# NETWORK BASED INFORMATION SERVICES – A GLANCE AT IGM LIBRARY, UNIVERSITY OF HYDERABAD

by

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## **ABSTRACT**

Now a days network based information services have become more useful, affordable, available and usable. In network based information system, users can work simultaneously with multiple distributed information sources that differ in content, form and source types. Libraries serve at least three roles in learning. They serve practical role in sharing expensive resources – both physical and human resources. Libraries serve a cultural role in preserving and organizing artifacts and ideas. Third, libraries serve as a centers of interdisciplinary places shared by learners from all disciplines. If the library is networked, it extends such interdisciplinary approach by making diverse information resources available beyond the physical space shared by a group of learners apart from providing internal resources to the local users as well as remote users. One clear differentiation between traditional libraries and electronic libraries is that electronic libraries offer to deposit as well as use information. Electronic libraries allow storage of information in electronic form, communication from any place to obtain material, copying or taking print out from any place. So, this paper discusses about the network, Internet, Internet resources and services to our user community and remote users also.

#### 0 INTRODUCTION

Over the decades, there has been tremendous change in the Information Technology field. Changes have forced the Information professionals to look for effective and efficient methods for processing, storing, and retrieving information. Because of information growth, even literate person feels as if he is illiterate. Increase in the number of users and their varieties of needs have forced the libraries to apply new technologies and techniques for information storage and retrieval. The emerging trends in computer, communication, and publishing technologies for wide spread distribution of information is also forcing the libraries to undergo substantive structural modification. LIS professionals have to put more efforts and enrich their knowledge to migrate to electronic from print media.

#### 1 Internet

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It is an International network spread over a large number of sites all over the world. The three basic applications of Internet are E-mail, Telnet and FTP. E-mail is used to communicate with colleagues and customers. They participate in discussion groups, share experiences and ideas with other librarians, and create and monitor discussion groups of interest to their customers. Telnet is used to connect to remote computer resources. One can explore other library catalogs, access commercial and non-commercial database services, and share the resources of campus-wide information systems and community Free-Nets. FTP Services enable librarians to obtain software programs, text, images, and sound files from the net and then offer them to their customers. Librarians and Information professionals contribute to the Internet community by making library catalogs and local databases available on the network; creating Gopher sites that offer logical, well organized, menu-driven access to services and resources on the Internet and establishing world wide web servers that provide graphical user interfaces for browsing the resources of the Internet. TELENET, TYMNET, UNINET, BITNET (Based in USA), and EURONET & DIANE (Based in Europe) are some of the leading international networks, which offer e-mail, remote login, file transfer services.

## 2 Internet Information Sources

The role of library has changed drastically, when we compare it with the ancient period where library used to be treated as merely a storehouse of books, and similarly, a librarian was also treated as the custodian of books. But with the passage of time and introduction of IT, the concept and the role of library and librarian has dramatically changed, especially with the innovation of Internet. It has successfully entered all the areas and to a large extent, it directly or indirectly affects the role of library and information centers. A wide variety of public domain (free) and commercial information sources are currently available on Internet, with some new sources added currently and outdated ones are removed frequently. These sources include, bibliographical/ full text databases, table of contents of journals, discussion fora, preprints, technical reports, directories, biographies, teaching and training material, data archives, software's, library catalogs and so on.

# 3 University Library

The Hyderabad University Library is a central facility supporting teaching and research needs of the University. Full-fledged library services to the users could start from the year 1976 onwards. The Library has very rich collection of over 2.72 lakhs of books, reference works, 700 Periodicals (both national and International), Theses & Dissertations and back volumes of research periodicals. The Library has started its automation activity in the year 1989. This library has the distinction of being the first university library in India to have fully automated all its house keeping operations. The Library database consists of all the books, back-volumes of periodicals, current journals and theses and dissertations. The database is connected on to the campus-wide Local Area Network (LAN) for the benefit of users in all the schools/departments. During 1994 the library was hooked on to the campus network through a thick Ethernet, which is now replaced with fiber optic. This facilitated the campus community to use the database over

the network. Computer Section of the library is the hub of computerized activities of the library. The library server is connected on the Campus-wide Local Area Network apart from connecting all the sections of the library with structured cabling using switches and hubs located in different levels. This section is vested with responsibility of maintenance of all the systems, network, Internet and e-mail facilities, training the users, data validation, etc.,

