

Master of Library and Information Sciences Second Semester

Library and Information Networks in India

1. Introduction:-

Due to multi-faceted uncontrolled growth of information and financial constraints none of the library or information centre can claim to be self-sufficient in terms finance and collection. Unaware to the situation, a user wants all relevant documents published in his area of interest. In this situation the only solace libraries has is Union catalogue for locating documents and Inter Library Loans (ILL). Due to geographical, postal and bureaucratic constraints it takes days or months to get just one document. Revolution of telecommunication technology has opened a new world for library cooperation. Due to recent developments, initiatives are taken at regional and national level to bring libraries together in order to share their collection. Several library and information networks are being created. These networks not only serve towards library cooperation but they also provide variety of services like Internet connectivity, emailing, central repository for data storage and so on. In such Networks, Union Catalogue is transformed to Online Public Access Catalogues (OPACs) and linking of the digital collection with OPAC has led us towards creation of digital libraries. The National Commission on Libraries and Information Science (NCLIS) in its National Program Document (1975) defines a network as “Two or more libraries and/or other organizations engaged in a common pattern of information exchange, through communications, for some functional purpose. A network usually consists of a formal arrangement whereby materials, information and services provided by a variety of libraries and other organizations are available to all potential users. Libraries may be in different jurisdictions but agree to serve one another on the

same basis as each serves its own constituents. Computer and telecommunications may be among the tools used for facilitating communication among them”. UNISIST II working document defines it as “A set of inter-related information systems associated with communication facilities, which are cooperating through more or less formal agreements in order to implement information handling operations to offer better services to the users.” Thus, a Library Networking is a kind of cooperation among the library. These libraries are connected through telecommunication networks to share documents and services, form consortium, subscribe journals and so on.

2. Development of Information Networks In India:-

It is in mid of 80's that telecommunication boom came to India and networking has been given thrust by the government of India. In India Department of Telecommunication is responsible for maintaining national telecommunication infrastructure which is the backbone for network architecture of country. The major breakthrough was establishment of NICNET by National Informatics Centre (NIC) in 1975. In library parlance NISSAT was a major development. It was established in 1977 under Department of Scientific and Industrial Research (DSIR) with the objective of development of national information systems and service. It played a major role in development of Ahmedabad Library Network (ADINET), Bombay Library Network (BONET), Kolkata Library Network (CALIBNET), Development Library Network (DELNET), Mysore Library Network (MYLIBNET), Bangalore Library Network (BALNET) and Pune Library Network (PUNENET). Development of INFLIBNET (Information and Library Network) in 1988 facilitated a nation-wide effort to improve information access and transfer, initiated by University Grant Commission (UGC). Besides, there were several networks developed for resource sharing among organizations like SIRNET of Council of Scientific and Industrial Research (CSIR).

3. Chronology of development of networks in India:-

1977 NICNET NIC

1986 CALIBNET, Kolkata NISSAT

1988 INFLIBNET UGC

1992 DELNET, Delhi NISSAT

1993 ADINET, Ahmedabad NISSAT

1993 MALIBNET, Chennai INSDOC

1994 MYLIBNET, Mysore NISSAT

1995 BALNET, Bangalore NISSAT

Due to growth of Information Technology (IT) now Internet is being heavily used as communication channel. This has given a chance for these restricted networks to become global networks. Almost all the networks use Internet for dissemination of their service

4. Need of Library and Information Networking:-

i. Information Boom

There is an exponential growth of information. There are lots of researches going on round the globe and accordingly increasing the number of publication. There is always a chance of information going un-noticed. Not only this, now has Internet become a huge source of information. One can find anything over Internet, which has changed the face of publishing. The era is now for Electronic publishing because it is simple and without time lag. Anyone can publish over Internet. One can also publish in CDROM or DVD with no cost as it used to be with physical medium. This situation has not only eased the publishing but has also created a good chance for publishing non-relevant material. It is very difficult in such scenario to cull out relevant information for users and keep the quality of library services high.

