APPLICATION OF OPTICAL MEDIA IN LIBRARIES

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Abstract

This article describes acquisition, accessioning, processing, circulation and maintenance of CD-ROMs in the libraries and suggests some practical way outs in managing the CD- ROMs which may help in taking policy decisions by the library managers in handling CDs. It also describe applications of other optical media such Scanners, Bar Code Reader, Optical Jukeboxes and Projectors in libraries.

KEYWORDS :

Application , Optical Media , Libraries , technology .

INTRODUCTION:

Optical media such as CD ROMs, DVD, Scanners, Barcode Readers and Projectors etc have become essential part of the Libraries. Importance of these Medias can be judged by the fact that academic libraries in advance countries starts to lend the even Projectors to their clienteles for presentations for 6 hours or so. Previously, we have been dealing with traditional collection only. Now in addition to it, libraries have information on electronic media which has some problems of accessioning, processing, circulation and maintenance and managerial decisions are to be taken by libraries managers according to the need and use. Now we will discuss one by one about CDROMs, Scanners, Barcode Readers and Projectors:

A.CDROMs

CD-ROM is now is well established technology in libraries of all kinds where it has found a role as an alternative to printed books and journals. It is very versatile technology which most library managers have welcomed enthusiastically. Besides traditional sources of information such as books, periodicals etc. the information now is also available on electronic media like CD-ROMs, DVDs, VCDs etc. Out of these the most common is CD-ROM and libraries have also started purchasing the books on CD-ROMs and journals, particularly abstracting available on CDs, are being subscribed. The reasons of being that, they are easy to access and save the time of users as well as space of libraries. In this way present technology has changed the scenario of libraries. All this has changed the management of libraries. . Libraries have hard time to consider the many management questions that CD-ROM has raised to experiment until satisfactory arrangements are implemented. We are discussing below one by one:-

1. Acquisition: The procedure of purchase of CD-ROMs is the same as they are substitute of books and journals. But their accessioning requires some policy decisions which are discussed below:

a. Accessioning of CDs of Books: Any book received in the library is entered in the accession register. These days libraries are purchasing CD-ROMs, i.e., electronic resources and some of CDs are received along with books. Now the following issues arise:

(i) Whether CDs should be accessioned along with books or separately. This decision is to be taken by each library according to its need.

(ii) Some of the CDs are received along with the books. Now the question arises whether we should accession separately or along with the book. If accessioned separately, is there any need to establish relation between the two.

SUGGESTIONS:

(i). Maintaining Separate Register: However, it will be better to accession CDs in separate register to maintain the statistics. Otherwise it will be difficult to ascertain how many books have been received on CDs

(ii) Correlation between the book and CD: The second issue is that some of CDs are received with books. If we have decided to accession CDs separately then there is need to establish correlation between the two, i.e., CD and the book. For this, notes are to be given against each. Against the book, it should be written that received with CD (Accession number so and so). In the CD register, it should be mentioned received with book (Accession.No. so and so). Cataloguing entry should be at one place.

b. Accessioning of CDs of Journals: Some of the libraries have started subscribing CD-ROM databases of Abstracting journals. In this way, they receive number of CDs for one database as per policy of the publisher. Latest CD may have previous data too. Now the following questions arise:

(i.) Whether the library should accession these CDs separately or along with the journals received on print media.

(ii) Whether all the CDs of one database should be accessioned or the last one which may contain all the previous data. If last one is accessioned, then what to do of the rest.

SUGGESTIONS:

(i) Maintaining the Separate Register: Here, it is suggested that libraries should use separate register for accessioning CDs of journals also. The reason being the same as in case of CDs of books because the libraries may want to have separate statistics for journals.

(ii) Accessioning All the CDs: It will be better to accession all the CDs of a database as auditing is involved because libraries are paying for all these CDs.

c. Writing of Accession Number: In case of books and journals to maintain the consistency, the libraries have been using the back of title page, secret page and last page for stamping and writing the accession number. In case of CDs we encounter with following question for doing the needful:

While accessioning, whether CD of book or journal, the stamp of library is to be fixed?

SUGGESTION:

Non-stamping and writing on CD: If we put stamp on CD, there are chances of causing damage to it due to delicacy nature of the CD. Therefore it is suggested, simply to write the name of library and accession number with special pen used for writing on CD, due to availability of limited space on it. Now a day special pens are available in the market for writing on the CDs. Luxar OHP Marker is a kind of pen which can easily write on the CD without scratching/damaging it.

d. Providing Cases to CDs: The CDs which are purchased have cases/covers. But CDs which are supplied along with books do not have the same. Similar is the case with CDs of journals. So the libraries should purchase the CD cases and such CDs which are received without cover should be put in these cases before sending for processing as printed books and journals are bound.

