NECESSITY OF INTERNET TO UNIVERSITY LIBRARY AND INFORMATION SERVICES IN NORTH EAST (NE) REGION

NITYANANDA PATHAK

With the advent of scientific and technological communication changers are being brought about by the Internet through global connectivity of computers and development of tools and techniques for information storage and access. Discusses the needs of Internet based information systems and services to University Library. Functional processes have been discussed so as to facilitate in understanding the features of Internet. After a brief overview of Internet technology, a brief description of experiences at K K Handiqui Library towards the development of the system has been described with special reference to NE region.

INTRODUCTION

The advent of the modern Information Technology (IT) has facilitated in the electronic storage and transmission of recorded knowledge. Linking of computers with telecommunication has revolutionised the expansion of information systems, commercial vendors of information and networks. On-line information has become easier for those who need it. New challenges and opportunities are emerging due to literature explosion, financial crunch, price hike of reading materials, fluctuation in currency rates, integrations of new information technologies and ever increasing of users. These are only a few basic challenges facing library and information professionals. The application of modern IT in the academic libraries has made it more near to them as it gives the user some new service. Due to improved communications and networking facilities, the academic institutions, students, researchers etc. are beginning to make known the information retrieval from online database services. Information, Communication, and networking technologies are providing the library professionals with new opportunities to improve their resources and
services. Libraries around the world have also developed varieties of Online Public Access Catalogues (OPAC).

There is no hope to survive in this age of information unless all our academics, researchers and students are brought into an environment where all the recent developments are made available to them precisely and speedily. That is why, it is imperative to evolve a mechanism for sharing of resources and adopt methods offered by modern information technologies for provision of services.

1. INTERNET AND ITS ORIGIN

The Internet has its roots in the ARPANET project of the Department of Defence, U S A in the late 1960s. Now it interconnects thousands of computer networks and millions of individual computers throughout the world using Transmission Control Protocol/Internet Protocol (TCP/IP) as the computer communication protocol. Today internet is the largest computer network spanning globally.

The Internet is a global collection of peoples computers which are linked together by cables and telephone lines making communication possible among them in a common language. However, the rigid technological definition of Internet is a global collection of interconnected networks.

2. CONNECTING TO THE INTERNET

The Internet is a rich online source of information, from bulletin boards with discussion groups to electronic mail and up-to-date news information. We need a computer and a modem connected to a telephone line and then we need an internet access connection from the Internet Service Provider. There are currently two basic ways to physically connect to the Internet. This can be either dial-up access or a leased line. The most widely used method is through a modem which connects our computer to telephone line, which in turn connects to a modem at the host computer. This is called a dial-up account. It has two types.

(1) A shell account is the primary level of access for Internet users using a dial-up access to the Gateway Internet Access Service (GIAS) system

(2) The next is Transmission Control Protocol/Internet Protocol (TCP/IP) account. Here, we can get upto multimedia rich surfing including access to the world wide web (WWW).
3 TOOLS AND SERVICES ON INTERNET

Tools and protocols help us further explore the vast territory of the Internet and the various resources offered by computers. These tools locate and transport resources between computers. They help us search for information, access services, and communicate through our keyboard. The key tools of the Internet are:

31 ELECTRONIC MAIL (E-MAIL)

E-mail, the sending and receiving of electronic messages, is the most popular use of the Internet. An Internet account includes an electronic mailbox. A message is received at our Internet host computer, where it is stored in our electronic mailbox. As soon as we login into our Internet account, one of the first things we should do is to check our mailbox.

32 USENET

News: Network News (USENET) is a popular tool. Newsgroups are specialized forums in which users with a common interest can exchange messages. We can also leave information on an electronic bulletin board where we can invite responses.

33 GOPHER

Gopher is menu-based program that enables us to look for information without having to know where material is specifically located. In this program the information is organized in such a hierarchy that the intermediate nodes are directories or indexes, and leaf nodes are documents. Thus the Gopher information space is modeled as a directed graph, where cycles in the search process are allowable.

34 FILE TRANSFER PROTOCOL (FTP)

FTP is a method of transferring files from one computer to another over the telephone lines. Vast numbers of articles, databases, and other information are made available this way.

