International Journal of Advanced Research and Development
ISSN: 2455-4030; Impact Factor: RJIF 5.24
www.advancedjournal.com
Volume 2; Issue 4; July 2017; Page No. 521-523

Highlights and challenges of digital library

Manjeet Panwar
Librarian, Aggarwal College of Education, Ballabgarh, Faridabad, Haryana, India

Abstract
"A Library is the Place of Worship" Libraries must provide the best services to its users or clientele. To meet user expectations, libraries in the past have updated their collection. In today's challenge, we must not only update our collection but we must also provide better access to information through the new information highway. This is may be done by way of digitization. Digitization in libraries is today's response towards a faster delivery of information to its users via internet or intranet. For developing countries like the Philippines where internet facilities are not available even in government offices within Metro Manila or other cities, CD technology in another option to access digitized information. Information needed may be accessed via the internet in full text or in the form it was digitized (such as bibliographic), via the internet 24/7 or twenty four hours a day, seven days a week at any place in the world where there are internet facilities.

Keywords: digital library, CD technology, internet facilities

1. Introduction

What is a digital library? There is much confusion surrounding this phrase, stemming from three factors. First, the library community has used several different phrases over the years to denote this concept-electronic library, virtual library, library without walls-and it never was quite clear what each of these different phrases meant. "Digital library" is simply the most current and most widely accepted term and is now used almost exclusively at conferences, online, and in the literature.

Another factor adding to the confusion is that digital libraries are at the focal point of many different areas of research, and what constitutes a digital library differs depending upon the research community that is describing it (Nurnberg, *et al*, 1995). For example:

- From an information retrieval point of view, it is a large database
- For people who work on hypertext technology, it is one particular application of hypertext methods
- For those working in wide-area information delivery, it is an application of the Web
- and for library science, it is another step in the continuing automation of libraries that began over 25 years ago

Digital libraries was first popularized by the NSF/DARPA/NASA Digital Libraries Initiative in 1994. These draw heavily on Vannevar Bush's essay *As We May Think* (1945), which set out a vision not in terms of technology, but user experience. The term *virtual library* was initially used interchangeably with *digital library*, but is now primarily used for libraries that are virtual in other senses (such as libraries which aggregate distributed content). In the early days of digital libraries, there was discussion of the similarities and differences among the terms *digital*, *virtual*, and *electronic*.

In the context of the DELOS, a Network of Excellence on Digital Libraries, and DL.org, a Coordination Action on *Digital Library Interoperability, Best Practices and Modelling Foundations*, Digital Library researchers and practitioners and software developer produced a Digital Library Reference Model which defines a digital library as:

"A potentially virtual organization, that comprehensively collects, manages and preserves for the long depth of time rich digital content, and offers to its targeted user communities specialized functionality on that content, of defined quality and according to comprehensive codified policies."

A distinction is often made between content that was created in a digital format, known as born-digital, and information that has been converted from a physical medium, e.g. paper, through digitization. It should also be noted that not all electronic content is in digital data format. The term hybrid library is sometimes used for libraries that have both physical collections and electronic collections.

2. Components of a Digital Library

Components required for a digital library can broadly be categorized into the following components

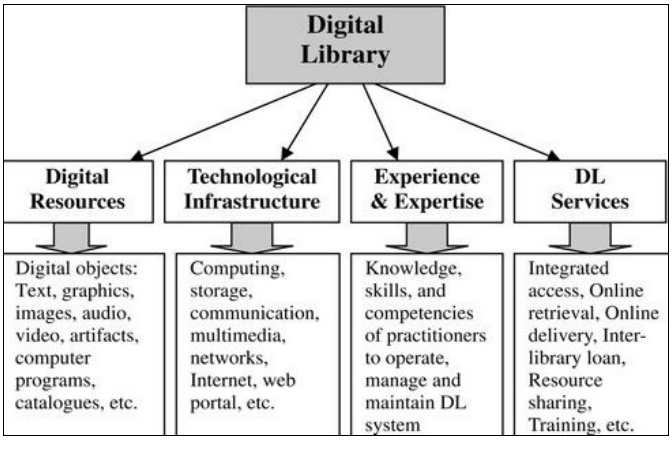

Fig 1

3. Launched by prime minister

Some of the new initiatives that have been taken by the new Government at the Centre headed by Narendra Modi in the area of human resource development over the last one year. One year is not a long time in the history of a country. But, going by the slew of measures taken by the Government within this period it seems quite clear that the country could be on the threshold of a sea change in the field of education.

