinel, Christoph (2011), E-Librarian Service: User-Friendly Semantic Search in Digital Libraries, Springer Heidelberg Dordrecht London, New York.*

9. *S. Vijayakumar et al., Digital Library Web Design Effectiveness: A Study, International Journal of Library Science and Research (IJLSR), volume 6, Issue 6, November-December 2016, pp. 53-68*

10. *Khochar, R.S. (1999) Library science Today, Discovery Publishing House, New Delhi.*