INTERNET AS AN OPPORTUNITY FOR LIBRARIES

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The authors are trying to look at the Internet which is becoming an integral part of everyday life, as a technology tool for improvements of the library services thereby increasing the visibility of librarians and the information professionals. The authors feel that there cannot be a gap between the so called librarians and the information professionals. The authors who are working in an automated library and network environment have been practicing the use of Internet in their day-to-day functions from collection development, information processing, organisation, retrieval and dissemination and more importantly for reference services. This paper discusses importance of using Internet to develop and expand the information base and to meet and enhance the information needs of their clientele.

0 INTRODUCTION

It does not require any detailed documentation to prove that there is a positive correlation between the level of library development and the stage of national development. This is why today there are very well planned and equipped libraries in the industrially and educationally advanced countries like UK and USA which are keeping pace with the development of technological changes. University of Calinfornia has undertaken a huge project of digital libraries in the direction of making every information available in the digital form. And many have already started moving in that direction.

There is no doubt that the digital revolution is leading to big changes for librarians all over the world. Changes that are posing a threat to the very survival of the profession on one side while it provides an opportunity to elevate the role of the Librarian on the other. Librarians are now called Cybrarian - a specialist in locating information on the Internet in the west. In sharp contrast to this, there is no dearth of information in India but an obvious lack of integrated approach to make it available for use in developing countries.

The problems of libraries in developing countries are well known. These are well known to the authorities - - not only the government but the individuals. These authorities are in a position to influence the national policies on libraries. Yes, it involves huge capital outlay for a country like India with little or no dividends immediately. Libraries do not yield immediate profits rather direct profits. This is probably why the authorities are reluctant to invest in them. Whereas, it can be observed from the World Bank reports that industrialised countries spend more on information systems and information technology.

There is also not much evidence of cooperation among the libraries on the one hand and between the government funding agencies and libraries on the other. Librarians are also partially responsible for the current state of affairs. There are still many libraries not even having computers. There is not even a single library network functional.

Indian input of information in the international databases is regrettably low. There are a very few online databases available but access to them is again a lengthy process as the infrastructural facilities required are inadequate. All these are pre-requisites for the productive use of information.

In India, libraries have always been left behind and given a low priority when it comes to applications of technological developments. Library automation is still a dream for many libraries. While automation is the pre-requisite for networking and resource sharing, there have been a few library networks in the country set up but these have provided benefits to a localized geographical area.

While this is the scenario on the library front, Internet has gained a lot of popularity as a means of access to world of information and delivery.

1 STATUS OF INTERNET IN INDIA

In India, the government offices and quasi-government offices at the centre, state, district, sub-district and village levels consume a vast amount of information and produce a large volume of information and produce a large volume of information. At the national level, the main sources of information include: various line ministries; the Central Statistical Organization (CSO); the National Sample Survey Organization (NSSO); the Registrar General of India (RGI); the National Informatics Centre (NIC); the Center for Monitoring Indian Economy (CMIE); INSDOC; DELNET; Tata Energy Research Institute; The Center for Science and

Environment; and the Federation of Indian Chambers of Commerce and Industries (FICCI). Similarly, there are hundreds of governmental bodies at the state and local levels. The information output from these offices in the various sectors is phenomenal. In addition, there is plenty of information created, acquired and disseminated in all manufacturing and servicing sectors. These sectors indicate the scope for the Internet developments in India.

ERNET was initiated in 1986 by the Department of Electronics (DoE), with funding from the Government of India and United Nations Development Program (UNDP) involving eight premier institutions as participating agencies - NCST (National Centre for Software Technology), Bombay, IISc (Indian Institute of Science), Bangalore, five IITs (Indian Institutes of Technology) at Delhi, Bombay, Kanpur, Kharagpur and Madras, and the DoE, New Delhi. Ernet began as a multiprotocol network with both the TCP/IP and the OSI-IP protocol stacks running over the leased line portion of the backbone. Since 1995, however, almost all traffic is carried over TCP/IP. The objectives of the ERNET project were:

(a) to progressively set up a nationwide computer network for academic and research community starting with the eight participating agencies.

(b) to undertake design, development and advanced research in the emerging concepts of networking and related technologies.

(c) to carry out continuing education, training, and consultancy programmes to generate critical manpower needed by the industry and users in this field.

The other Internet Service Providers became involved at a later date. They were STP (Software Technology Park) by Softnet, NICNET by National Informatics Centre and Gateway Internet Access Services (GIAS) by Videsh Sanchar Nigam Ltd (VSNL).

India may have as many as eight million Internet subscribers by the year 2002, according to figures released by India£s apex infotech body, NASSCOM (National Association of Software and Services Companies), at the launch of CyberCity, its three-day Internet Conference in Bangalore. NASSCOM estimates the current Internet user base in India to reach 200,000 by the end of this year, and 1.5 million by the year 2000. There will be a major infusion of capital in the Indian Internet business as the Government of India has come out with the policy of allowing the private

ISPs (Internet Service Providers). Government has waived off the ISP licence fee for the first two years (Cyber India Online).