2. Processing of CD-ROMs: As, we know that processing of books and journals requires classification and cataloguing. Similar is the case with CD-ROMs. So we discuss these processes one by one.

a. Classification: All the CD-ROMs after accessing should be classified. The call number should be written on the CD itself because there is no other place to do the needful.

b. Cataloguing of CD-ROM of Books: It is another area where the librarians are to take decisions on the following issues.

(i). Whether the indication about CD is to be given in note section or with title to distinguish it from the book to convey this information to the users of library.
(ii). Whether separate database is to be created.

SUGGESTIONS:
(i). 'CD' be made part of the Title:If an indication about CD is given in the note section it will not be retrieved by key word CD under combination search if users want to know   whether any material on particular topic is available on CD. Moreover, users may not catch what is given in note section. Hence at the end of the title it should be mentioned as 'On CD'. For example the Book entitled, Digital Libraries [On CD].
(ii). Separate Database for CDs: No doubt separate database can be created and it will be useful for users to have access on the material available on CDs at one place. It is only possible if provision for the same is available in the software being used by the library
c). Cataloguing of Periodicals: CD-ROM databases of journals or other periodicals should find words 'On CD' at the end of each title of journal to distinguish these from other journals which are received on print media. It will help the users of library to know about the availability of particular journal(s) on CD(s) and they will not have to waste time in going here and there.
d). Barcoding: As the libraries are generating barcodes for books, so same procedure is adopted for CDs too. But the only difference is that a CD requires one barcode label which should be fixed on its case as there is no other place due to its size. The barcode label should have information about Call No. and Accession No.

3. Circulation: As the libraries are now acquiring the books and journals on CDs, therefore the decisions are to be taken regarding the following:

(i).Whether the CDs should be issued or not.
(ii).If issued for how many days?
(iii).What should be the rate of overdue charges?
(iv).What procedure should be followed to check the CD on its return because it will not be possible for the person at the issue or return counter to check the same as he/she may be busy in his/her routine job?
v).If lost how to make recovery- whether to realise the cost or ask for   replacement.

Suggestions:
(i.) Issuing of CD: If the CDs are not issued then all the other points automatically becomes invalid. In case, these are issued then other points are valid. It is a very crucial point keeping in view of nature of the material and delicacy. When the library issues books, CDs should also be issued because they are the substitute of the books. The only difference is the media of publication. Circulation of CDs can be avoided if libraries are able to make their availability online. However, some of the users still insist for issuing the CDs to make use at home. So the libraries are to take following decisions:
(ii.) Issue Period: The libraries should follow the same practice as in case of books. If a book is issued for 14 days then CD should also. But book might have multiple copies whereas CD has single copy. Keeping in view of this fact loan period may be reduced to 3 days or less as the case may be.
(iii). Overdue Charges: The librarians feel pain to charge overdue charges. But the timely return of the book or CD is must. The rate may vary from library to library according to the clientele they are serving. However, it is suggested that libraries should charge at the rate of Re.1.00 per day per CD.
(iv). Checking of CD on Return: The safe return of the CD is essential for every library so when it is returned it should be checked by the senior staff. As issue/return comes under circulation or Readers' Services Division so it becomes the duty of the Incharge to check the same before getting it back.

(v). Loss of CD: In case the CD is lost by any member of library there should be a provision of replacement of CD with latest edition as in case of book along with processing charges. In case, the CD is not available then the cost may be realised. The processing charges should be decided by the librarian from time to time.

4. Maintenance and Shelving: Every material whether it is book, furniture, periodicals, CD etc. needs proper maintenance. But CDs require special care because they are delicate in nature, hence the following points to be kept in mind:

(i) Cleaning of CDs: They should be cleaned with utmost care to avoid scratch. Rough handling may cause scratch or break the CD which leads to corrupt the data.

(ii) Shelving of CDs: It is important and decision should be taken keeping in view of their size. The libraries cannot provide open access to CDs because their contents are not visible without the help of computer. Moreover, there are chances of theft due to their small size. A CD can be taken in a pocket by any user. So these should be kept in close sequence under lock and key. But the question arises whether these should be kept in almirah or in a rack. It is rather better that CDs should be shelved on specially designed racks for them that would provide a good look. Some samples of racks downloaded from Internet* are given below:

CD/DVD Spinner Racks   **CD/DVD Glass Door Racks**

No CD is to be shelved uncovered. This will not only provide protection but also give symmetrical look as in case of books which are bound prior to put on shelves.

