Internet Use In Academic Libraries: A Case Study of Central Library, Sri Sathya Sai University

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In an era of exploding information the professionals in Academic Libraries have a key role to play. They have to identify the shift in the paradigm and gear up to meet the new challenges by adopting Super Highway Technology like the 'Internet'. This paper Discusses the advantages of the 'Internet' and its impact upon Academic Libraries. The practical application of e-mail, Internet and other Electronic Media has been dealt in brief. Need of the use of Computers in libraries has been stressed.

Keywords: ICT, Internet, Telecommunication

1. Historical Background of Technology

The period middle of the 19th century and 20th century needs a special mention because the period marks the age of revolution with new modes of communication technology. Instead of 'paper' man made the use of terminals, computers printers and other types of data communication devices. 'The use of paper', has been completely superceded by the Super Highway Technology. During this electronic age, academicians have become very close to the non-book materials.

During 1990s, we had more justification for this feeling than any other generation. In the history of mankind so many technologies have emerged and all of a sudden compelled us to change the way of our thinking. People have started recognizing the importance of Information Technology as an effective tool in satisfying the human needs. In efficient governance and in developing human resources, efforts are being directed towards improving the utilization of the scarce academic resources and thereby integrating the society globally. Telecommunication and computerization are being increasingly seen today as means to improve efficiency of operation. The quality of 'library service 'has vastly been improved with the introduction of communication technology.

2. Evolution of ICT in Brief

It is the natural phenomena that the wind can move but cannot burn similarly fire can burn but cannot move. When two elements meet together there is the optimal growth of force. Information Technology (IT) is like fire, considered as the greatest force of the century, requires the need of communication technology to transcend the barrier of time and space to make it available to the user. It is true that IT has been changing every aspect of human life-education, research, security, culture,

service, manufacture, trade and communication. It is dependent on a wide spectrum of issues relating to internet access, platform based software development, hardware manufacture, electronics, man-power training, education, information infrastructure and mainly telecommunication. If the user is well aware of IT and not aware of communication or if he/she is expert in communication but ignorant of IT the ultimate result will be failure. So there is an urgent need of telecommunication to succeed the purpose of ICT.

The development of transmission technology has become the drive force to ensure the success of the communication technology in general and telecommunication in particular. New technologies like optical fiber and the satellites have enormous bandwidth to carry information. Optical technology and satellite broadband technology have ushered the wireless broadband technology. The advancement in the wireless fixed and mobile technology provides voice and data communication to users on the move. Thus the application of advances in the ICT into the functioning of university libraries would no doubt carry fruitful benefits.

3. Telecommunication - Libraires

Telecommunication plays an important role while designing an effective functioning of the on-line libraries. Digital technology, improved antennae systems and use of microcomputers have been instrumental in achieving a communication revolution. The recent trends in the telecommunication are the use of E-mail technology and Internet technologies. They accommodate a wide variety of multimedia communication services that are very popular in most developed countries and are now gaining importance in developing countries like India as well.

Advances in both Telecommunication and Computer technologies have facilitated the designing of new software thereby—making the delivery of information quicker, convenient and efficient than ever before. It is fact that users—feeling increasingly comfortable—with computers. The communication technology land line and satellite communication have made the world a 'global village '. In such a challenging situation academic libraries have to welcome not only e-mail, LAN, WAN, and likewise services but also Intranet and Internet services and new software—like KOHA in their libraries.

4. Over View of Internet

A world wide communication system that links millions of computers has been developed. Such a network is called the Information Super Highway or Cyber Space most popularly known as the Internet. The Internet permits two way speech which allows millions of people to communicate by either sending messages through their computers or receiving messages from other computers all over the world .

Internet in normal usage is a network of computers. In other words we can say that it is a network of networks providing global across geographical boundaries. Internet made a humble beginning way back in the 1970s in the United States under the Department of Defense-Sponsoring a collection of computer network known as ARPANET. It was connecting about 64 computers providing admissions to researchers and commercial sectors. With in a span of forty years, the system has considerably advanced in research and technology. It is connecting millions of people and sharing information in different fields like agriculture, defense, transport, economics, sports, medicine, education and also libraries. Although its popularity is spread over the developed countries, Internet has been only a recent development in India.

5. Indian Experience

As we aware over few years back the public sector organization VSNL has introduced Internet to the Indian community. At present approximately 400000 commercial users have access through VSNL whereas from education and research communities 500000 users have access through ERNET. So, around 10,00,000 Indian people are directly connected to the NET which is a small fraction of total population of India. VSNL has been channelizing the information particularly from the four International Gateways at Mumbai, Delhi, Calcutta, and Channai. With an aim to give more access to E-mail and Internet, VSNL has installed the new Gateways at Ahmedabad, Kanpur, Ernakulam, Jullandar, Bangalore and Hyderabad.

6. Infrastructure Needed

To have admission to the Internet, specific equipment are required. Primarily the computer forms the backbone of the network. A personal Computer being a commonly used machine that is easily available can perform the task. Telephone lines form an important part regarding information passing through lease lines and this facility can be availed of through additional payment to the telephone department. A device which is necessary to use the Internet is called Modem. The Modem sends/passes the information from one computer across phone lines to another computer. Now a days Computer has become part of the Internet. One has to subscribe to an Internet service provider (ISP) which gives the user admission to the Internet expecting reasonable fee. In India, the VSNL is the service provider that is connected to the webs of many popular countries including USA. VSNL has its main Internet admission node in Mumbai. It also has various other remote admission nodes at Pune, Calcutta, Delhi, Bangalore and Chennai that link to the US Web through the main node in Mumbai.