Although most of the academic, research and educational institutes are already having access to Internet, they have been using it mainly for electronic mail communications. Most of the institutions who have already set up their home pages have nothing to offer except the information brochure about their activities. Of course, a very few institutions have   an interactive home pages whereby users can ask and find the answers.

On the part of the agencies, who are responsible for promoting Internet in the country like ERNET, VSNL, NIC, there has been some kind of considerations towards library for use of Internt. For example, ERNET has a different subscription rates at various levels, there is a flat rate of Rs. 5000/- for email access to the libraries.

These agencies are also bringing down the cost of setting up internet by way of reducing the subscription rates, the installation and equipment charges. Government has also opened up the Telecom sector for the private which will enhance the use of Internet in the country not only for the academic and research purposes but for business as well.

2 IMPACT OF THE INTERNET IN INDIAN LIBRARIES

While the internet revolution is leading to big changes for librarians all over the world, it is still in its infant stage in the Indian libraries. Though there are a very few technocrats who have just jumped on the bandwagon to make everything computerised and networked, a large number of librarians have not kept pace with the technology. They are silent spectator of whatever happens and want someone alse to do for them. It should be realised that Internet will help the Indian libraries:

— to connect every scholar to every other scholar in the country as well as in the world and thus reduce the barriers to scholarly interaction of space, time, and cultures,

— to connect to the network all important information sources,

— to build databases that are collaboratively and dynamically maintained that contain all that is known on a particular subject,

— create a knowledge management system on the network that will enable

scholars to navigate through these resources in a standard, intuitive, and consistent way*

The latter two objectives are fundamental library functions and the second (connecting to the network all important information sources) could be a library function in the future.

Libraries attached to those institutions who have internet access again get a low priority (as usual !!!). They have not even had their individual e-mail accounts. Libraries are the places where the information is generated, stored, organised, distributed for better use. It is the library which should be given high priority for accessing the Internet. It is the library which can provide the information as they have been providing through their print resources in the form of databases of whatever sources available. This will help the users on the internet to identify and locate the information resources that they may not be able to find in their local libraries. In a way, Internet helps to develop the so called library networks or resource sharing.

In India, the pace at which the library networks (most of them exists only on paper) grow is regrettably low. None of the networks have yet got the infrastructure facilities for making available atleast the databases that they have all been doing it for years. The libraries who have enthusiastically extended their support and participation initially by way of giving their catalogue databases (most of them were reentered physically) are still waiting to see them on the net. Besides the lack of infrastructural facilities and object oriented planning, there are other factors like lack of technical knowledge and skills added to the problems.

In this situation, internet comes as a big tool for the library networks to make them operational and functional whereby the individual libraries can participate and share their resources for effective use. Internet can be used for developing the union catalogue databases of the library holdings which is the most important information tool for the library networks and resource sharing. World library network giants like OCLC, LC and a large string of hosts of library networks are on the Internet which can be sources of information for building the union catalogues.

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*Kenneth M King, President of EDUCOM, originally described his vision of a networked scholarly community on December 8, 1998, at a joint meeting of the Library of Congress Network Advisory Committee and the EDUCOM Networking and Telecommunications Task Force. His vision embodied four objectives.

3 INTERNET AS AN EFFICIENT TOOLS FOR INFORMATION SERVICES: A CASE

Library is the largest beneficiary of Internet revolution. Internet helps in every function and service of the Library. It helps right from identifying the sources of information, selection, processing, database creation, resource sharing, and information services, etc.

We will see how a library which has internet connection is making use of Internet for its daily routine jobs such as acquisition, processing, online catalogue, circulation, and other information services.

31 ACQUISITION

Every Library may practice its own acquisition policy. But, one usual way of acquisition is through the recommendation of the users. Many a times, the user may not give the necessary details such as title, author, publisher, year, edition, and price. It becomes time consuming for the library staff to find out these details. They may use publishers' catalogues, books-in-print kind of resources. But unfortunately, these resources may not be updated ones. Then, the library staff have to contact the publishers or distributors for a recent catalogue and find out the information. After getting the desired information, you may place orders with local distributors. Local distributors will take their own time to process your order as they usually combine multiple orders into a single order so that they can avoid the overhead charges. Unless, you specifically request the distributors the mode of delivery, they will get the books only by sea mail. This means getting a book from a foreign publisher (if it is not locally available) will take a minimum of 4 months. You may now realise how much time is it taking.

Look at how Internet can help in this effort. Major publishers have put up their homepages with their online catalogues of publications. Bibliographical giants like OCLC and LC have their online catalogues updated on the Internet. One can just login into their systems and try a search by title or author or publisher (whatever minimum details you have). It retrieves the relevant records in just minutes. Secondly, the orders with publishers can be made directly on the Internet. If you operate Credit card facility, it is still better and easy process for getting the book in a week to two weeks time from any part of the world. This whole process will take only a week or two to get the book. You will be saving about 10 weeks time. This is the efficiency Internet offers for the acquisition functions of the library.

