LIBRARIES IN 21st CENTURY IN INDIA

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INTRODUCTION

The meaning of the word 'Library' has changed considerably in recent times. At present this word is used for collection of books for reading purposes, libraries which can act as depositories as in the case of national libraries or a library system of a country, i.e., British Library, etc. Some of the libraries have emerged as Documentation Centres (not a very recent term) and others as Information Centres or Informatics Centres with the traditional Library as an integral part. The collection of libraries has also become diverse from stone tablets and palm leaves to printed books, audio-visual materials and computer readable files. The access of information of a library user has shifted from a collection at a location to databases located at thousands of miles away.

Library - whether public, national, academic or special - its main objectives and functions are to collect, organise and to disseminate the information to its users effectively and efficiently. Application of Information Technology in the organisation and services of libraries has brought a sea change in the functioning of libraries in the last two decades throughout the world. In India the application of Information Technology (IT) in libraries is in its infancy.

As day by day the use of Information Technology is dominating the libraries, the librarian's skill in the application of this technology is becoming the deciding factor for the efficiency of services provided by a library. This is obvious from the point that the number of journals available in electronic media (CD-ROMs, floppies, etc.) are increasing day by day. The libraries are using computers, telecommunications, etc. for document delivery systems.

PRESENT STATE OF LIBRARIES IN INDIA

The tradition of libraries continue from ancient times in India. The ancient seats of learning like Nalanda, Vikramshila, etc. were having well developed libraries. During the medieval period the libraries flourished under royal patronage. The British Government had played a dominant role in setting up Calcutta Library which is now known as the National Library. After independence, with the establishment of several institutes of learning and a chain of R & D laboratories, the growth of libraries picked up a momentum. The country today has nearly 179 university libraries and 5500 college libraries. Apart from these, there are 1000 libraries attached to the scientific institutions and organisations, 550 social science libraries and 600 government department libraries. Added to these, there are archival and oriental libraries containing oriental manuscripts and a large number of documentation and information centres. In all, there are more than 60,000 libraries of all types in India [1].

Of the various library and information centres only few had started using IT for modernisation for their services and house keeping functions. As most of these are located in major cities of India, they could use the facilities available in these cities like modern telecom networks, computers, software houses, etc. These centres are far ahead of other libraries/information centres as far as resources (both financial and human) are concerned. Prominent among these are the information centres of national importance like INSDOC, DESIDOC, NASSDOC, etc., libraries attached to R & D Organisations and having sizeable collection like the library of IARI, NDC of NIHFW, etc., the libraries of BARC, IISc, TIFR and the libraries of IIITs and IIMs. Apart from these, some information/informatics centres are providing state-of-art information services. Some of these centres are discussed below:

INDIAN NATIONAL SCIENTIFIC DOCUMENTATION CENTRE (INSDOC)

INSDOC, setup in 1952 by the CSIR with the assistance of UNESCO to provide documentation services on a national scale has completed 40 years of its existence. During this period it had undergone 3 major phases of development.
During phase I (1952-1963) its activities included the services of document procurement, translation, reprography, printing and publications.

During phase II (1963-89), while continuing the earlier activities, a number of new activities like compilation of bibliographies, publication of ISA, compilation of NUCSSI and a number of other directories, and computerised information processing including the and SDI were undertaken.

During phase III (1989- ) INSDOC has started the application of modern information technology in providing its services in a big way.

The current activities of INSDOC include creation of indigenous S & T databases, providing online database host services to the scientists in India, consultancy projects in the field of information handling, advanced training to information scientists and the bibliographic services based on online & CD-ROMs; the creation of SIRNET and the facility of E-Mail.

In the 8th Five Year Plan period the thrust areas of INSDOC would be:

1) Creation of 100 S & T databases of use to S & T community;

2) Setting up of a computer network of R & D organisations and providing online searching facility at 5 places;

3) Developing the trained manpower for handling S & T information.

INSDOC also proposes to strengthen R & D infrastructure to enable experimental work on networking, CD-ROM technology, electronic imaging, etc.[2].

