## DIGITAL COLLECTIONS IN ACADEMIC LIBRARIES

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#### **Abstract**

The success and survival of academic libraries in future will depends on their role to satisfy the ever-increasing information needs of users. The resources of information available in the form of digital format becomes a dynamic resource for global sharing more easily than the knowledge in any form and lends scope for automated delivery mechanism. This paper focuses the need for the practice of digitalization and digitized information resources and services at academic libraries to create digital library service environment. Discusses the objectives and services of digital library. It concludes that in view of the effectiveness of digitized information resources and services, urges that the academic libraries should go in for digitized information resources and services for their survival in future.

Keywords: Digital Surrogates, Digital Library, Digital Collection, and Databases.

### 1. INTRODUCTION

Information is a fundamental resource indispensable for any academic activity. The role of information in study, teaching and research is well recognized by the academic community. The revolution in the information and communication technologies (ICTs) has made the transfer of information without geographical barrier. The new ICTs have enabled the academic community to overcome the barrier of time in accessing information as well. Obviously the technology has made it easy for us to do that, but certainly things have to be planned and executed properly. The academic libraries are faced two major problems right at this juncture, First is to isolate the documents of active use and digitize it so that most of users can have advantage of it. Secondly the acquisition, storing and maintenance of digital collections. The digital collection may include two types information resource. One type comprises the 'digital original resources', which are 'born digitally'. The other type comprises 'digital surrogates', which are created from traditional information resource through format conversion. While both type of management requirements, they raise different issue of selection and acquisition and their preservation imperatives are also different.

#### 2. DIGITAL LIBRARY

The concept of digital library began with the emergence of electronic journals and networks. Digital library can defined as a system of distribution of full text and multimedia databases accessible on computer networks. It has a number of machine-readable publications and facilities for remote access to several databases. The Digital Library Federation (DLF) defines, the digital libraries as organizations that provide the resources, including the specialized staff to select, offer intellectual access, to interpret, distribute preserve the integrity of and ensure the persistence overtime of collections of digital works so that they are readily and economically available for use by a defined community or set of communities.

For most of the users of the electronic information system, a digital library is simply a collection of information stored in electronic format. However, some of the information scientists and experts of information technology defined digital library as follows:

Controlled collections of Information Bearing Objects (IBOs) that are in digital form and that may be organized, accessed, evaluated and used by means of heterogeneous and extensible set of distributed services that are supported by digital technology. P. 30

Clifford Lynch, a well-known expert on Internet and Web technologies, has defined a digital library as a "system providing a community of users with coherent access to a large, organized repository of information and knowledge. The digital library is not just one entity, but multiple sources seamlessly integrated". P. 30

### 3. OBJECTIVES OF DIGITAL LIBRARY

The main objectives of a digital library are:

- To collect, store, organize and disseminate information in digital form.
- To save the time the users as well as Library staff.
- To provide accurate and right information at the right time.
- To save space.
- To provide information to a large number of users at a time.
- To reduce human effort and cost involved in different library activities.
- To preserve valuable and rare documents.

## 4. TYPES OF DIGITAL INFORMATION RESOURCES

Digital refers to any resource, which is in digitized form, i.e., which can be read and scanned with the means of electronic media. Like conventional forms digitized resources do not require separate space in a library, as this can be stored in a computer locally and remotely. Digital resources include a wide range of material such as:

- Collection in which complete contents of documents are created or converted into machinereadable form for online access.
- 2. Scanned images, imagers of photographic or printed text, etc.
- 3. Scientific data sets such as protein sequences.
- Online databases and CD-ROM information products, particularly those with multimedia and interactive video components.
- 5. Computer storage devices such as optical disk, jukeboxes, CD-ROM/DVD-ROM.
- 6. Databases accessible through Internet and other networks.
- 7. Digital audio, video clips or full length movies.

## 5. DIGITAL COLLECTIONS AND ACADEMIC LIBRARIES

The successes of digital library depend largely on the nature, content and quality of its collections. The basic requirements in creating a digital library will be the building of digital collections. The digital collections of information include various resources such as electronic journals, books, full-text articles, CD-ROM databases, etc. The benefit of information collections in digital form for preservation, access

and managing large quantities of information have been recognized by both library professional as well as users.

