CD-ROM DATABASES : THE PRACTICAL INFORMATION SOLUTION FOR THE LIBRARIANS AND USERS

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ABSTRACT

Dissemination of the right information to the right user, at the right time, at the right cost is the grass root principle of any information system. For which, the IT (Information Technology) helps in many ways, which is right from the invention of a personal computer to CD-ROM (Compact Disk-Read only Memory) technology. CD-ROM technology is mainly used in the information storage and retrieval operations, which helps to handle the large volume of data (which can be textual, numerical, graphical) in a effective, accurate and faster way. In this information explosion era, culling out the required information is a challenging task to the librarians and information professionals. To succeed in this situation using the traditionally available information dissemination methods are not ideal and advisable. The ideal solution to handle such a large volume of data is the application of CD-ROM technology, the one which is quite cheaper and economical too. This paper deals about the general characteristic features of CD-ROM databases, hardware and software requirements to set up a CD-ROM work station, popular CD-ROM databases available in various subjects, and the special benefits of CD-ROM databases, etc.

INTRODUCTION :

Information is for development, development leads to the prosperity. The development of an industry or an idividual depends upon getting the 'right information' at the right time and utilising the information in one's day-to-day applications. While considering the rapid growth of information, for an industry or an individual, it is very difficult to cull out the relevant information from the information Ocean. The present era of IT (Information Technology) revolution made this task very easy, and the application of IT plays a major role in the dissemination of information. The CD-ROM (Compact Disc-Read Only Memory) technology is one among those, which is latest and being used in very large scale, especially for the information storage and retrieval. CD-ROMs are used as databases to store large quantity of data, in the form of bibliographical, full text, numerical, graphical, and even sound. The advantages and utility of CD-ROM databases are properly understood by the libraries and information centres, mainly in developed countries. Several CD-ROM databases are already in use in different subject areas. Now, India as well as few other developing countries also started using CD-ROMs, but not on a large scale.

WHAT IS CD-ROM ?

CD-ROM means Compact Disc - Read only Memory. Read Only Memory is a generic term for an un-modifiable computer data storage device. CD-ROM is an optical circular disc of 120mm diameter and hole of 15mm at the centre with thickness 1.2mm. Using laser beam data is recorded in digital form in the disc. The recorded data can only be read by any user, but a user cannot write on it. By using apporpriate software and hardware the data can be read.

DATA STORAGE CAPACITY OF CD-ROM

A CD-ROM disk can store up to 660 megabytes (MB) of information. That is the equivalent of approximately 3,30,000 type-written pages or more than single-sided floppy discs. The storage life of CD-ROM ranges between 10 to 50 years.

EQUIPMENT REQUIRED FOR CD-ROM

CD-ROM is read, using a CD-ROM drive attached or in-built with a computer, via, suitable interface, and using a compatible software. To access the information on a CD-ROM, one must have the following minimum equipments configuration;

1. An IBM PC-XT/AT (386 series and above) or 100 percent IBM compatible PC (Personal Computer) Including a Monochrome or VGA Colour Monitor.

2. Operating system PC-DOS or MS-DOS, Version 3.1 or later, or Windows 3.0 or later.

3. 640 RAM (Random Access Memory)

4. One hard disc drive 50 MB

5. One floppy disc drive.

6. One CD-ROM drive and CD-ROM controller card, and a laser reader.

7. CD-ROM retrieval software.

8. CD-ROM disc (databases as per requirements like TTD, CA etc.), and

9. A 80 Col. dot-matrix printer.

When buying the CD-ROM hardware and software, much care should be taken. The CD-ROM drive should match the ISO 9660 standard. It is advisable to buy a kit, which includes, the CD-ROM disc drive, interfaces, cables, operating system software etc. Sound and video cards are also available alongwith the kit.

The approximate cost for the equipments other than retrieval software and CD-ROM database, will be ranging from US $ 5000 to US $ 7000. To operate CD-ROM an appropriate training is required at the initial stage. Those who are familiar with computer operations are able to handle CD-ROM.

NEED FOR CD-ROM DATABASES

The need for a CD-ROM database is directly related to the increasing information need of the user population, to look for up-todate information which benefits them.For which, the library and ifnormation centres (L &IC) needs to provide from time to time better quality information, but at lesser cost and quickly. Due to explosive growth of information sources, for the users, the retrieval of needed information, would not be available many times only from their internal sources. In this situation, a need arises to look for the relevant information from external sources. Obviously the quantity of information in the external sources are of very large volume. To handle so large data is not an easy task, if we use only computer hard disc and floppies as a tool. So, an alternate and ideal way can be, to make use of CD-ROM technology and CD-ROM databases. To have a quick access to the latest information in a large volume, the application of CD-ROM databases is must.