INSDOC in collaboration with NISSAT is conducting several short term courses on the application of IT for library & information activities thereby leading the information community in India to the 21st century.

DESIDOC

Desidoc was established under the Defence Research and Development Organisation (DRDO) for providing information services to various agencies under the Ministry of Defence, Govt. of India. Desidoc provides a wide range of information services like document supply, translation, on-line and CD-ROM search, current awareness services, etc. Apart from these services it conducts short term courses from time to time for the application of IT for information activities.

BIO-INFORMATION CENTRE, JNU

To take full advantage of the Information Technology for biotechnology purposes, the Biotechnology Information Service (BTIS) was set up by the Department of Biotechnology, Govt. of India. The BTIS network constitutes about nine Bio-Informatics Centres (BICs) distributed all over India.

JNU houses one of the BICs specializing in genetic engineering. Which is providing the following functions:

- Bulletin Board,
- Database Search,
- Current Awareness & SDI Services,
- E mail,
- Collection Development,
- Development of specialised databases, etc.

Biotechnologists all over India are making use of the services provided by the nine BICs.

Efforts are being made to interlink libraries and information centres through computer communication technology in India because networking is one of the most effective ways of sharing the resources among libraries to meet the needs of information users. A number of information networks like INFLIBNET, CALIBNET, DELNET, SIRNET, BTNET, etc. are in the process of establishing by inter linking libraries and information centres in different regions and the university libraries, colleges, R & D institutions, etc.

INLIBNET is a cooperative networking effort initiated by the University Grants Commission linking universities, colleges and documentation centres in India through the computer and communication technologies. National organisations like CSIR, ICAR, DRDO, ICMR, DOE etc. and academic institutions and universities will be participating in this network.

CALIBNET which is a Metropolitan Area Network (MAN), is supposed to cover 38 science and technology libraries in Calcutta Metropolitan Area.

DELNET once under operation offers sharing of resources in about 35 libraries in Delhi region.

SIRNET offer services like E-Mail, file transfer, document transfer, Information retrieval, etc.

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I-NET, a network of the Department of Telecommunications, Government of India, besides providing access to international data networks through GPSS of VSNL, at Bombay offers facilities for interlinking terminals and computers located in important cities of the country through packet switching.

FUTURE OF THE LIBRARIES IN INDIA

It is indeed very difficult to forecast about the future of any institution, since future is not predictable or pre determined. Only the choices of individuals can influence the future outcome to some extent. To escape from this situation one may chart a number of alternative possible as well as probable futures. Consequently uncertainty comes to the forefront of planning. Scenarios provide a context for planning.

In order to forecast alternative futures for the libraries, Shuman [3] has chosen three principal areas from which elements for the expected scenarios can be selected:

1) Sociopolitical trends which affect the environment in which libraries find themselves;

2) Technological trends in which innovation and modern, automated systems and procedures have direct impact on the libraries;

3) Economic trends which concern themselves with the funds available within the environment and within the library so that it can carry out its mission and goals.

Some of the writers like Vannevar Bush, J.C.R. Licklider, Tom Childers, Marilyn Gell Mason etc. had expressed their views of what the library or information facility of the future might consist of. Bush [3a] visualised a new world of information storage and retrieval which would be convenient, rapid, and comprehensive with information needs of varied types of users considered. Today, with the availability of IT tools like the micro-computers, the modem, the optical or laser disk, the high speed printer, the mouse, telephone connection, etc., what Bush envisioned as possible about five decades ago is not only a reality but has become common in developed countries and is becoming common in developing countries.

Shuman[4] portrayed nine quite different scenarios of future public library which can be categorised as Utopian, Dystopian and Incrementalist. They are:

Utopian

It is a stage where

The library becomes fully automated and robotized, handling request for books, information, data, or answers in conversational mode.

The library becomes a place where wonderful and exotic adventures may be experienced while relaxing in an easy chair with an electronic helmet on one's head.

Dystopian

This is a stage when

The library disappears, un lamented and unmourned.

Very little happens in the library as it becomes a vast, empty monument.