6.1 Infrastructure Needed

1 PC 2.0 GHz

256 MB RAM

40 GB HD

Floppy drive 1.44 MB

CD ROM drive 52X

Key Board 104 keys

Mouse - optional -scroll

17" monitor

1 Printer (Dot matrix/Laser or inject

1 modem 56 kbps

1 one telephone line

500 VA UPS

7. Internet Application into Library Functions in General

For instance, when the Librarian in Sri Sathya Sai University wishes admission to the Internet, the modem connected to the Library's computer establishes the link to the VSNL which automatically connects the Librarian to the main Web through the Internet admission node in Mumbai. The VSNL offers admission to the Internet expecting reasonable fee per annum. Once it gets connected to the server, a list of areas that he/she can use appears on his/her computer screen in the Central Library. For instance, topics like Sciences, Social Sciences, Humanities and Engineering subjects also will appear on the screen. Using the mouse the Library staff can click on any item of their interest and information pertains to the particular subject will automatically appear on the screen. Penguin India, Foundation Books, Allied Publishers, PC World, Springer

Kluwer, Cambridge university press and other publishers are tied up in the web to help book lovers while placing orders for books and subscribing journals through on-line.

7.1 Internet Application - Technical Section

A subscriber/ teacher/library staff can make use the on-line catalogues for selecting recent editions of books. For example to find the information on recent publications on religion, philosophy and Indian culture the users can make use the publisher's sites like:

Motilal Banarsidas:	www.mlbd.com
Indian Books Centre:	www.indianbookscentre.com
Munshiram Manoharlal:	www.mrmlbooks.com

The Librarian can send an order via Internet whether to Penguin India or Informatics or any other related publisher and avail discount too. It also provides instant information for library executives regarding the subscription of journals; sending reminders for missing issues and informing payment clearances.

7.2 Internet Application - Processing Section

The senior library staff – SSSU opt internet—search for—classifying and cataloguing of books. The Assistant .Librarian – cataloguing—section takes the advantage of the sites www.oclc.org, www.loc.gov and www.inflibnet.ac.in etc., for classification and cataloguing of books.

7.3 Internet Application - Reference Section

The Academic library mainly at University level associates with outstanding scholars who expect ready made information like SDI (selective dissemination of information). To succeed the above every librarian should maintain close contact with professional and non-professional bodies like INDEST, INFLIBNET – INFONET etc., The staff should refer various types of information sources available on Internet. They may be commercial databases, open access databases, licensed databases and full text articles of journals.

For example the Reference librarian – SSSU expects the ON-LINE services offered by the INFLIBNET CENTRE, CAMPBRDGE UNI PRESS,SPRINGER VERLOG, EMERALD and EBSCO PUBLISHERS etc., To ensure it the library staff should refer the web sites www.insdoc.org and www.infonet.ac.in where the web pages pertain to the world popular journals can be located on computer .

Internet at present has become a multi-user facility with in the reach of the common scholar. It is launched by exercising the search engines which help the reader in library while searching vast collections of files like education, industry, sciences, fine arts, music and trade etc., In case a reader spots certain information regarding biotechnology, he/she can download the online information across lease lines from a far away site to his/her computer. To do so the reader has first go through the different search engines like: National centre for biotechnology information: www.ncbi.nlm.nih.gov; BIOSIS: www.biosis.org; Environmental science: www.envirolink.org

In general it is summarized that if the Librarian types referred protocol he/she gets a list of subjects preserved in the databases of either INDEST, INFONET or private online service vendors. Similarly a web of on-line dictionaries in humanities discipline gives a list of languages choices with translation, acronyms, biographies etc., The full text information of 'Encyclopedia of Britannica is readily available at INFONET homepage www.inflibnet.ac.in . Likewise the world wide web of sports provides abundant

information on over sports of numerous types. There are other web sites on photography with guidelines to take good pictures and handling cameras in special situations. It is fact that many academic librarians can now a days enjoy multi-faceted benefits of internet.

8. Advantages in Brief

- 1 Internet can be efficient and convenient in the context of desktop automation;
- 2. Internet does not cost much;
- 3. Internet can shrink social as well as geographical distance;
- 4. Internet can support and sustain the academic interests of the research community;
- 5. Internet is purely a paperless tool in the communication chain;
- 6. Internet as network medium disposes of transmission delays imposed by geographical distance.

9. Conclusion

Internet is growing exponentially worldwide and India is no exception. It is no doubt that the use of Internet has increased the efficiency of Librarians today. It has altered the nature of library professionals in University Libraries while deploying on-line services into their regular functioning. It has opened the doors of the vast information resources. Various types of professionals like students, teachers, technologists and commercial vendors access the information for the success of their academic tasks. Internet mainly playing a vital role in enabling the scientists and technologists to share their innovative insights all over the world. Internet access by librarians preferably at university level will facilitate to provide better services by means of reference services, resource sharing, Inter-Library-Loan, book purchase and journals subscription etc.,

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