BENEFITS FROM THE CD-ROM DATABASES

There are many advantages when you use a CD-ROM database. The practical benefits are as follows:

1. Easy to handle the large volume of data in a flexible manner.

2. High quality, accurate and current, information retrieval in a faster way.
3. More information at lesser cost.

4. More access to the end user by way of providing direct access to the large volume of data.

5. In a bibliographical database a search can be made of any of the access points like keywords or subject terms, title, author, year of publication, document type etc. and combination of all these.

6.No telecommunciation charges like on-line databases. There is no connect fee or on-line charges, without the fear of access time charges multiple search can be performed, data can be down loaded.

7.Less physical storage space is required.

8.User friendly, menu driven database system, it helps the end user to access the database without much difficulties.

9. Information can be viewed on the screen, down loaded to floppy discs or can be directly printed. CD-ROMs are portable, can easily be transported from one place to other.

POPULAR CD-ROM AVAILABLE IN VARIOUS SUBJECTS

	CD-ROM TITLE	SUBJECT
1.	Encyclopedia of Associations: International Associations	Business
2.	Consultants and Consulting Organisation Directory	Business
3.	Market Share Reporter	Business
4.	Booklist's Guide to the years best book	Literature
5.	Oxford English Dictionary 2nd Edition	Language
6.	Acronyms, Initialisms and Abbreviations Dictionary	Language
7.	Contemporary Theatre, Film and Television	Arts & Entertainment
8.	"Video Source Book"	" "
9.	Directory of Religious Organisations in US.	Religion
10.	Educational Ranking Annual	Education
11.	Advertising Career Directiory	Careers
12.	Worldwide Government Directory	Governmnet & Law
13.	"Law and Legal Information Directory"	" "
14.	Encyclopedia of Enviromental Information Sources	Environment
15.	"Recycling Source Book"	"
16.	Senior Citizen Services	Society
17.	Research Centres Directory	Science & Technology
18.	"Chemical Abstracts"	" "
19.	"Textile Technology Digest"	" "
20.	"COMPENDEX "	" "
21.	"INSPEC"	" "
22.	Encyclopedia of Health Information Sources	Medicine
23.	Ulrich International Periodicals Directory	Publishing & Indformation
24.	"Bookman's Price Index"	" "
25.	"Directory of Special Libraries & Information Centres"	" "
26.	"Publishers Directory"	" "

The above are some of the popular CD-ROMs databases available in different subject areas. These databases are available in various combinaions like, full-text, bibliographical, sound & video, and graphics etc. More details can be had from:

Gale International Catalogue
Gale Research Inc.
835 Penobscot Building
Detriot,
Michigan 48226-0748
USA
Phone: 313-961-2242
Fax: 313-961-6348

IMPLICATIONS

Right from the very beginning all kinds of human inventions have been very well applied in the information storage and retrieval processes. In the present era, the Information technology is used at a higher rate. So far the CD-ROM is used mainly for audio and bibliographical data storage and retrieval. But, now the trend is changing. CD-ROM isused in Multimedia (sound, text, graphics and animation) applications. The CD-I (Compacat Disc-Interactive) technology is being used for mass education and mass communication. In the developed countries like Japan, USA, UK, and other European countries, CD-ROM technology is exploited to the maximum extent. In many libraries and informaion centres (profit as well non-profit oriented) several reference sources like, multi-volume encyclopeidas, abstracting and indexing periodicals, dictionaries and other audio-visual aids have been replaced by CD-ROMs. In foreign countries CD-ROM megaazine publishing is already in practice. Many periodicals and journals are now available in CD-ROM format. However, in India, even major and popular libraries and information centres are yet to have a CD-ROM. Mostly private information providers are dealing with CD-ROMs. Now, slowly the special libraries and information centres, in Inida have started procuring CD-ROMs. This trend should move fast, more and more libraries and information centres should try to use the CD-ROM databases in their informaion storage and retrieval activities.

CONCLUSION

The awareness about the use of CD-ROM databases and its utility among the library and informaion professionals, the top management in various organisation also should understand the benefits of the CD-ROM databases, and encourage library professionals involvement, training and dedication to use the latest information technologies are also imporatant. If all these can be achieved, definiltely by the beginning of the 3rd millennium itself, we can see the CD-ROM libraries replacing present day hard copy libraries, which is going to save lot of manpower, money and tremendous space too.

REFERENCES

1. L.Allen and L.Stoddart, "Adding VAlue Through a CD-ROM network", Aslib Information, 20(7/8), p.284-287, 1992

2. Vic Lilley, "Building Better Business: Obtaining the maximum benefits from the use of CD-ROM", Textile Horizons , 14(4) p.28-29, 1994

3. M.M. Kooganuramath, "CD-ROM Databases on Engineering and Technology: Networking Usage in Libraries", Library and Information Science, Edited by D.B. Patil, Ashish Publishing House, p.33-54, 1994.

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