Review Article

Digital Library in Open Universities – A Review

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Abstract

Digital Library as **Library without walls** or **wall free** electronic work station to access universal knowledge irrespective of the distant location. Digital Library is a user-friendly interface, which can provide information that was already scanned previously from the volumes inside the library itself and/or data obtained from outside sources. When we search through computer network system for our information related requirements and needs for our use, we in fact search every bit of information all over the world. Internet is the best example of digital library and information system. In digital library, information is digitized, collected, operated by electronic computers, transmitted by the computer network, and freely shared. In this way, required information can be easily and efficiently retrieved and disseminated.

Keywords: Digital Libraries; Libraries; Open Universities; Universities; Information organization; Information preservation.

Introduction

Digital Libraries may be defined as electronic information collections containing large and divers repositories of digital objects, which can be accessed by a large number of geographically distributed users. The content of digital libraries include data, metadata that describe various aspects of the data (eg. representation, creation, ownership, reproduction rights), and metadata that consists of link or relationship to other data or metadata, whether interanl or external to the digital library

Association of research libraries (ARL) in definitions and purpose of a digital library has defined a digital library as having these qualities:

- The digital library is not a single entity :

- The digital library use technology to line the resources of many :

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- The linkages between the many digital libraries and information services are transparent to the end user : and

- Digital library collections are not limited to document surrogated they extend to digital artifacts that cannot be represented or distributed in printed formats

It can be said form all the above definitions that ideal digital library is one that possesses every information in digital form and all the functions are automated using advanced technologies.

Traditional libraries V/s Digital libraries

Traditional libraries possess in their stack books periodicals maps and atlases standard and specifications, trade catalogues, reprints and preprints etc. mainly in printed format. In this collection in development and services are provided, organized, information is retrieved and disseminated mainly manually. It takes much time, requires more space and needs a sizable number of library staff to perform duties in this environment. But with the pace of time, information users as well as the library and information peoples feel the need of the hour and information technology tools have come to the help of librarians and information professional. On the other hand digital libraries use information technologies, communication technologies, online

databases, CD- ROMs, multimedia databases, email services to serve the users needs digital libraries also requires national and international networks. Some issues such as information protection, property rights relevance of information and information security are there and should be taken care of and resolved before designing and be implementing the digital library.

Why we need the digital libraries?

We need digital library technology to manage large amounts of digital content, such as thousands of images or hundreds of audio clips to perform searches that are impracticable manually. The WWW makes it easier and possible to transfer such information over national networks.

There are various factors that explain the need or digital libraries.

(a) Information explosion - This is an era of information explosion due to multidisciplinary and interdisciplinary research, proliferation of publication activities and transfer of information among user community. Digital libraries can fulfill the requirements of providing high quality output to the users.

(b) Storage of information in order to solve the space problem in libraries, many libraries are going ahead or planning to go further in order to provide electronic access of information to their users.

Challenges of digital libraries

One of the major challenges to digital libraries is the development, which takes palace in IT environment available to librarians. The librarians have to experience various problems such as resource crunch, non availability of infrastructure, lack of trained manpower lack of self- exposure lack of motivation and unwillingness of the library staff to adopt the new environment of design and development of digital library. Process of conversion of information from paper to electronic format is known as digitalization apart from the challenge of digitization of the available information in the library, there is a challenge of electronic publishing digital collection building storage organization of the digitized documents transmission of digital information creation and use of hypertext and hypermedia systems networks and manpower development

Objectives of digital libraries

The main objectives of digital library are:

(a) To provide fast and efficient access with multiple access mode.

(b) To provide efficient information retrieval.

(c) To Identity all relevant sources quickly

(d) To provide rapid access to bibliographic as well as full text information.

(e) To incorporate learning as well as access.

(f) To provide richer context for people to interact with information.

(g) To act as a powerful instrument of change in social and work practices.

(h) To have collection which –

　(i)　are large, and persist overtime:

　(ii)　are well organized and managed;

　(iii)　contain objects, not just representation;

　(iv)　contain objects which may be otherwise unobtainable;

　(v)　contain some objects which are originally digital.

Digital libraries act as global, multilingual repositories of data, knowledge, sound and images. Digital libraries are inherently international.

Advantages of Digital Libraries

There are many advantages of digital library such as-

(i) material can be delivered directly to the users' computer

(ii) information search is easy, and

(iii) any number of documents can be given to any users.

Not only that, multiple copy distribution at any time to anywhere is also possible and maintenance is easy.

Some of the main advantages which digital libraries provide include the following:

(a) Digital libraries are completely of paperless systems which contain technology and information sources and allow remote access of its resources to other libraries by breaking down the physical barriers through national and international computer networks.

(b) Another advantages is that at the same time users from many locations can access simple

electronic information, can copy, print and preserve at his location or wherever he desires.

(c) Digital libraries provide better retrieval and faster communications.

(d) Digital storage permits libraries to expand the range of material that they can provide to its users.

(e) Digital libraries provide one document to more than one reader at a time.

(f) Due to advent of digital libraries there is a significant growth in the use of Internet to share information.

Problems of Digital Libraries

Although digital libraries offer many advantages, they are not free from certain problems. These problems are as below:

(a) **Expensive: -**   The major obstacle to digitization is that it is very expensive.

(b) **Copyright:** -   It is very easy to copy, duplicate and distributes digital information but at the same time copyright law is being violated in digital environment due to lack of control over contents access and reproduction of multiple copies of digital media.

(c) **Technological Obsolescence:** - The major risk to digital objects is not physical deterioration, but technological obsolescence of these devices (hardware and software) to read them.

(d) **Dependence of Technologies: -** Digital libraries are mostly dependent on suitable telecommunications links and computer systems for proper utilization and information transfer, libraries depend much on suitable technology and training of end users in handling a variety of retrieval software's search strategies.

(e) **Preservation: -** Archiving and preservation of electronic information may be one of the most challenging of all tasks. The digital storage network such as hard disks, tapes, CD s and floppy disks have a very short life span due to rapid technological obsolescence.

Conclusion

Digital libraries are nothing but an organized collection of digitized materials, accessible entirely from a desktop computer over a network. Using available modern technology we can create and maintain such library which is the need of the day.

Fortunately most of the new information created today is already in digital form, and may just require conversion to formats appropriate to digital library.

Digitization projects have been important for libraries aiming the digitization of manuscripts, these, dissertation, special collections, which are special in nature. Some of the research and special libraries have already undertaken digitization projects in their full swing. Few digitization initiatives by university libraries could be seen. Yet efforts are to be made in this direction by university libraries in India. It will provide solution to their several problems, like space, preservation of age old and fragile materials users' satisfaction, network based full text browsing time, etc., Electronic library and digital library mean one and the same thing. When the electronic libraries/digital libraries are connected via various networks particularly the Internet, this is called a virtual library.

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