

Impact of Recent Advances in Information Technology on Collection Development

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Abstract

The impact of CD-ROM databases, internet and digital libraries on collection development is quite significant. Challenges in this regard are discussed in this paper and argued that it is necessary to conduct a survey of available sources on various networks. Effective techniques are required to search- and store the downloaded data. The policy for collection development should take care of recent advances in information technology and its impact.

1. INTRODUCTION

The topic 'Collection Development' covers a broad range of activities related to the policies and procedures of selection, assessing user needs, evaluation of the present collection, weeding out, and storing parts of the collection and planning for resource sharing. Collection development is not any single activity or group of activities; it is a planning and decision making process.

In recent years, information technologies have advanced to such an extent that their impact on libraries is significant. Particularly, development regarding digital libraries, Internet, electronic publications, CD-ROMs, etc., have forced the librarians to change the way they are now functioning. In this context and also due to

the budgetary constraints, librarians are giving importance to 'accessing the other libraries' collection' rather than 'possessing almost all documents' on a given subject. For instance, a number of full text databases are available on Internet. Why then one has to acquire/purchase similar documents? Why can't one access such records and download, if necessary? Once downloaded, such electronic documents, must be classified and catalogued, so that one need not search and download (the same documents again, if and when required. In some cases, however, it may be economic to download again!

An attempt has been made in this paper to discuss the impact of recent advances in IT on collection development.

2. IMPACT OF CD-ROM

CD-ROMs are now increasingly being accepted as a standard storage medium based on ISO standards. One CD can store about 650 MB of data. It is estimated that the life-time of a

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CO-ROM is almost 100 years-yet to be proved in a real-life situation! There are cases where scratched/damaged CD-ROMs cannot be read by the system and it is practically impossible to acquire them again. More than anything else, it is inexpensive. A large number of CD-ROM databases are available on almost all subjects. Multimedia databases are now increasingly becoming popular. They are the most useful educational tools, especially for the beginners in any subject. No librarian can afford to ignore this development. In the near future, perhaps there is no need for subscribing secondary periodicals in printed media. If CD-ROM databases are subscribed and if they are made available on CD-NET, many can even access them on networks from remote distances. In this environment, librarians can afford to have less shelving space, since bulky volumes are not subscribed; CDs require only least space! Further, complex queries can be searched effectively by Boolean expressions.

Often cost is considered as a major factor to decide whether or not one should subscribe to CD-ROM databases. It is no longer true. Cost is becoming less and less every year. The problem perhaps is of compatibility—hardware and software with its different versions, change so frequently that one need to worry about its compatibility with new systems. This however has to be tackled by adopting certain international standards. Evaluating CD-ROM databases is yet another task—the simple way is to know:

- How good is its retrieval engine?
- Its coverage by country-wise, language-wise, etc. Does it cover Indian Literature?
- How frequently it is updated?
- Whether it can be replaced, if and when it is damaged or missing?

3. IMPACT OF INTERNET

Yet another development in IT applications is the emergence of Internet. Its impact on libraries is considerable. Internet is popularly known as the network of networks. It is being used world-wide for personal and group

communication, file transfer and for accessing databases on remote computers.

Information sources on Internet are all stored as computer files of some kind or the other. They have a location on at least one Internet site; may be duplicated at other site (in such a case, it is called a mirror image of the original file). These files on the Internet contain varied materials. Sources like electronic journals, pre-prints, technical reports, numerical and graphical data, software, campus-wide information systems, databases, library catalogues, educational materials, company profiles, patents, standards, information on societies, institutions, associations, etc., are available on Internet. Much of these are 'reference type' in nature. Other resources on Internet can be classified as usernet resources, gopher resources, world wide web resources, WAIS resources, etc.

In this context, libraries may have to review their collection development policy—much of what is available on Internet need not be procured! This however involves a considerable amount of time and cost to conduct a survey of what is available and how long it is available? How much it cost to access—for searching and downloading? This is a difficult task.

4. IMPACT OF DIGITAL LIBRARIES

The term digital libraries refers to a new way of carrying out the functions of libraries encompassing new types of electronic information resources, new approaches to acquisition (especially, more access to other libraries' collection and sharing it); new methods of storage and preservation, new approaches to classification and cataloguing, especially of electronic data; intensive use of electronic system and networks and dramatic shifts in intellectual, organisational, and electronic practices. It is also known as a distributed text-based computerised information system and service. It may have several provisions to access documents, those are of high value, mostly from outside the organisation.

In digital environment, only digital information is disseminated; software is

produced locally, and most of the information is obtained by remote accesses; much of this information is less permanent in nature. In these circumstances, it is very difficult for librarians to decide :

- What should be acquired (by downloading), stored and organised?
- Who should do it (most of such information is accessed directly by users, without bringing into the knowledge of librarians)?
- What standards to be followed?
- Users locate and access the information; information is not usually structured; no rules or codes are followed and no one controls the information that is made available.

The data or information may be of different types. To organise the data or information, we require cataloguing practice and it calls for an appropriate data model for organising data with standard font. Specialised technologies are needed for compressing as well as for organising information. These are the major challenges in digital library environment.

5. EVALUATION OF COLLECTION

Evaluation of the library collection is one of the functions of collection development programme. Development of quantitative measures to evaluate a collection is usually complicated by the increasing use of CD-ROMs, online services, impact of internet, etc. In traditional methods, the following measures are usually considered for evaluating collection:

- Size of the collection absolute size, size of the rare collection, size of subject, date, language, etc.;
- Number of volumes per user, number of volumes per document circulated, current growth rate, etc.;
- Amount of collection used; and
- Expenditure on collection, etc.

All these measures are inadequate to evaluate a library in the context of recent advances in IT. In addition to the above, the

following measures are equally important in the modern context:

- Availability of CD-ROM databases—number of CD-ROM databases subject-wise, frequency of updation, availability of CD-ROM drives, possibility of is remote access, availability of multimedia databases, etc.
- Access to Internet success rate—how much is really accessed, number of records accessed and downloaded, number of accesses to other electronic publications, response lime, the cost of accessing. Internet and other electronic publications through online services, etc.

It is difficult to collect such data since users can directly access such information through their terminals; librarians may not come to know such events. Eventually each of the users may have his/her own 'digital library' at very high cost and the library may become virtually non-existent.

One aspect of evaluating collection is keeping track of what is missing and what should be replaced. Replacement decisions may be based on reports of requested items not located and on visual inspection of documents that have been returned. Further, a sample of the collection can be surveyed to establish which subjects are sustaining the greatest losses. The other aspect of evaluation is to identify less used document so that they can be sent to a less expensive building for storing, or can be put into compact storage in a less accessible area of the main library building.

But in the context of IT, it is not that easy to measure the use of electronic records although, it may comparatively be easy to collect the data. It requires entirely a different mission to keep track of frequently used records and organise infrequently used records effectively in a distributed text-based systems. Who has to do this?

All these issues are challenging one in IT environment.

6. CONCLUSION

IT has its impact on collection development. It is necessary to monitor what is available on

various networks. It may also be necessary to search frequently such networks and download the relevant records depending upon the local interest. Effective techniques may have to be developed for storing and searching such downloaded data. Since electronic publications, including the CD-ROM databases, are increasingly becoming popular, the policy towards collection development should take care of such trends.

7. FURTHER READINGS

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