A.Optical Jukebox

An optical jukebox is a robotic data storage device that can automatically load and unload optical discs, such as Compact Disc, DVD, Ultra Density Optical or Blu-ray disc and can provideterabytes (TB) and petabytes (PB) of tertiary storage. The devices are often called optical disk libraries, robotic drives, or autochangers. Jukebox devices may have up to 2,000 slots for disks, and usually have a picking device that traverses the slots and drives. The arrangement of the slots and picking devices affects performance, depending on the space between a disk and the picking device. Seek times and transfer rates vary depending upon the optical technology. These are used in high-capacity archive storage environments such as imaging, medical, and video. Hierarchical storage management is a strategy that moves little-used or unused files from fast magnetic storage to optical jukebox devices in a process called migration. If the files are needed, they are migrated back to magnetic disk. Optical disc libraries are also useful for making backups and in disaster recovery situations. Today one of the most important uses for jukeboxes is to archive data. Archiving data is different from backups in that the data is stored on media that will last up to 100 years. The data is usually written on Write Once Read Many (WORM) type discs so it cannot be erased or changed. (Wikipedia, 2013)

C.Scanners

Application of Scanners can be seen in the library very frequently. In advance countries, libraries provide free use of scanners to their users the readers/users are themselves responsible for the

copy right laws prevailing there.

A scanner is a device that captures images from photographic prints, posters, magazine pages, and similar sources for computer editing and display. Scanners come in hand-held, feed-in, and flatbed types and for scanning black-and-white only, or color. Very high resolution scanners are used for scanning for high-resolution printing, but lower resolution scanners are adequate for capturing images for computer display. Scanners usually come with software, such as Adobe's Photoshop product, that lets you resize and otherwise modify a captured image.

Flatbed Scanner

D.Barcode Reader

Librarians are observing a paradigm change towards shaping of their libraries. All the documents are being bar-coded to be used by the barcode scanner for the library patrons so that they can save maximum time using by checking out or checking in of their books.

A barcode reader (or barcode scanner) is an electronic device for reading printed barcodes. Like a flatbed scanner, it consists of a light source, a lens and a light sensor translating optical impulses into electrical ones. Additionally, nearly all barcode readers contain decoder circuitry analyzing the barcode's image data provided by the sensor and sending the barcode's content to the scanner's output port (Wikipedia).

Barcode reader

E.Projectors

Libraries are using projectors for providing presentations. Many academic libraries in USA lend projectors to their users for presentations.

An LCD projector is a type of video projector for displaying video, images or computer data on a screen or other flat surface. It is a modern equivalent of the slide projector or overhead projector. To display images, LCD (liquid-crystal display) projectors typically send light from a metal-halide lamp through a prism or series of dichroic filters that separates light to three polysilicon panels – one each for the red, green and blue components of the video signal. As polarized light passes through the panels (combination of polarizer, LCD panel and analyzer), individual pixels can be opened to allow light to pass or closed to block the light. The combination of open and closed pixels can produce a wide range of colors and shades in the projected image.

LCD Projector

CONCLUSION:

Libraries now-a-days are purchasing most of the optical devices such as CD-ROMs, DVD, Optical Jukebox, Scanners, Barcode Readers and projectors in addition to printed documents to meet the challenge of information technology. These electronic media of information required special treatment and management skills in accessing/ procuring, processing, circulation and maintenance as they are different from books in nature and size. They are delicate and they must be handled with utmost care.

REFERENCES:

1.CHAKRAVARTI (A K), VASANTA (B), SHROFF (N) and KRISHNAN (ANA). Technology watch: CD-ROM. Annals of Library Science and Documentation. 42.1(1995): 27-34

2.HANSON (T A) and DAY (J M). CD-ROM in Libraries: Management issues. London, Bowker-Saur, 1994.

3.MALAVYA (V C). Electronic Libraries. New Delhi, Ess Ess Publications, 1999.

4.MALWAD (N M), etc, ed. Digital Libraries: dynamic storehouse of digitized information. New Delhi, New Age International, 1996.

5.* [http://www.stackstandsstacks.com/html/product85 0.htm]

6.http://en.wikipedia.org/wiki/Barcode_reader

7.http://en.wikipedia.org/wiki/LCD_projector

8.http://en.wikipedia.org/wiki/Optical_jukebox

9.http://whatis.techtarget.com/definition/scanner