COLLECTION DEVELOPMENT OF DIGITAL RESOURCES: SOME ISSUES

B. M. Panage
Former Librarian and Head, Jayakar Library and Dept. of LIS,
Savitribai Phule Pune University, Pune – 411007, India

H. S. Bonde
Assistant Librarian, Jayakar Library,
Savitribai Phule Pune University, Pune – 411007, India

ABSTRACT

Collection development is a dynamic and continuous activity. It involves the users, the library staff and the subject experts on selection team. Collection development is a means to develop need based, up to date and balanced collection fit to meet the documents and information needs of the users. It means collection must meet the requirements of the users. The collection of library must be developed on a proper line. The efficiency of any library service is governed largely by quantity and quality of its collection.

In today’s modern information technology era, most of the information is available in digital form. Many organizations are designing and developing digital libraries. As compared to traditional library, digital library requires different set of skills and competencies to handle a digital collection. The present paper discusses in details the importance of digital resource, digital library and collection development. It highlights the procedure of developing a digital collection with reference to born digital and in house digital resources.

Key words: Collection Development; Digital Resources; Digital Library; Digitization


1. INTRODUCTION
Digital resource is defined as “an information resource that is available in digital form”. [1] Electronic texts, databases, and spread sheets are commonplace while databases of digital images, hypertexts, digital sound and video recordings, computer simulations, and mixed media resources are only now coming into the main stream. Some data resources are static and unchanging; others are dynamic or regularly updated or amended. Data resources are made accessible to users in a variety of different ways. They may be hosted on remote computers and accessed by users via the Internet. Alternatively users may have to acquire the data, and mount and use them locally. Content has been always been center-stage in the digital
library field. Handling content is at the heart of designing, developing, and building digital libraries. The various stakeholders’ i.e. authors, publishers, users, librarians, and others are all tied to each other through the content. Authors have content to disseminate and distribute, while publishers and librarians add value to this content and its distribution. Communication through content creation and delivery relies upon supporting technology and techniques. The effectiveness of the message depends upon the representation and rendering of the digital content.

2. WHAT IS DIGITAL LIBRARY

Digital library is defined by various professional experts and organizations. The most prominent definition is given by Digital Library Federation [2], which reads as; "Digital libraries are organizations that provide the resources, including the specialized staff, to select, structure offer intellectual access to interpret, distribute, preserve the integrity of, and ensure the persistence over time of collections of digital works so that they are readily and economically available for use by a defined community or set of communities". Since the digital library is not adequately defined, there are different opinions about its structure and function. If one looks at it from the traditional library point of view, one can see the following important ingredients or components of digital library:

- Content, Digital objects and collections
- Design and architecture
- Resource discovery tools
- Interfaces

Content is common in both the environment i.e. digital and traditional. Without content, one cannot undertake any type of digitization activity or build a digital library. One perspective of DLs is that they provide dynamic knowledge spaces for the knowledge creation process. The flexibility offered by the digital medium to authors in representing and rendering their ideas is immense. Today it is possible to think of content or information beyond the traditional text largely due to this capability. New genres of documents are evolving. Text is enriched with images, sound and movies. The hypertext/hypermedia modes provide non-linear presentation possibilities. Tens of millions of content objects (speeches, music, poems, articles, books, sculptures, paintings, movies etc.) are being created all over the world. Efforts are being made to convert some of them in digital form. This requires capture and conversion to a digital representation suitable for the relevant media form.

The content of digital libraries may be text, images, audio, video, computer programs, and other forms. Newly created content often is born digital, while older resources are typically digitized through some conversion process. Both must be represented digitally, so the issues of character encoding, formats, files, etc. are the main issues in the building of digital library content. Building digital content encompasses creation, capture, conversion, storage, organization, search, retrieval, presentation and re-use. Contents are of two types; one, which is developed in house by the libraries and the other, is procured from outside vendors. If the content is created in-house then one can take help of internal as well as external experts available in the organization. Sometimes it is very difficult to create the digital contents in-house, so they have to procure this from outside vendors. One should be very careful in selecting the contents from external agencies. Once the content is selected, then we can build a strong collection of digital resources as per the needs of the users.
3. COLLECTION DEVELOPMENT

According to Evans, “Collection development is a process having six major components namely market analysis, collection development policies, document selection, documents acquisition, weeding and evaluation of collection”. [3]. While developing a collection of digital resources, one requires the same set of skills and components which are used in traditional libraries.

Digital collections can be built using a variety of strategies. The Digital Library requires a greater and more coordinated effort for creating digital objects. These can be achieved by following methods;

3.1. Digitization of existing materials

Digitization refers to the conversion of an item – be it printed text, manuscripts, image, sound, film and video recording – from one format (usually print or analogue) into digital. The process basically involves taking a physical object and essentially making of an “electronic photograph” of it. [4] This is usually accomplished through scanning and document creation. As the fundamental architecture of a digital library becomes stable, existing materials will be digitized and added to the digital collection.

3.2. Resources Created Outside the Library

Building digital collections can entail more than digitization of existing resources. Purchasing or providing access to external resources can extend the scope of the library collection, either by eliminating duplication of effort at multiple locations or providing access to materials which the library may not be able to digitize.

3.3. Acquisition of Original Digital Works

Acquisition of “born digital” materials include such as electronic books, journals, or datasets created by publishers or scholars that originate electronically rather than being scanned from paper or other fixed media. Digital objects may be born digital or digitized. Strictly speaking, born digital objects are considered to be those that have been created, and as such are generally used and managed, in digital realm. They are ‘not intended to have an analogue equivalent , either as the originating source or as a result of conversion to analogue form. [5]

3.4. Providing Access to External Collections :-

Providing links to external web sites, other library collections, or publishers’ servers is also a method of increasing materials available to local users. However, libraries do not have long term control over items accessed from external collections; such items may be modified, discontinued, or allowed to stagnate without input from libraries that link to them.