# **4** Online Access to Database

The library has automated all the operations and the database can be accessed within the University as well as out of the University also. Most of the students and faculty members are accessing the databases over LAN (Local Area Network) from their departments, for which we have loaded the Libsys client software or Netterm software into their machine to access the databases, which are located at the computer section of the Library. Using these software, users can search the database by entering author, title, subject, call number, keywords in title and Boolean logic operators (and, or, and not). In Library are kept 24 systems near the Circulation desk, which is directly connected, to the server situated at computer section and 6 terminals at stack area to find out the availability of a particular book. Apart from this, we are providing bibliographic service to the users, either a print or e-mail, based on their request. With the help of INFLIBNET (Information Library Network) we have started giving bibliographic database search services for number of CD-ROM databases to the faculty and research scholars by making request to the INFLIBNET through the Librarian.

## 5 Access to full text online Journals

We are providing online journal access for full text articles in respect of more than 2500 reputed journals for which we have undergone agreement with EBSCO publishers. They are providing four databases namely Academic Search Elite, Business Source Elite, ERIC, and Serial directory. Academic Search Elite provides full text for 1,380 journals covering the social sciences, humanities, general science, multi-cultural studies, education, and much more. Business source elite provides 1,050 journals covering business, management, economics, finance, banking, accounting, and much more. ERIC provides citation and abstract information from over 750 educational journals and related from the Educational Resource Information Center and educational documents symposium report literature during back to 1967. Serials Directory provides up-to-date and accurate bibliographic information and pricing for over 178, 500 U.S. and international periodicals. Helpful tips are available to narrow down or broaden the search using Boolean operators and specific fields like author, title, etc. Retrospective information for the above mentioned journals are available in the CD (Quarterly) for Academic Search Elite from Jan. 1984 to Sep. 2000 and Business source elite from June 1998 to September 2000 from which we could provide information for retrospective period. Some are IP based and can be accessed free of cost within our university campus only. Some are accessed by using login ID and password. Apart from these journals, our users can access number of online full text journals for which library is subscribing printed version. This helps the faculty and research scholars to get specific information from number of journals using Boolean and logic operators. Following are the publishers providing online services:

MATHSCINET from 2000 (AMS service for Mathematical Reviews & Current mathematical publications, linking services to various mathematical societies and commercial publishers)

ACS Web editions & Science Direct (Elsevier) full text access to the print version.

RSC (Royal Society of Chemistry)

Oxford University Press

Cambridge University Press, etc.,

## **6** Internet Search Service

The Library has started providing Internet Search Service to the students of this University. Near the Circulation desk, we have 24 Pentium computers with assigned node numbers starting from 1 to 18 to browse the Internet, access the online journals subscribed by the library and use e-mail software (Pine) to send and receive the mail. The service is available during 9.00 A.M. to 10 P.M. on all working days and 9.00 A.M. to 12.00 P.M. during the examination period. Out of 24 computers, 6 are reserved exclusively for research scholars and if the system is vacant, other students can also use it. The Library has provided barcode Identity Card to borrow the books from library by eliminating the card system. The students are allowed to browse the computer maximum one-hour by producing the Borrower Identity card and writing their Name, ID No., Node, Entry time, and signature in the register kept at Information Desk. Our professionals solves any software problem faced by the students and any hardware problem will be rectified immediately by calling the concerned person for which University has made agreement. Now the access is very fast since the Library is connected with main computer center by optical fiber cable, which is connected to Internet through VSAT. The present bandwidth is 128 Kbps, which is likely to be upgraded to 2 Mbps soon. University of Hyderabad is one of the transit nodes of Education and Research Network (ERNET).

# 7 E-mail Alert Service

We have been updating the latest information and important sites as also our home page. We have grouped the e-mail ID of the faculty based on the schools, based on the subjects like chemistry, maths, sociology and so on. Whenever we find some information useful to the particular community, we will send it to them immediately. Many publishers are providing e-mail alert service, for which we just fill our name and e-mail ID that enables us to get the content pages of journals and bibliography frequently.