ii. Rising Price of Resources

Traditionally, libraries store books, journals, reference sources, etc. With decreasing finance and money devaluation it has become extremely difficult for libraries to continue with the purchase of existing sources of information. Unfortunately, much of the journal subscription in Indian libraries is from over sea publishers. Thus, it affect over all library budget. To cope up with problem consortiums could be set up, which is only possible through library network. The price of tools used in the libraries like printers, scanners, digital cameras, etc. is going high day-by-day. Networking libraries facilitates locating work to any other library which has resources and get job done. On other face of it, the rising price of resources increases the cost of library services. To reduce overall cost service can be partially distributed to other constituents of library network or other alternative can also be sought with their help. The shrinking library budget, and devaluation of rupee and its impact on the library acquisitions can best overcome upon certain level by the following means:

1. Use of computer and communication networks for resource sharing;
2. Use of national and international databases through communications networks;
3. Introduction to full text CD-based systems.

Libraries can do resource sharing in many other areas, such as co-operative acquisition, co-operative cataloguing, co-operative classification, etc. Inter-library loan has been practiced as one of the most popular resource sharing activity amongst libraries. Interlibrary loan, in a traditional library, is severely affected by barriers of information communication, such as apathy of the lending library, distance, language, time, etc. A computerized inter-library loaning system overcomes these limitations. Thus networked environment facilitates cooperation

among the libraries for resource sharing to bring economy in the terms of resources, money and manpower.

5. Role of Library and Information Networks:-

The main objective for establishing library networks is resource sharing. It facilitates cooperative access to library catalogues and documents, cooperative acquisition and avoids wastage of library resource to establish overall economy.

Library networks play an important role in propagation of information:

- i) Library networking should provide a means for efficient and reliable resource sharing for documentary sources, human resources and consortia based access to journals or databases.
- ii) None of the library can be called monetarily self-sufficient so that it can cover all the resource of a subject so there should be a Cooperative effort for collection development to reduces the cost and avoid duplication of subscription.
- iii) Library network should facilitate individual or federated searching of participant libraries catalogue as well documents. The central control unit should monitor the network and provide referral services on demand.
- iv) Library networks should promote regional, national and international cooperation among various library networks.
- v) Library networks should be compliant with global standards like MARC21, CCF (Common Communication Format), ISO 2709, Z39.2, Z39.50, OAI/PMH (Open Archive Initiative Protocol for Metadata Harvesting), etc.
- vi) Library network should facilitate further opportunities for creation of new library services, like, Digital libraries, Personalized SDI (Selective Dissemination of Information), etc. It should enhance opportunities for building of new libraries at different levels.

6. Coverage of Networks:-

Libraries network is nothing but networking of computers through telecommunication channels among different libraries. These computers store the data and disseminate as and when any request is made by client libraries. The library network may range from within a campus (i.e., network of departmental libraries within a university campus) to round the globe. Based on the coverage, networks can be classified into three kinds of networks.

i. Local Area Network (LAN)

When all the participants of library network are situated in a limited geographical location (for example, within a building or campus) it is known as Local Area Network (LAN). In other words, a LAN is a group of computers and associated devices that share a common communications line or wireless link within a small geographic area. A local area network may serve as few as two or three users to thousands of users.

ii. Wide Area Network (WAN)

When all the participating libraries are located in different and far of locations (for example, network of CSIR laboratories in India) it is known as Wide Area Network (WAN). In other words, a WAN is a geographically dispersed telecommunications network for example, DELNET.

iii. Metropolitan Area Network (MAN)

When all the participants of the network are located within a city it is called as Metropolitan Area Network (MAN). MAN is a kind of WAN but often it is referred as in between LAN and WAN. MANs are very common within city limits that are why they are called as Metropolitan Area Network. A MAN can have several interconnected LANs. CALIBNET, ADINET, etc. are Metropolitan Area Networks.

