

## INFORMATION ACCESS IN LIBRARIES

---

### **K Manjunatha**

T.A. Pai Management Institute  
Manipal – 576 119  
Karnataka  
Email: manjunath@mail.tapmi.org

### **D Shivalingaiah**

Department of Library and  
Information Science, Mangalore University  
Mangalagangothri – 574 199  
Karnataka

*The current information landscape is experiencing tremendous growth of information both in print and electronic media. Overlapping types and formats of information presents the ambiguity about the future of traditional text-based publishing. Open access for global information from a remote place is present day's necessity. The current technology not only empowers users with wider choices for seeking information but also necessitates them to possess technical skills to access information in electronic media. Developing countries are faced with many technological inadequacies. Libraries need to understand the dynamics of service delivery in IT driven world and need to strike a balance between print and electronic resources. In this article the authors discuss information formats and types, information access process and problems of information access in developing countries. An Information Access Model integrating print and electronic resources is also proposed.*

### **INTRODUCTION**

The present day is characterised by reducing distances, shortening of time zone, digitised storing and manipulation of information, services not tied to any specific delivery system, and an increased role played by software. Web access has become essential in mediating a digital world. The overlapping types and formats of information presents the ambiguity about the future of traditional text-based publishing. The Internet offers unparalleled riches to scientists and researchers to find about new discoveries faster than ever before and they want that information be delivered electronically to their desktops. As customers' priorities in information seeking pattern are shifting from the print resources to digital resources, the means of accessing information is also changing and requires new dimensions while planning and organizing. The libraries should embrace the new technology and

provide access to information beyond the four walls of traditional libraries. The libraries in developed countries are better equipped with technology to meet the challenges of information access as compared to those in developing countries. Libraries particularly in developing countries are faced with technological inadequacies to provide information access especially in digital format. This article attempts to address a) what is information access? b) what is the information access process?; and c) what are the problems associated with information access in the electronic age? The authors also propose an Information Access Model integrating print and digital information.

### **INFORMATION ACCESS**

The late British Prime Minister Benjamin Disraeli once remarked: "As a general rule the most successful man in life is the man with best information" [1]. Seibert, Kraimer and Liden [2] argue that "a person seeks information to enhance his competency and skills and greater access to information and information resources would lead to his higher level of motivation". The nature of information seeking ranges from trivial information to a sensitive research area. For example, the information access could be to monitor development of a well-known topic over the period of time; or to carryout stereotyped series of searches to achieve a particular goal; or to explore/ understand the new subject of interest.

Information access refers to the means or modes through which information is made available, or to an entire range of possibilities for making information and information services available to

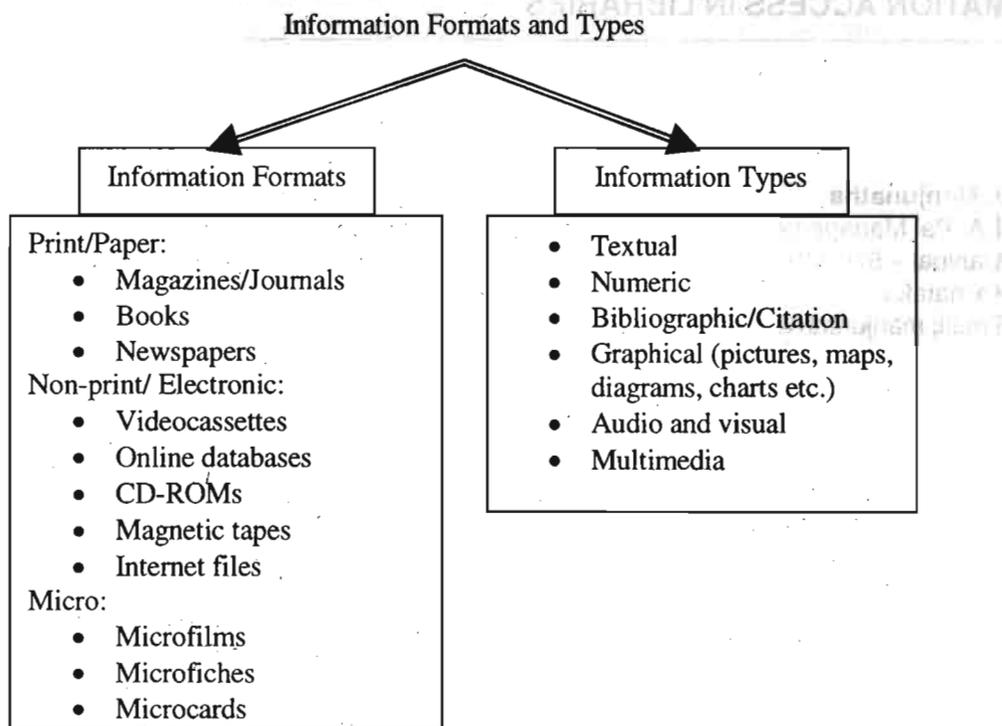


Fig 1 — Information Formats and Types

the users. Hence a person tries to access information through means and modes like personal contacts, from a library or from electronic networks. The level of access to information and information resources is significant and positively correlated to the user's career success and satisfaction" [3]. This article focuses on information access in libraries including access via computer networks as a part of information accessing.