Fig 2

A key feature of the new initiatives is a focused attempt to utilize the modern tools of information technology in the best possible manner. For instance, a project has been taken up to create a national digital library of eBooks and other e-contents on various subjects and topics and another to set up a platform through which highly qualified faculty of centrally sponsored institutions like IITs, IIMs and central universities would offer online courses free of cost. Called Swayam``, the mass-scale online open course platform would be hosted on a virtual cloud and have provision for the beneficiaries to get certificates following tests at the end of the courses.The digital library, in turn, will be set up by IIT, Kharagpur, and a sum of Rs. 10 crore has already been released to the institute for the purpose. In addition, technology is being used to identify geographical pockets which fared poorly in terms of education among girls, particularly of those belonging to marginalised sections of society so that corrective measures could be taken. The digital atlas project developed in partnership with UNICEF was launched on March 8 on the occasion of the World Women's Day. Further, a separate portal has been developed by the All India Council for Technical Education to enable prospective students to make informed choices about which colleges to pursue admission in. The searchable database of all accredited colleges in the country provides detailed profiles for each of them. The `Know Your College Portal' was launched on November 11 and has so far received 1.63 lakh hits. The Ministry of Human Resource Development has also taken an initiative to map the entire country on a GIS [Geographic Information System] platform to identify habitations which still do not have elementary and secondary schools. A total of 28 States and Union Territories have so far provided the necessary data and the National Informatics Centre has mapped them on the platform. Central Board for Secondary Education [CBSE] has also developed an innovative online self-assessment tool that could be used by schools to look at their performance at an aggregate level as also at the level of each student and compare them with regards to all CBSE schools at various levels. Called ``Saransh'', the tool covers data for 2.02 crore students and 1.5 lakh teachers across 15,000 schools for a period of seven years. Apart from initiating schemes to make effective use of the latest tools of technology, the new Government has also come out with new schemes and projects to make the education system sensitive to the needs of the differently abled children and also children with special needs. Among other things, it has launched a scheme called ``Saksham'' under which differently abled students will be provided with a scholarship of upto Rs. 30,000 per year to pursue diploma and undergraduate level courses in technical institutions approved by All India Council for Technical Education. In all, 1,000 such students would be provided the scholarship every year. They would also be provided with an additional sum of Rs.2,000 per month for 10 months as contingency allowance. Likewise, a handbook has been brought out to guide teachers on how to take care of children with special needs. All primary school teachers across the country are to be given the handbook. The aim is to provide for inclusive classrooms.