# 8 Content page service

We have started providing contents page services every month to the faculty and research scholars working in this University. It is a new kind of service called COBSABS – Contents of periodicals in Social and Behavioral Sciences started by the INFLIBNET

(Information Library Network) an autonomous Inter-University center of UGC. They had sent approximately 1600 journals on various subjects like Communication, Economics, Education, Geography and Environmental, Law, Library and Information Science, Management, Political Science and Public Administration, Psychiatry, Psychology, Public Health and Health care Science, Rehabilitation, and Social Work, Social Policy, Sociology and Anthropology. From these titles, we selected only 40 journals chosen by the Heads of the departments, and have sent it to INFLIBNET to get the Contents page of those 40 journals. So every month INFLIBNET sends us the content pages in the floppy/e-mail that can be sent to the faculty of Social Sciences through e-mail for which we have created (. mailrc) file in which all the faculty member's e-mail addresses have been included.

# 9 CD-ROM Search Service

We have quite a good number of CD-ROMs for full text articles, multimedia, and CDs which come along with books. We are providing full text articles from approximately 2500 journals from EBSCO CD-ROM databases (Academic Search Elite & Business Source Elite) quarterly to the faculty and research scholars apart from the online access. The search will be sent through e-mail. We have number of multimedia CDs for giving demonstration to the PGDLAN students for effective use of Information Technology as applied to library and information science. The CD-ROMs coming along with books are assigned accession numbers and are kept at the computer section to be issued to the users to get information whenever needed.

# 10 Document Delivery Service

No library today, can hope to hold every item required to meet the needs of its users because of the resource crunch. Hence, sharing of resources using computer networks has become necessity. It is with this goal in mind that INFLIBNET has initiated the document delivery service. The role of INFLIBNET here is mainly to act as a catalyst in promoting this service to the academic and research community in India.

Under this service, University of Hyderabad Library will serve as a Document Delivery Center and deliver on demand, the copies of papers from learned journals, papers from conference proceedings and any other materials required for academic and research purposes, depending on the availability and policies at nominal cost. This service is provided on No Profit - No Loss basis and is expected to be prompt. This service is open to any one who is working or studying in the academic and research institutions, government departments and other public funded organizations. Requests from profit making and commercial organizations will also be considered. However, priority will be given to the requests coming from INFLIBNET member institutions. Preferably, the request for availing the service should be made through the respective libraries. The requests are received by e-mail, post, Fax, Telephone (in case of urgency) and in person

with complete bibliographical information and the same can be sent through e-mail or by post or fax, whichever is possible.

# 11 Digital Information Service (Scanning)

We are providing digital information services to the users by using Flatbed Scanner. Using the scanner we scan the images, graphs, drawings, etc. and make it available to the public by putting it on the Web Server. Once the scanning is over, it can be saved as an image file or text file. Some of the image files we have saved are .gif (Graphic Interchange Format), .jpeg (Joint Photographic Expert Group), .bmp (Bit Map File) and so on. These files are used to design web site and insert into the Word, PowerPoint for presentation, etc. We also convert the image file into text file using the OCR (Optical Character Recognizer), and in this way provide content page service to the users. Apart from this, we have extended our service to the faculty and scholars to scan photos, drawings, graphs, for their research purpose.

# 12 Barcode Technology

Charging and discharging at the circulation desk has been automated by using Libsys software. Three Pentium systems kept at the circulation desk are used for charging, discharging and for sending remainders, printouts. Remainders are generated automatically by the software for each user and sent through e-mail if the due date is over. All the books are given accession numbers and the same are pasted in each book with barcode labels. Each user ID number is also entered in the system and a Bar-coded Library card is also issued to all the users to utilize the library facility. Using the handheld scanner, the staff at the circulation desk first scan the bar coded library card and then the barcode label pasted in the book for charging the book. For discharging, barcode number in the book is scanned, for library card is not required. Using this, we could save lot of our staff as well as users valuable time and using this system we could avoid making wrong entries.

#### 13 Conclusion

For Library and Information Science professionals, Internet is a challenging tool for providing better services, thus improving the image of library among the user community. The services mentioned here are few but for maximum usage of internet facilities, a librarian as a professional needs to become network literate and in turn needs to provide programs and facilities to his/her customers. Adequate training to the staff and inclusion of IT subjects in the curriculum will help the library profession.

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