## INFORMATION ACCESS AND LIBRARIES

Libraries are repositories of information sources and play an important role in the academic world by furthering research among scientists and researchers. The access to information is available through print, non-print/electronic, or micro format resources. The current information landscape offers a plethora of options for accessing the various formats and types of information as summarised in Figure 1.

Whenever users contact the library personally or through remote access, they may interact with any or all the formats in the library while seeking information. They may also encounter library staff

to satisfy their information requirements. The mode of accessing information varies from format to format and type to type ranging from general browsing to use of specialized equipments.

The exponential growth of IT and communication technologies have greatly influenced the methods, media and formats of information. Historically, with the invention of printing machine, the oral/restricted information access has transformed to information access dominated by print resources and the communication technology resulted in open/on-line information access from a remote place. We could trace similar transformation in library history too. The transformation from museum to digital library is summarised in Figure 2.

Until 1980s, the libraries virtually had a monopoly on the provision of information through print resources and the users were completely dependant on them for the publications they needed. Of late, the scene has changed with the emergence of information technologies, in addition to increased quantity of print resources, voluminous research information in electronic format is accessible by anyone online. Open

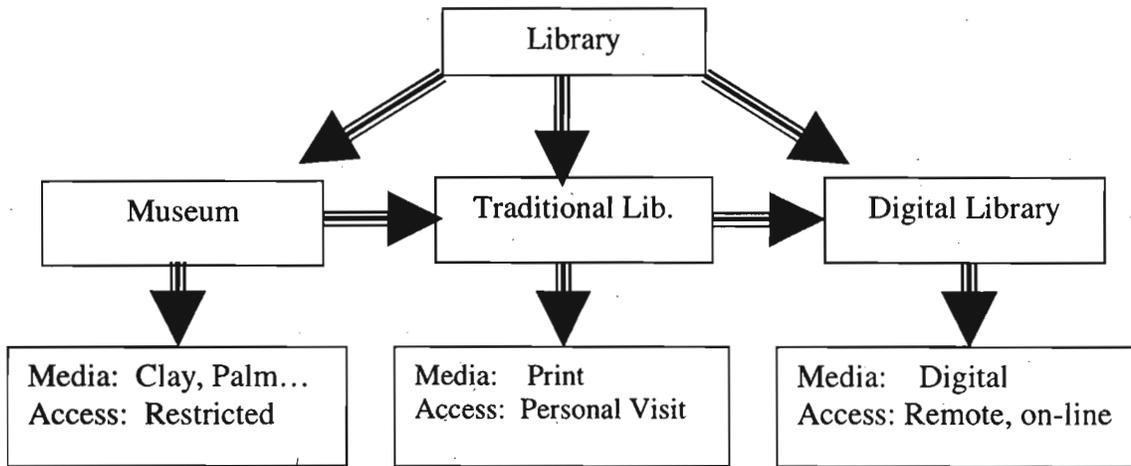


Figure 2— History of Library Transformation

access appears to be a permanent unanticipated feature of the Internet. It offers unparalleled riches to researchers to find out about new discoveries faster than ever before and they want information delivered electronically to their desktops.

Applications of information technology are erupting and moving faster than one's imagination resulting in information explosion crossing geographical boundaries. Information overload, information quality, information management and speed of accessibility are key issues of IT driven world. The distance no longer determines the cost of communicating electronically and death of distance is the single most economic force shaping the society. The users anywhere around the world and the new tools of communicating such as digital and easier network technologies wipe out distance as well as cost factor. Web access has become essential in mediating a digital world.

Thus, libraries are facing severe competition from commercial service providers and networking technology particularly the Internet and WWW. They are also forced to meet the challenges of increasing need for electronic resources by academicians, researchers and business executives. A library's survival depends on its capability to understanding users' needs and responding fast to satisfy their needs effectively and efficiently.

### INFORMATION ACCESS PROCESS

Until a few decades ago, information seeking was relatively a simple process of locating print resources and extracting the required information. A visit to the library or bookstore was generally sufficient. In the paper world the tools to access the information were via the library catalogue, table of contents and the index. Now, the picture has changed. One must know which source (print or electronic) to access and how to access. Keyword is a very popular way of locating information in print or online resources.