Due to a nuclear explosion, a place very much like it was prior to the discovery of electricity.

A place where the state controls not only the contents of the library but also access to those contents.

Incrementalist

This is a stage where

A library is a place where only the poorer sectors of the community may enter free of charge. Others pay admission charges.

A library becomes a place where only a certain type of information or a certain type of service is available.

A library is replaced by home access to information and entertainment.

None of these scenarios are inevitable but all of them are plausible.

Information technology has its impact on the libraries and information centres in India though it was not very significant. Library networking, on-line services, E-Mail, etc. are already operational or in the process of becoming functional in major cities of India.

Compact disk has added a new dimension to the
information business. The declining cost of CD-ROMs, its high storage capacity (600 M bytes), easy and fast replication capability, etc. are making optical disk a popular medium for publishing and data distribution. A glance at the data of CD-ROM market titles from 1987 to 1990 (1987-150, 1988-450, 1989-900, 1990-1500) [5] clearly indicates the increasing demand for this storage medium. The libraries are acquiring more of CD-ROM because:

1) It saves the shelf space and reduces the maintenance cost;

2) It is easy to handle and at the same time less expensive compared to other machine readable databases.

In-house use of the databases on compact discs is comparatively cheaper than providing on-line host service because it eliminates connect charges.

With the growing global awareness for afforestation and environmental protection, some of the industries like paper industry may have either to curtail their production or close down. This will make the paper a costlier product and consequently the publishers will have to look for some alternative media like CD-ROMs for publishing.

Since more and more publishers will be opting to bring out their publications on compact discs, the libraries in future will have no other option but to go for CD-ROM products. The huge, bulky volumes will be replaced by these small discs of size 4.75 inch diameter in future.

To sum up, the libraries of future will be having less of printed materials.

Already some libraries in India like NSL, DESIDOC Library, NAL Library, etc. are using CD-ROM products. In future more and more libraries will follow suit.

On-line access to databases enables the user to retrieve relevant and latest information in the disciplines of his/her interest with minimum time. There are more than 5000 international databases available through out the world pertaining to different subjects. These databases can be accessed for on-line bibliographic search through different host systems. INSDOC has established access to about 1000 international databases through DIALOG and EASYNET and provides information services to its clients [6]. Besides INSDOC, other institutions like NIT, New Delhi; CCMB, Hyderabad; Madurai Kamaraj University, Madurai, etc. have also established on-line access to DIALOG databases.

INSDOC has created a few on-line databases such as National Union Catalogue of Scientific Serials in India (NUCSSI), Polymer Science Database, Current Contents of Indian Journals, Material Science Bibliographic Database and Scientific and Technical Conference Proceedings (Union Catalogue, Bangalore). INSDOC is planning to create more databases in future.

Resource sharing among libraries will become indispensable in the future. The proliferation of publications, price escalation of library materials and financial constraints will necessitate the libraries to acquire only necessary and selected materials. In other words, libraries may not be in a position to purchase all the required publications comprehensively. Joint efforts among libraries, like networking, creation of databases of common use will be inevitable to render effective information service. Regional networks among the libraries like MALIBNET may be a common feature in the coming years.

CONCLUSION

It is clear from the present scenario that IT continues to dominate the information world. Electronic Communications will substitute other forms of communications to certain extent. Electronic Publishing will mostly replace print-on-paper publishing. Paperless communication systems will substantially be in vogue by the year 2000. The growing familiarity with new technologies among the users will affect the reading/browsing habits of the users of the libraries in future. As a result of resource crunch, libraries in the 21st century in India have to pool their resources for sharing and procure the information sources which are cost-effective.

Sloat’s [7] prediction about the information scenario in UK 2000 is true in Indian context too:

“Sophisticated systems will undoubtedly be centred to the development of the information industry in the 21st century, but only those systems will succeed which respond to the needs of the users and are perceived to be cost effective. Skilled, expert and understanding staff will be as important as the systems. In two decades we have moved from documentation to informations in two more, will we have moved from information to knowledge?”
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