The new Government at the Centre has also come out with a special scheme called for Udaan for girl students. It is a mentoring and scholarship scheme to enable meritorious girl students to transit from schools to technical education without much difficulty and also aims to enrich and enhance teaching and learning of mathematics and science at senior secondary school level by providing free online resources for all. The first batch of 950 students was selected by CBSE in November for the scheme. Of them, 307 girls belonged to families with income of less than Rs. one lakh. The focus of the project is to address the low enrolment ratio of girl students in prestigious engineering institutions and enable them to receive special incentives and support so that they can join these institutions and go on to take leadership roles in the future. Another interesting step is the launching of a mission named after freedom fighter and educationist Pandit Madan Mohan Malviya to build a strong professional cadre of teachers by addressing all the issues related to teachers, teaching, teacher preparation, professional development, curriculum design, design and development of more effective pedagogy and better assessment and evaluation methodologies. The Rs. 900 crore schemes were launched by Prime Minister, Narendra Modi, on the occasion of the Good Governance Day on December 25. An executive committee chaired by HRD Minister, Smriti Irani and a project approval board chaired by Secretary, Higher Education and co-chaired by Secretary-School Education and Literacy to monitor the mission have been established. As part of the scheme, the first inter-University centre for teacher education has been set up by University Grants Commission at Banaras Hindu University, Varanasi. The Central Government has also launched a scheme called Unnat Bharat Abhiyan to promote the transfer of technologies from the laboratory to the land. Under the scheme, institutions of higher education would connect with villages in their neighbourhood and address the various problems faced by them. The scheme would particularly focus on offering solutions for water management, organic farming, renewable energy, infrastructure and livelihood. IIT, Delhi is the coordinating institute.About 130 villages have so far been adopted by IITs, NITs and IISERs across the country under the scheme. Besides a new scheme called `Gian`[Global Initiative for Academic Network] has been launched which will bring world class educators from across the globe to teach in India. Indian American mathematician, Manjul Bhargava, has agreed to spearhead it. Prof. Bhargava is a winner of Fields Medal, which is considered as the highest honour for a mathematician in the world. `Gian` is aimed at tapping the talent pool of scientists and entrepreneurs internationally to encourage their engagement with the institutes of Higher Education in India so as to augment the country's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological capacity to

global excellence.

4. Pros and cons of digital library

"Nowadays, going digital is no longer a matter of choice. It is a necessity." Yes, indeed digitization is a necessity. This is specially so for special libraries. Other advantages may be considered as less meaningful to other libraries and they are follows:

- Space: rack-mounted, enough memory to store 10 times all the books in the educational library
- "Savings" as to Acquisition costs" - At times, this is considered as long term - WESTLAW
- Manpower
- "handling" of material (books or documents)
- Security
- Property Accountability
- Knowledge in the sky
- Keeping up with change
- Digital libraries offers versatility
- Out with the old, in with the new
- Learn more

Disadvantages of Digital Library

Forming a library digital may not be the right answer for all areas. It takes a lot of work to start. It also requires that you have enough funding to be successful. Because of the work load requirements on volunteers and library staff the time might not be right. Followings are the cons of digital library:-

- Access is an equity issue.
- Enough but too many resources
- Cut and paste
- Google
- Obsolescence of books
- High Budget
- Digital preservation
- Interface design
- Interoperability between systems and software
- Information organization
- Inefficient or non-existent taxonomy practices (especially with historical material)
- Training and development
- Quality of Metadata

5. Conclusion

Traditional libraries are limited by storage space; digital libraries have the potential to store much more information, simply because digital information requires very little physical space to contain it. As such, the cost of maintaining a digital library can be much lower than that of a traditional library. A physical library must spend large sums of money paying for staff, book maintenance, rent, and additional books. Digital libraries may reduce or, in some instances, do away with these fees. Both types of library require cataloging input to allow users to locate and retrieve material. Digital libraries may be more willing to adopt innovations in technology providing users with improvements in electronic and audio book technology as well as presenting new forms of communication such as wikis and blogs; conventional libraries may consider that providing online access to their OP AC catalog is sufficient. An important advantage to digital conversion is increased accessibility to users. To handle the growing volume of electronic publications, new tools and technologies have to be designed to allow effective automated semantic classification and searching.

6. References

1. Benchbooks.
2. Bell, Suzanne. Librarian's Guide to Online Searching: Cultivating Database Skills for Research and Instruction, 4th Edition: Cultivating Database Skills for Research and Instruction. ISBN 1610699998, 69, 2015.
3. Edward A. Fox. The Digital Libraries Initiative- Update and Discussion, Bulletin of the America Society of Information Science. 1999; 26(1).
4. Digital libraries, electronic libraries and virtual libraries. www.hawaii.edu. Archived from the original on. Retrieved, 2016.