An academic library collection generally consists of the following

- 1. Books (including reference sources);
- 2. Journals:
- Theses and Reports;
- Newspapers and Magazines;
- 5. In some cases manuscripts.

Today, digital resources have become a major field in the world literature. Electronic publishing are those publications, which are found in electronic or digital media. The electronic documents are made available either on CD-ROMs or on the Internet. The electronic documents, which are available on CD-ROM, are referred as offline documents while those on the Internet are known as online documents.

The digital resources in an academic library may be any one of the following

- 1. E-books (including e-reference sources);
- 2. E-journals;
- E-theses /E-research reports;
- 4. E-newspapers.

# 6. BENEFITS DIGITAL LIBRARY COLLECTIONS

There are considerable benefits of digital libraries. The digitalization of resources opens up new mode of use, enables a much wider potential audience and gives a renewed means of viewing our cultural heritage. The main advantages of digital libraries are:

- a. Immediate accesses too high-demand and frequently used items.
- b. Easier access to individual components within items (e.g. articles of journals).
- c. Rapid access to materials held remotely.
- d. The ability to reinstate out-of-print materials.
- e. The potential to display materials that are in inaccessible formats, for instance, large volumes or maps.
- f. 'Virtual Reunification' allowing dispersed together.
- g. The ability to enhance digital images in terms of size sharpness, colour contrast etc.
- h. The potential to conserve fragile/precious originals while presenting surrogates in more accessible forms.
- i. The potential for integration into teaching materials.
- j) Enhanced search ability, including full text.
- k) Integration of different media (images, sounds, video, etc.)
- I) The ability to satisfy requests for surrogates (photocopies, photographic prints, slides, etc.).
- m) Finally reducing the burden or cost of delivery.

### 7. ADVANTAGES OF DIGITAL COLLECTIONS

The digital collection of articles offers all the advantages that electronic media gives over print media:

- 1. Compact storage. In place of the separate hardcopy files maintained for each year's digitalized collections, a multiple CDs can store the full electronic information.
- Integrity of the digital collection. Digitalized collection will not be misfiled, or any pages torn or damaged.
- Quality of the digital collection. A better quality digital collection can be obtained than by photocopying in printed source.
- 4. Search facilities can be provided. Author, article title or journal title can search the digital collection.

### 8. DIGITAL LIBRARIES IN INDIAN CONTEXT

In last one decade, due to the emergence and fast developments of new technologies in the communication as well as in the computer technologies the libraries and information centres taking a new shapes everyday all over the world with different names along with adopting new styles in its functionality in extending their services to its users. Acceptance of these technological changes are inevitable to the library and information professionals in giving new turn in making simple in collections development, fast in servicing and mainly in transforming their traditional library into hybrid one. Only a countable number of organizations and libraries all over the world are gradually achieved and some are still achieving to make their traditional libraries into digital one in a full pledged manner as well in a part. But in Indian context we observed that there is a small jerk in making or creating their library into digital one by making use of the latest technologies are due to the number of issues are as follows.

- The professionals are failed in understanding the basic concept of digital library and also the difference between the Library Automation and the digital libraries. Because the majority of libraries more than 80% still not achieved the full pledged automation. Because library Automation is very basic and necessary part in making or transforming any traditional libraries in to digital one.
- Non-professionals with poor collections will manage the majority of the libraries.
- Number of libraries having some small percentage of digital collection but they don't have any technology or infrastructure facilities to make use of them.
- Library professionals are not independent in all respect in taking any major decision in switch over to new trend or to introduce any new technology.
- Lack of suitable and timely updating and exposing to new technology especially there is a lot of new changes are happening due to the emergence of new technology in information technology.
- Lack of suitable financial support in introducing the continuing and updating the latest arrived updated technology.
- Lack of suitable revised policy for modernization of traditional library to digital one.
- Lack of infrastructure viz. Power trained, human resource, and proper technology etc.

### 9. CONCLUSION

Academic libraries exist to serve the information needs of academic community for their academic matters. The success and survival of academic libraries depends their role to meet the information needs of academic community. Academic libraries with traditional practices to serve the users have failed in meeting the complex information needs of the users due to the shrinking budgets and information explosion. To overcome this, the academic libraries need to create digitized information sources and services with the use of modern technology.

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