Information access process assumes an interaction cycle consisting of query specification, receipt and examination of retrieved results, and then either stopping or reformulating the query until a desired result is obtained [4]. They also highlight that the user's information need is static and the information seeking process refines until the query retrieves the documents relevant to the original information need. Further, they describe a simple and popular interaction model as shown in Fig.3.

The information access process consists of two main components namely "information search/retrieval and "information analysis/ synthesis of results". The first component deals with queries and searches and the latter focuses on evaluation of relevance of retrieved information.

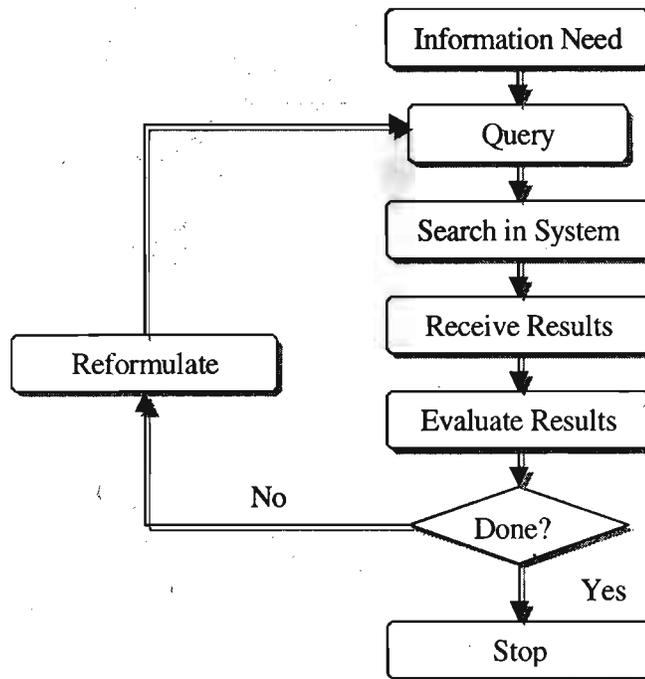


Fig 3 — Model of Information Access Processes

### INFORMATION ACCESS PROBLEMS

In addition to print resources, libraries are facing the challenges of increased resources in electronic media; customers' preferences to use electronic media, changing document formats and storage complexities. The 2000 annual report of Australian National University Library [5] reveals students were increasingly looking for "one-stop-shop" for information, as they were short of time compared to the past. Secondly, the users' visits to the library buildings were declining but the access to information in electronic medium was increased through desktop rather than going through the physical use of library buildings. The above findings hold good in Indian library environment too. The WWW opens a new forum for information access but the access is complicated particularly in developing countries

with technical and communication inadequacies. The inadequacies could be seen in:

India is fast moving towards technological excellence and adoption of its applications. But still there is long way to go. The above-cited issues need to be considered by policy makers of government and private organizations while providing open/remote access to people. Improved infrastructure facilities beyond cities, continuous flow of funds, latest computers and its accessories at low price and internationally compatible software standards are desirable to overcome the barriers.

### INFORMATION ACCESS MODEL

Information access in libraries is the process of interaction between users, resources, services and staff. The customer or user makes use of library resources and services directly or through the library staff. In an academic environment, the users consider the library as their prime source of information as it is reservoir of both print and non-print reading materials. The library provides information access to its users through its print and electronic resources, routine and computer aided services, resource sharing and ILL and document delivery.

Communications/Phone charges	Networking
Computer Hardware & Software	Infrastructure
Website Design	Fund Allocation
Professional /Technical skills	Management's Support
Quick Response to customers	Campus-wide/Remote access
Speed of Accessibility	Equal access to all segments
High Maintenance Cost	Data Security

The conventional library with its massive weight of paper gathering dust and restricting efficient searches is another paper-based institute that sets fingers at the keyboard. The sense that information is "there" somewhere, but cannot be found can drive anyone to digitise. While providing access to electronic resources through campus-wide networks, it is desirable and necessary for library professionals to be knowledgeable about the open access sources and restricted access resources and streamline their efforts to optimise the use of resources.

Though technological developments and electronic resources are influencing scholarly communication, the print resources cannot be ignored as they are still popular among the

research community. In order to improve the information access with print and electronic resources, an integrated "Information Access Model" as shown in Figure. 4 is proposed.

The proposed model assumes several basic constructs: technology choice is a value choice; developing electronic resources is a necessity; print resources cannot be avoided; ILL and resource sharing for better networking and human element in service cannot be ignored. The model is the combination of print and electronic resources. It also integrates technology adaptation and intra/inter organizational networking. Further its staff too is a key element for the efficient and effective service delivery. The components of each element are listed below.