You can also get regular updates of the books on a particular subject areas from these resources which is posted to you via e-mail automatically, if you can join their user group. You keep abreast of the new books that are published from time to time. You can also subscribe to listservs, newsgroups on particular subject areas whereby you get upto date information about the new books.

32 TECHNICAL PROCESSING

The basic bibliographic data required for acquisition, processing, circulation in an organised format (catalogue format) for a particular book can be extracted from the sources like LC, OCLC or the publishers catalogue available on the Internet. This will help organising your databases more consistently and uniformly (without any typographical errors) as these catalogue formats conform to international standards such as MARC format. The other important feature is the classification number which you can get it from these sources (without going through a process of subject analysis and synthesis) for arranging the book on the shelf. This will save lot of your technical processing time and thus money and energy.

33 RETROSPECTIVE CONVERSION

Database creation is the basic requirement for library automation which in turn is the pre-requisite for library networking. Retrospective conversion is the key process of creating online cataloguing records for the materials in the library. Retrospective conversion is an essential element of automating the library, and one that is critical to its success. Without a database of well organised and correct information, the automated system will present many problems. There are two options available viz, (1). inhouse and (2) outsourcing. Inhouse option includes keying in all records into new automated system which is proned to be time consuming with typographical error which will make lot of problems for searching and retrieval of information. As most of the records are in English language, the hit rate of its availability in the online bibliographic utilities like LC or OCLC is very high to the extent of 70%. This means you only need to key-in only 30% of the data. Though, it requires some interface to reformat these records into a format suitable for your local database. It is not a difficult job as these records conform to MARC formats which is being

supported largely in any library software environment.

34 INFORMATION SERVICES

341 *Reference Services*

Traditionally, we have been providing the information services largely from the sources available within the four walls of the library. This means, we may not be able to provide every information that is required by the user. Internet has widened our information resource base by providing access to the world of information at your desktop computer. You can use internet to find any information that you are looking for. Even if you do not get exactly the same information, you may atleast get some relevant information which helps you proceed further. Information ranging from business, careers, computers, education, entertainment, health, real estate, shopping, sports, travel and the list goes on and on .... Besides, internet provides a platform to make your library resources available online to the users by designing and developing homepages linking your databases and other resources.

With Internet, your library references desk becomes a virtual information desk where you find information at finger tips.

The so-called reference tools like encyclopaedias, dictionaries, manuals, handbooks, directories, bibliographies, atlases, maps, yearbooks, or you name any reference source are all available on the internet. Searching on the Internet becomes much simpler with the help of search engines like Yahoo, Infoseek, Exite to name a few. These search engines are organised so well, you can broaden or narrow down your search depending on the number hits that you get for a particular search. It also supports the boolean operators, phrase searches.

342 *Current Awareness Services*

One of the most important information services is providing the right information to the users community by scanning the relevant sources. It is also known as Selective Dissemination of Information (if it is personalised). Internet helps you to enhance this service by providing up-to-date information which you can periodically scan and filter them to suit the users needs and email them.

343 *Table of Contents Services*

Table of Contents (TOC) service is the most commonly available service from almost every electronic publishers on the Internet as a means

of marketing their products. For example, Uncover - a table of contents service provider offers table of contents of major articles from more than 17,000 journals, most published since 1989. It covers all the major science subjects. Besides, every major publishers like Elsevier, MCB, have put-up their homepages and also provide free contents pages services. These services are supported by document delivery services where you can obtain the full-text articles at a cost.

This will help libraries to have access virtually to all major journals of their areas of interest in a more economical way.

35 RESOURCE SHARING

Lack of effective and efficient technology has been a major hurdle for resource sharing in India besides the lack of cooperation among the participating libraries. Internet provides the technology to link libraries and to make the users of one library aware of the collections of others and create cooperative network which is the most important requirement at this juncture where economic considerations are forcing the libraries to cooperate. Internet could be a platform for decentralised cooperative library network where every individual library keeps its resources available on the net which can be shared by other libraries (may be in a restricted access mode - the internet way).

4 CONCLUSION

We have attempted to examine the overall impact of the Internet and its applications in Indian libraries. We have been looking at the Internet more as an opportunity than a threat!!!! (a positive approach) as it changes the entire gamut of information system into a small global village where librarians play a role of not just collecting, organising the electronic and print information but to be the source of information themselves. Internet helps in every activity of library and enhances its effectiveness and efficiency.

Internet helps in building wealth of information resources in a more accessible form which will make economists, industrialists and engineers find the answers to perplexing development problems in current literature. This is more rapidly achieved in libraries than in laboratory tests and experiements. Thus, two precious commodities - money and time - are thereby saved.

The authors put forth the facts that it is education, commerce and industry, science and technology, which contribute most significantly to the economic and industrial development of any nation. The degree of success of any such development depends on the extent to which libraries and their information resources are tapped. This is one of the secrets of the success of development programmes in more technologically advanced countries.