



CHALLENGES FACE IN IMPLEMENTATION OF DIGITAL LIBRARY

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ABSTRACT:

The Digital library plays an important role in promoting the use of information. Digital libraries give solutions to main challenges to traditional libraries such as storage. This paper discusses the concept of digital library and how it helps in conserving manuscripts and what type of equipments or software are required in this work. We want digital information in every field so that every library should be a digital library. It highlights the Necessity, Challenges and issues in creating digital library, there are certain issues which should be taken care like copyright and Intellectual Property Right. This article also explores successful digital library project set up in India and what is the future of digital library in Indian scenario..Digital libraries are quite new – about 20 years of age. At the same time, they have been growing at a fast pace. Digital libraries have the following characteristics – they store, preserve, distribute and protect contents in different formats and, at the same time, they allow interaction between the user and the contents; they are always present, both geographically and over time; they can make works internationally known, enhancing referencing and citations; they can make public the products of the educational process and let them be used as inputs for further learning. This work addresses some aspects of digital libraries that make them suitable tools to support higher education.

Keywords:- Digital Libraries, Face Challenges , Library system, Implementation

INTRODUCTION:

The Digital Library has various implications with specific individuals & affiliations. The Digital Library that contain a collection of digital documents, databases, video games & learning materials available to children through a laptop. Collections that can be viewed over the Internet, such as GIS and CAD details, satellite symbolism, video exhibits, This can include a digital library for a space scientist. For the owner of a company, the digital library offers a collection of information about the application, such as massive market deals, stocks and offers, expenditure statistics, and so on. It is in basic words. Digital Library is a collection of digitalized material, designed for the gathering of people or a network, this helps clients to have the strength they don't have with conventional libraries. Words are utilized for interactive library use in a number of ways, such as

insinuating indirectly linked activities such as sight and hearing index, knowledge processing, knowledge collection, information extraction, online software shops, computer archive, mobile archive, picture files, digital backup, digital text, eBooks, publisher repositories, e-journals, etc.

Digital libraries were characterized to speak to two lines of considerations individual focuses on access & recovery of digital substance, in which consequence from crafted by PC researchers, engineers, investigators, and so on. The subsequent line centers around the collection, affiliation and administration parts of digital libraries that is viewed as the commitment of library & information experts rehearsing by land level.

Stanford Digital Library explore bunch characterized digital libraries "suchas planned gathering of administrations, that depend on collections of materials, such of that never be

legitimately under the influence of the affiliation giving an assistance in which they assume a role.

As indicated by E.A. (Fox, 2015) the digital library might be characterized as the "better approach for completing the elements of libraries including new types of data assets, new ways to deal with characterization and listing, serious utilization of electronic frameworks and systems and sensational moves in scholarly, authoritative and electronic practices". A digital library is an array of digital registering, stockpiling and interchanges hardware together with the substance and programming expected to replicate, imitate, and broaden the administrations gave by ordinary libraries dependent on paper and other material methods for gathering, classifying, finding, and dispersing data. A full help digital library must achieve every single fundamental assistance of customary libraries and furthermore misuse the outstanding points of interest of digital stockpiling, looking, and correspondence".

Definition of Digital Library

Digital libraries are Internet sites consecrated to the creation and preservation of electronic book collections and holdings of other kinds of materials, without the need for end users to purchase the materials they want to consult and read.

How do digital library work

They attempt to provide instant access to digitized information and consist of a variety of information, including multimedia. A digital library is a library in which collections are stored in digital formats (as opposed to print, microform, or other media) and accessible by computers.

Digital Library System

Library Management Network Hub for safe listing including online group lists, distribution control, serial control, management records, interlibrary loans, etc. Initially, machines were

deemed not to be powerful enough to provide services. Today, online free lists have enhanced their search facilities to include a vast number of features originally exclusively found in the information provided by bibliographic repositories. Previously, knowledge processing systems offered links to information contained in online papers and other records.

Data processing systems cover record control, web directory services, electronic database services, the Website and CD-ROM. Present recognition programs and written indexes are some forms of unique purpose information retrieval systems. In certain structures, records can be held in a microfiche or print format, where even the index is in electronic form.⁵ The Website, the Site of telephone networks, offers links to a variety of machines or servers. Search engines enable the extraction of this unknown and large knowledge storage. Any of the machines or servers are web search systems that have links to identified and reviewed datasets. The directory that is not accessible on the internet network can be bought on a CD-ROM. Associations and libraries, in particular, can want to network such CD-ROMS. The CD-ROM is equipped with a search or knowledge retrieval feature such that it is easy to find relevant details inside the archive.