35 TELNET

This is another way to access information from another computer on
the Internet. Here we can see only text. When we connect, our computer acts as if our keyboard is attached to the remote computer. This means that we can run programmes on a computer on the other side of the world.

4 INTERNET AND THE WORLD WIDE WEB

The Internet makes it possible to get in touch with anybody across the world at the cost of a local telephone call. The World Wide Web (WWW or the Web) is an area within the Internet where one can access information as text as well as pictures, graphics and even sound. This requires a special kind of software which allows us to browse through the WWW. Such a software is called a Browser. The WWW gives us a graphical, easy-to-navigate interface for looking at documents on the Internet.

Hypertext is the fundamental organizing concept of WWW. It refers to the embedding of links within an Hyper-Text Markup Language (HTML) page (Web page) pointing to other documents. The linked documents could comprise text, images, graphs and charts, and audio-video clips. These documents need not exist in one computer; they may be distributed among different Web servers located at different geographic locations.

5 INTERNET IN INDIA

On August 15th 1995, Videsh Sanchar Nigam Limited (VSNL), the India’s Gateway to the World launched the Gateway Internet Access Service (GIAS) first time on commercial basis in the country. VSNL in coordination with DoT (Department of Telecommunication) has also launched Internet services in many cities in India. Users in remote areas of India can now reach GIAS service via I-NET. DoT has a wide-spread network in India called I-NET, which has direct connectivity to each GIAS node.

Education and Research Network (ERNET) has been quite successful in creating awareness of the Internet among the higher education and research community in the country. There are only four Internet service providers in the country today-ERNET, STPI, VSNL, and NIC (National Informatics Centre).

6 INTERNET AND LIBRARY

The idea of digital library has emerged from the Internet. This idea has moved to the fore-front of discussion and research.
The Vatican Library has made 20,000 images from rare documents available online to scholars around the world comprising more than 1,50,000 ancient volumes or millions of pages. It was a giant leap for the Internet. Few libraries have made their contents available on the Internet viz. the Library of Congress and the British Library. In 1992, conversion of Harvard University’s entire library catalogue system took place and this is the largest University library system in the world and it is now available Online and searchable in any technique.

In the United Kingdom, most of the academic institutions are connected to the Joint Academic Network (JANET) and its service (JIPS). So staff and students can access the Internet free of charge through a shell account. Many academic institutions also provide a dial-up service.

7 INDIAN SCANARIO

Only a few universities and educational institutions (e.g. IITs, IISc, Punjabi Univ, etc), research institutes (e.g IUCAA, National Chemical Laboratory) and government S&T departments (e.g. Dept. of Electronics have their Web sites. The National Centre for Science Information (NCSI) at the Indian Institute of Science, Bangalore, has made a modest beginning in this direction by setting up a structured catalogue of key Internet sites in Science and Engineering and providing access to a few databases, including a union catalogue of journals held in the IITs and IISc.

7 NE REGION SITUATION

Back to N E Region which comprises seven states this region has eleven universities including three central universities, and one Agricultural University in five campuses. Access to global information on online or in CD-ROM media is now just a matter of money; at the same time access to Internet has remained a challenging effort for any University Library in NE Region.

The developments in IT have effected drastic changes in the way the information is collected, stored and distributed. In India too, the UGC has rightly launched the INFLIBNET programme for resource sharing among University libraries. Now the GU Library, Manipur University, Tezpur University, Dibrugarh University, and NEHU are participating in establishing library networking for resource sharing with INFLIBNET for library networking programme.

In NE Region the K K H Library, Gauhati University is the pioneer of
application of IT in library for information transmission and access. Despite facing a serious fund crunch, the GU Library has been providing good communication and on-line information access facilities to the users through the Internet system. The services have been a boon to the research scholars, teachers and other students. The growing demand for information and increasing use of present facilities and services indicates the need and importance of Internet systems as components for our information infrastructure.

8 CONCLUSION

The technology-based instruction in the field of education gives rise to playing a special role by the academic libraries. Keeping in view the role of IT in handling information and instruction to the teachers and learners, the library must equip itself with such type of information sources - CD databases, online databases, computerised information services to teachers and students.

In conclusions, let us hope the university librarians in NE Region will take initiative to have Internet and show the dynamic leadership by properly monitoring the Library automation and taking the advantage of modern IT.

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