- i. **Core Print Collection**
  - Develop core book collection with latest editions and new titles
  - Increase research journal collection in core subject area
  - Increase the variety of newspapers in subject areas
- ii. **Electronic Resources**
  - Develop In-house databases of print collection in library
  - Develop local databases; for example union catalogues
  - Subscribe to online services or commercial databases
  - Providing links to other open web resources
  - Periodic information alerts
- iii. **Technology Integration**
  - Provide access through campus-wide network (Remote / Intranet access)
  - High-Performance hardware
  - Software compatible with international standards
  - Standard packaged software from reputed developer/vendor (if Development of in-house software is not possible)
  - Develop own website/Internet access
- iv. **Resource Sharing**
  - Network with local libraries
  - Network with similar institutions
  - Creation of union catalog accessible electronically
  - Develop policies/agreements for mutual resource sharing
- v. **ILL and Document Delivery**
  - Library philosophy with electronic access
  - Photocopy of the document when only text required
  - Electronic delivery of digitized resources
  - Policy for timely delivery of documents electronically or manually
- vi. **Reference Service**
  - Develop competency in staff to respond to customer's query
  - Staff's willingness to help users and deliver prompt service
  - Staff's timely response to users' queries

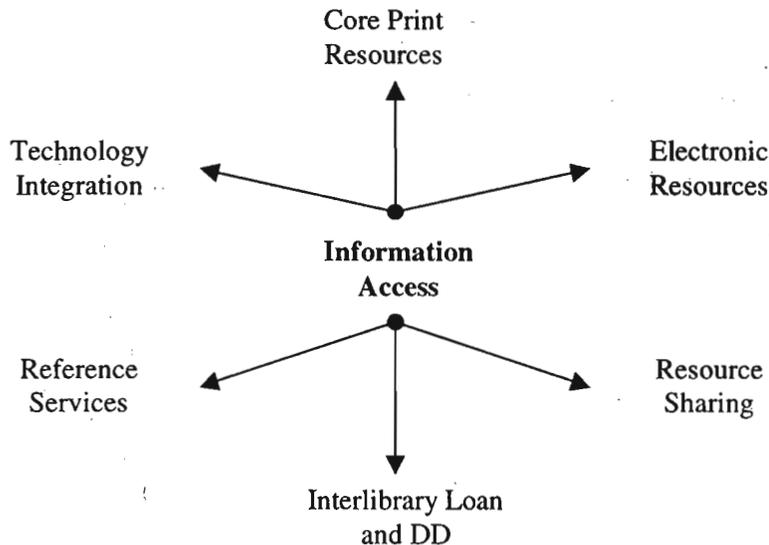


Figure 4 — Information Access Model

Excellent resources and facilities alone cannot achieve success unless the staff is alert, and knowledgeable. They should be responsive and should have sincere interest to help the library users.

### CONCLUSION

Access to the information infrastructure, the ability to produce and consume are the determinants of individual's economic success and social mobility. Obtaining information quickly is the main concern of users who want their library to be state-of-the-art and responsive to their needs. Knowledgeable staff provides seamless access to information regardless of format, whether the user is in the library or at a remote location. Open/on-line access is today's buzzword as the users are finding lesser time to come to library for free or leisurely reading. It is clear that libraries need to understand the dynamics of service delivery and make sincere attempts to provide speedy access to both electronic and print resources. These two resources sometimes supplement or sometimes compliment each other. As print resources still dominate the scholarly publishing, libraries need strike a balance between the two resources. The requirements for print access should be efficiently handled and electronic access via the desktop needs to be enhanced.

Good quality library services form an essential component of the universal access. Libraries have a responsibility to facilitate access to expressions of knowledge and intellectual activity. To accomplish this the librarians should manage the library and look for opportunities and translate these opportunities into realities. Traditional library professionals should stop worrying on declining trend in use of print materials and become proactive to seize the technological opportunities available to them. This calls for genuine commitment and initiation from library professionals and library authorities to develop a system, which allows users to access the information not only within four walls of the library but also from any remote corner through a mouse click.

### REFERENCES

1. SATYANARAYANA (P V). Business Information: Great Lacuna. *Business World*. 4, 13; 1986, Sep 15-28; 56-57.
2. SEIBERT (S E), KRAIMER (M L) and LIDEN (R C). A Social Capital theory of Career Success. *Academy of Management Journal*. 44, 2; 2001; 219- 237.
3. Ibid
4. BAEZA-YATES (R) and RIBEIRO-NETO (B). Modern Information Retrieval. 1999. Addison-Wesley-Longman Publishing Co; Boston.
5. <http://www.anu.edu.au>