Internet - The Web is the largest open network, & this couldn't have been accomplished without a set of open framework principles that are already well developed & generally embraced. It's a forum where several devices can interact with each other. It is also a cheap contact platform for many countries. Open system is an excellent avenue through which organizations can communicate with their customers.

Information Producers - The time is coming when the importance of information producers will be highly appreciated. Individuals, organizations and society, their competitiveness and efficiency of information processing and

knowledge creation capabilities increasingly rely on. Effectively in an environment of rapidly changing data managers to make changes to the systems that need to be able to.

Market Places :- Technical, social & political forces in the information environment are important. These factors across national and international borders and arguably the most important is access to information. Also all these are associated social and political ramifications of the market there.

Information Society :- An information system in society has changed. All of the electronic communication where the view of the virtual community, and processes such as where it all work, real person-to-person contact telephone education and teleconferencing or videoconferencing substitute, a man must have a significant effect on their answer to the need to interact with one another. Meeting other people, holding meetings and conferences such as the century-old system is likely to be replaced in the near future. Most of us recognize that this new era will emerge overnight will be a relief. At present, data and information systems and the associated impact on our society and their communication gradually accept that we are growing.

Global Economy -Improved telecommunications allow people to form their own countries irrespective of geographical location. This supports the formation of groups of people with similar interests, policies or objectives. The society world over is being treated as one global village. In the process of globalization a global economy is likely to emerge. Because of telecommunication and information technology a large number of professionals in this field all the world over have availed a new economy so far unheard of.

Employment Avenues- In the beginning of the information era, throughout the world, it was considered that automation would eliminate the

clerical staff or would decrease it to the minimum. It was presumed that information technology would lead to unemployment. Of course, it has happened to some extent. There is now a change and we see a global competition. New avenues of automation have opened but the value is only for those who are skilful in their work.

Copyright Issues- The text, data, or multimedia, spending time, effort and money to be made on whether the information. A manufacturer wants to recoup their investment. Actually, the security of online records of sufficient copyright is challenging to implement. With originality of copyright in the digital documents that need to be looked at in two important aspects that will. Audio and video content over time to see the Internet access in the footnotes of the present can be used by researchers to accept.

Data Protection and Security- Financial transactions, and commercially sensitive information, including national security, some information needs to be kept secure. Besides, we all rightly be stored in multiple databases that may be sensitive information about us. Moreover, for personal protection, the security of individual statistics is required.

The Market Standards - The standard advanced or leading firms or organizations, or is made by advanced countries and they are supposed to be followed by others. Any new technology to lay down standards for the main player, and as a result, the same network may have problems or interpersonal communication.

E-Learning:-

A digital library of all the latest books in digital form, with the latest knowledge of elearning will be available. Changes in the education technology is very fast. These days elearning and digital library, a popular and much sought after by students will be in the not distant. However, some institutions and universities have begun to

work in this direction and now is leading the effort by helping others. Telecommunications and information technology education for centuries, popular with the rapid development in the traditional system, is undergoing rapid change. Computer and Internet technology has completely revolutionized the education system. The world today has an impact on all aspects of life, stressing education, are engrossed by the web revolution. India is no exception. Learning 'Learner-centric' education system 'for teacher-centric' will shift its focus from. E-learning and correspondence courses offered by open universities, distance education programs grew. Traditionally, libraries have been threatened by web technology. India, still a popular print media and other media's role as audio, video, radio, television, multimedia, etc. are still only support. Using other media to learn to learn, a place and time to match. The availability of information on the Internet has proven to be a boon for developing countries. Micro or Macro information about each topic is available on the Internet. Because of the Internet, e-education in Indian educational institutions in Third World countries, it is possible to use the Internet for teaching.⁷ are under great pressure. E-Learning System for Quality Education, can empower both students and teachers. Source of knowledge for the nation, and, in any module easily anywhere, anyone can share. Education is a good face to face education for the students is to provide excellent education support. Such effective education, not improved, reducing the time, cost effectiveness and flexibility can be considered as e-education purposes.

Impact of Digital Library

The trends in the calling and its effect have been talked about by the various researchers since numerous years,. The traditional data access and the board roles played by the data callings are growing, especially in the plan and improvement of new data items and

administrations and use apparatuses to help data chasing and choice, examination and amalgamation of data content in the interest of clients, and client guidance. The developing acknowledgment of organizations as learning associations, rehash of government offices, new bearings for training in colleges, universities, and schools, guarantee new open doors for data authorities strengthen and extend their help of correspondence and learning process in associations and networks.

Traditional period of production began with keeping up data composed and protected on stones, fabrics and metal dividers and kept up and abused data to society. The improvement of libraries is basic for the advancement of the human advancement. From the old Gurukul system where learning was given to the understudies orally by the instructors/masters was the improvement of data recording in type of data.