3.5. Collection Development of Digital Resources

A collection development policy which is used for traditional materials is desirable for digital resources. Following are some of the major issues which should be considered for building a collection of digital resources.

- a) Criteria for selecting resources (value of information, technical specifications, etc)
- b) Choosing from multiple versions available through different aggregators,
- c) Choosing between print and online versions (or both).
- d) Choosing between linking to external resources vs. buying and maintaining online resources locally.
- e) Procedures for discontinuing print subscriptions for materials available in electronic format,
- f) Procedures for “weeding” obsolete materials.

Out of above six issues, the present paper is focusing only on selection of digital resources.
4. CRITERIA FOR ASSESSMENT OF DIGITAL RESOURCES

Librarians provide not only physical, but also intellectual access to information. With respect to online information, much of which librarians cannot vet or curate, users need to be able to evaluate those resources [6]. Hence, it is necessary to evaluate these resources. Many authors have discussed various steps and criteria for assessing the digital resources. Vijaykumar & Jeevan [7] have comprehensively described the criteria to assess the externally procured digital resources, which are as follows-

4.1. Authority of contents

The authority of contents can be judged by taking into account these questions, Is it complete and internally consistent?, Is it coherent in relation to other related material?, Is there an authorized canonical version?. Another issues one has to consider are as intellectual level in which the subject matter is discussed; reputation of the publisher, compiler and indexer/abstractor in the field; style of the subject presentation, coverage, update, and language; comprehensiveness; Currency of the subject matter.

4.2. User level

The digital documents either created through digital conversion or born-digital should be useful to the specified user community. It should be easy to use and its presentation should be legible. These documents are software dependents, so software should be user friendly. At every possible stage help should be provided by giving help messages and instructions. In case if any user comes across to any errors, the errors should be well documented.

4.3. Search capability

The search facility should be powerful. Users should be in position to search the database using Boolean and logical operators. Whenever it is required users can search the documents by particular author, particular title, particular date or range of records. Response time is very important ingredient one has to find how fast the information is displayed. Another important points should be considered are like; information exhaustiveness in records; mechanism and transparency by which the bibliographic to full text linking is guaranteed, searchable text fields: exhaustive indexing conducted to make searches amenable to different field, graphic support etc. It is frequently observed that graphics require more time to download.

4.4. Display capabilities

Display capability of system can be judged with the help of following points

- Managing search results, features and support provided by the system to manage the query field.
- Display format: style and variation of displaying results is a sorted order.
- Sorting- does the system support arranging search results in a sorted order.
- Avoiding errors. How free is the system from typographic or other errors in display
- Appearance: Aesthetically designed colour combination and headings for display.

4.5. Documentation

Detailed information about the digital source is required for its full utilization.

- Manuals: should be carefully designed and explanatory.
- Online help messages: Electronic version of the manuals as context sensitive messages in a pick access mode.

4.6. Technical support

It is experienced that technical support is available regarding the digital source, the technical support can be judged with the help of following points;
• Speed: How much time requires to vendors to support? or. Have they got service points in your vicinity?
• Depth: Technical supports are provided up to what level
• Duration: How long services are encouraged?
• Nature: Are the services being provided free or on payment?

Above mentioned points are necessary to assess the usefulness of the digital resources. Libraries are spending large amount on purchase and subscription of these resources. Hence it should cost effective and cost beneficial.

The important task of digital library is to enhance the knowledge base of common people. Hence they are very important in overall growth of any society.

5. ROLE OF DIGITAL LIBRARY IN SOCIETY

The stakeholders are different communities of people who use and benefit from digital libraries – have different views of what DLs are and what can it do. Most government around the world has positive views about the ability of digital libraries to enhance ‘equity of accesses to information’. Government perceives DLs as a means of overcoming the digital divide. Much of the digital library movement in the US as well as in other countries of the globe has stemmed from governmental initiatives and drive. Networks had developed and strengthen to support the building of National Information Infrastructure. Governments and government agencies perceives dLs as information infrastructure that enable them to realize the goal of the social mission of equity of access.

The new medium of digital libraries is perceived with ambivalent notions by the publishing industry. For the publishing industry, digital libraries are new modes of distribution, and a new competitive market for their continued growth. In view of the threat to their traditional roles markets, publishers are adopting the new paradigm of electronic publishing through integration of new media and new partnerships with other agencies and institutions. For educators and teachers, digital libraries represent new learning resources, supported by a broadening of media centers and multimedia content. Many projects and initiatives have been undertaken to further the cause of education through digital library developments. Governmental educational institutions, and other agencies and individuals, enthused by the benefits of digital libraries, have vigorously pursued their development. To the library community, digital libraries are a further step in the continuum of newer media of publishing, as well as newer technological and organizational framework for continuing and revitalizing their mission of accessing and disseminating information and knowledge.

6. CONCLUSION

Libraries and the librarian community have embraced and adapted themselves to the changing technologies. Today, librarians look at DLs as means for more direct involvement in the dissemination process. In order to obtain the desired data, a user may expect to simply use a GUI interface or a metaphor that replicates a physical library by computer graphic technologies. However, a digital library provides services to so many kinds of users that it requires a specific user interface for each user class. Users can get very scholarly and useful information through these resources through digital library. The main function of the libraries is to procure the highly relevant and scholarly information to meet the information needs of the users and librarians role is very dynamic in this age.
REFERENCES