7. Major Library Networks in India:-

There are several library initiatives in India but not many of them are active. The most active are DELNET, INFLIBNET, CALIBNET, MYLIBNET, etc.

i. Information and Library Network (INFLIBNET)

INFLIBNET is helping in automation and modernization of university library system. It is providing universities high-speed line for accessing e-journals. It has become a major player in enhancing scholarly communication in India. INFLIBNET development was started under University Grant Commission (UGC) India in 1991. Initially it was started as a project under Inter-University Centre for Astronomy and Astrophysics (IUCAA). The headquarter of INFLIBNET is situated in Ahmedabad, Gujarat.

ii. Developing Library Network (DELNET)

DELNET has been sponsored by the National Information System for Science and Technology (NISSAT), Department of Scientific and Industrial Research, Government of India and is currently being promoted by the National Informatics Centre, Department of Information Technology, Ministry of Communications and Information Technology, Government of India and India International Centre, New Delhi. Though it became a registered body in 1992 but was functional since 1988. DELNET was originally established as Delhi Library Network and subsequently the name was changed to Developing Library Network. The Headquarter of DELNET is in New Delhi.

iii. Calcutta Library Network (CALIBNET)

The CALIBNET was envisaged as a metropolitan network in 1993, linking 38 libraries in Calcutta with financial support from NISSAT. The prime objective was to institute systematic interlibrary co-operation and document delivery among the networked libraries for effective resource sharing. The applications to be supported

are electronic mail, file transfer, remote logging to databases and document access. The participating libraries computerized their in-house functions such as cataloguing, serials control, acquisition and fund accounting, circulation and user services. These have been interconnected through X.25 protocol. The Network Services Centre provides global information services for all the users of the participating libraries. The services include current awareness, union catalogues, database, access to national and international networks. CALIBNET provides libraries and their members an efficient solution for their information needs. The project was supported by NISSAT in 1986 and managed by the CALIBNET Society established under the West Bengal Government's Societies Registration Act 1961. The centre is stationed at Jadavpur University Campus, Kolkata.

iv. Ahmedabad Library Network (ADINET)

ADINET is established for developing cooperative mode of working amongst the libraries and information centres in and around Ahmedabad. It was established in 1994 with the help of NISSAT. ADINET promotes sharing of resources and disseminates information among member libraries by networking them up. It is stationed in INFIBNET Centre, Ahmedabad.

v. Mysore Library Network (MYLIBNET)

Mysore Library Network (MYLIBNET) was initiated in 1995 with the support of NISSAT. It is stationed in Central Food Technology Research Institute (CFTRI), Mysore. About 116 colleges/institutions are affiliated to the University of Mysore; of these 34 college libraries are located within Mysore. These were networked in the first phase.

vi. Madras Library Network (MALIBNET)

MALIBNET was established in 1993 with the support of Indian National Scientific

Documentation Centre (INSDOC). It provides information to the users in and around Chennai. Nearly 50 libraries in Madras are member contributing actively to the creation of various databases on MALIBNET.

vii. Bombay Library Network (BONET)

Bombay Library Network (BONET) was established in 1994 with financial support from the NISSAT. It has 25 members in the city of Mumbai. Located in the National Centre for Software Technology (NCST, now CDAC) a number of computers and software for shared use to the members. The service offered includes access to bibliographic databases, email, CD-ROM, etc. The BONET conducts seminars and training programs for member institutions. There are several other city level networks, which are in their initial stage of developments.

8. Issues related to Library and Information:-

The objective of library and information network is for resource sharing among libraries as well as easy access to information. But it requires heavy implementation of Information Technology (IT). Though IT has facilitated the access to information but unfortunately there are many issues needed to be addressed. The libraries require high-speed connectivity to Internet which in turn require specific hardware and software for creation of system. Installation of a system is not the only issue which should be addressed. Libraries should make conscious effort for training the staffs who are involved in delivery of service and the user who are to be served. One of the major outcomes of such networks is accessibility of Online Public Access Catalogue (OPAC), which in turn requires adhering to particular standard. Library network must follow one bibliographic standard but selection of a particular standard is a subjective issue which needs to be addressed in very beginning. India is big country with many different languages and culture. Growth of literature is there in all the language. In such a multilingual environment rendering service in once own language and script is very big

challenge. There is a conscious effort at Documentation Research and Training Centre, Bangalore towards rendering multilingual OPAC service for users. A system has been developed which converts records on the fly in different Indian scripts.