Issues and Challenges Face in Creating Digital Libraries

Challenges for digital libraries Digital libraries face many challenges – interoperability; 24/7 operation; multi-language, The optimism and hype from the early 1990's has been replaced by a realization that building digital libraries will be a difficult, expensive, and long-term effort (Lynch and Garcia-Molina, 1995). Creating effective digital libraries poses serious challenges. The integration of digital media into traditional collections will not be straightforward, like previous new media (e.g., video and audio tapes), because of the unique nature of digital information^{3/4} it is less fixed, easily copied, and remotely accessible by multiple users simultaneously. Some the more serious issues facing the development of digital libraries are outlined below.

1.. Technical architecture The first issue is that of the technical architecture that underlies any digital library system. Libraries will need to

enhance and upgrade current technical architectures to accommodate digital materials. The architecture will include components such as:

high-speed local networks and fast connections to the Internet • relational databases that support a variety of digital formats • full text search engines to index and provide access to resources • a variety of servers, such as Web servers and FTP servers • electronic document management functions that will aid in the overall management of digital resources

2. Building digital collections One of the largest issues in creating digital libraries will be the building of digital collections. Obviously, for any digital library to be viable, it must eventually have a digital collection with the critical mass to make it truly useful. There are essentially three methods of building digital collections: 1. digitization, converting paper and other media in existing collections to digital form (discussed in more detail below).

2. acquisition of original digital works created by publishers and scholars. Example items would be electronic books, journals, and datasets.

3. access to external materials not held in-house by providing pointers to Web sites, other library collections, or publishers' servers. While the third method may not exactly constitute part of a local collection, it is still a method of increasing the materials available to local users. One of main issues here is the degree to which libraries will digitize existing materials and acquire original digital works, as opposed to simply pointing to them externally. This a reprise of the old access versus ownership issue⁴ but in the digital realm³ with many of the same concerns such as: • local control of collections • long-term access and preservation What about digital collection building in a coordinated scheme? There are many reasons why building digital collections is a good candidate for coordinated activity. First,

acquiring digital works and doing in-house digitization are expensive, especially to undertake alone. By working together, institutions with common goals can gain greater efficiencies and reduce the overall costs involved in these activities, as was the case with retrospective conversion of bibliographic records. Second, it also reduces the redundancy and waste of acquiring or converting materials more than once. Third, coordinated digital collection building enhances resource sharing and increases the richness of collections to which users have access. How can specific materials to be processed by a given institution be identified? Who collects and/or

Digitizes what materials could be based on factors such as: •

- collection strengths. A particular library with a strong collection focus could be responsible for digitizing selected portions of it and adding new digital works to it. •

- unique collections. If a library has the only copies of something, they are obviously the ones to digitize it

- the priorities of user communities. Such priorities will justify holding the materials locally, for example, because of the demands of a curriculum •

- manageable portions of collections. When there is no other overriding criteria, then material can be divided up among institutions simply according to what is reasonable for any one institution to collect or digitize

- technical architecture. The state of a library's technical architecture will also be factor in selecting who digitizes what. A library must have a technical architecture up to the task of support a particular digital collection. •

- skills of staff. Institutions whose staff don't have the necessary skills can't become a major node in a national scheme. Yet, no matter how a collection is built— of materials digitized in-house, of original digital works, or of

providing access to materials by pointing to other external resources^{3/4} libraries in a collective must ensure it is preserved and made available in perpetuity. For example, if the only copies of digital works reside on a particular publisher's server, then what happens if the publisher goes bankrupt? Or if the market value of a particular work approaches zero? What if all of part of a digital collection of a library were lost, such as through some catastrophic event? Ensuring long-term preservation and access will require policies and a scheme by which redundant permanent copies are stored at designated institutions. Preservation issues will be discussed

- Metadata Metadata
- Preservation
- Copyright / rights management
- the preservation of fixed-media materials through digital technology.

CONCLUSIONS :

Libraries around the world have been working on this daunting set of challenges for several years now. They have created many digital library initiatives and projects, and have formed various national schemes for jointly exploring key issues. With several years accumulated experience, the initial enthusiasm surrounding the development of the digital library has been replaced by sober second thought. Librarians have discovered that, with a few exceptions, making a business case for digitization and investments in digital technology is more difficult than first envisioned, especially given the technical and legal constraints that must first be overcome. As with most other technical developments in libraries over the years, we will have to move forward in small, manageable, evolutionary steps, rather than in an rapid revolutionary manner.

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Figure 3: Growth of mung seeds (*Vigna radiata*)

