



*Journal of Advances and
Scholarly Researches in
Allied Education*

*Vol. VI, Issue No. XII,
October-2013, ISSN 2230-
7540*

A STUDY ON THE IMPACT OF IT ON LIBRARY AND INFORMATION SERVICES

AN
INTERNATIONALLY
INDEXED PEER
REVIEWED &
REFEREED JOURNAL

A Study on the Impact of It on Library and Information Services

Sunita

Research Scholar of Monad University, Hapur, UP

Abstract – The largest single factor which has caused changes, if any, in the library and information services, is information technology including computer, telecommunication, storage and other related technologies. It has made possible to introduce few new services, revolutionaries many existing services by providing new media, by increasing speed of processing and retrieval, by overcoming distance and communication barriers and so on.

-----X-----

INTRODUCTION

Having analyzed the potentials and problems of using IT in libraries, a look at what impact IT has on library services even if it is in a small cross section of libraries is worth.

Library services are broadly grouped in the following six categories: (1) Document delivery services (2) Bibliographic (or citation) services (3) Information (or reference or answer) services (4) Instruction services (5) Facilities services and (6) Adjunct services (behind the screen-enabling activities like acquisition and technical services) (Orr, 1973 p321). Excluding the regular facilities and routine adjunct background services, we can examine the services or libraries under the heads Bibliographic services, Document delivery services, Information services and Instruction services.

Document delivery services are crucial to libraries and are concerned with the capability of a library to provide users with the items they need at the time they need. Capability indexes and satisfaction indexes of library effectiveness are some of the measures gaining increasing acceptance in evaluating a library. Capability measures both the service as well as the collection of a library. The satisfaction indexes tend to address delivery of services to fulfill the expressed demand. On the other hand, book availability factor is also concerned with the chances of an item owned by the library will be on the shelf when sought by the users. These capabilities of the library depend largely on facility, services, adjunct services and other background services as well as quality of manpower. There are all the indications and confidence that there will be a positive change in the document delivery services including increase in satisfaction level of users or book availability factor if our libraries adopt the state of the art IT.

Professionally and academically we are also proud of talking more about information services other than 'basic' services like document delivery service or instruction services. The success of information services depends largely on the effective use of IT and the quality of manpower, as one cannot see any dramatic positive change in the skills, attitudes, knowledge and moral of library professionals nor wide spread application of IT. The possibilities of providing better information services are still open.

"The library is the heart of all the university's work; directly so, as regards its research work, and indirectly as regards its educational work which derives its life from research work. Scientific research needs a library as well as its laboratories, while for humanistic research the library is both library and laboratory in one. Training in higher branches of learning and research is mainly a question of learning how to use the tools, and if the library tools are not there, how can the students learn to use them?... both for humanistic and scientific studies, a first class library is essential in a university" (University Education Commission 1949, 110).

The importance of the university libraries has been well described in the above statement of Radha Krishnan Commission. Going a step ahead, the Kothari commission on Education (1960 states: "no new university, college or department should be set up without taking into account its library needs in terms of staff, books, journals, space, etc. nothing could be more damaging to a growing department than to neglect its library or to give it a low priority. On the contrary, the library should be an important centre of attraction on the college or university campus" (Education Commission 1971, 287).

India is the land of one of the oldest civilizations in the world. Since the beginning, Indian civilization pursued the intellectual and spiritual fields of knowledge like philosophy, morality, religion, law and

government. The study of Vedic Literature was an integral part of the life of upper castes. The centers of religion were also centers of learning in Ancient India. In the words of Dr. S. Radhakrishnan "in the old days teachers of India were themselves librarians, and they were held in highest esteem" (Quoted in Chattopadhyay 1998, 57).

REVIEW OF LITERATURE:

Shokeen and kaushik (2003) found that in the libraries of Haryana and Delhi, the digital access mechanism was only to 0.13 percent of the total collections. Some individual university libraries' automation activities reported in the literature reveal a similar picture. The Dhanvantri Library of the University of Jammu (Gupta and Gurdev Singh 2004, 282) since the mid-1990s, the library has been able to achieve the following tasks; a) database of 20,000 books; b) database of 1,500 theses and dissertations; c) database of 264 serials; d) CD of documentation on Jammu and Kashmir; e) Directory of Ongoing Funded Projects at the University of Jammu; f) Research work at the Social Sciences and Humanities at the University of Jammu (1977-1999); g) printed Catalogue of Books Available in the Kashmir Section. Besides this, the library is providing e-journal access through J-Gate facility of Informatics India Ltd, Bangalore.

Dr. Hari Singh Gour University Library (Thapa and Sahoo 2004) also started its computerization activities in 1995-96. It has been able to prepare a database of 75,000 books and 12,000 theses and dissertations, which constitutes about 35 percent of the library's entire collection.

In a study of user education programmes to use computers in NIT libraries, Shrivastava (2004, 460-63) found that two NIT libraries do not have any user education programmes. Out of nine libraries four are using lecture method; even individual help; four library tour method; three audio-visual instruction; two each are using tutorial/demonstration, practical exercise, and printed media; while one library is using single method for imparting instructions while one library i.e. NIT Nagpur is using a combination of as much as six methods.

In India, agricultural universities are offering bibliographic instruction courses on a regular basis. Neena Singh and Dominic (2004) analyzed the content of these courses offered by eight university libraries. They observed that these courses have been designed 'to acquaint the students with various sources of information, retrieval of information from library's holdings and preparing them to use the library independently for self-study.

Singh (2001) emphasizes the challenging role of librarians and information professionals in the present internet era and describes the impact of internet on various library processes.

Kannappanavar and Vijaya Kumar (2001) survey the use of hardware and software facilities in University of Agricultural science libraries in Karnataka. Results reveal that none of the University libraries at the time of study is having databases and full implementation of IT application in their libraries. Through the agricultural university libraries are having hardware and software facilities to some extent, the results are not reaching the clientele.

Biddiscombe (2001) illustrates the Internet and IT skills that are required by information professionals in their support for learning, teaching and research within the changing context of the higher education sector in the UK and the development of managed (or virtual) learning environments. The author stresses that through IT skills, particularly in relation to the Internet are essential, some of the more basic skills that are important to the information professional should not be abandoned.

Chaudhary (2001) reports the continuing education needs of libraries and information professionals in the University libraries of Pakistan. The study explores the needs of university librarians in Pakistan and Azad Jammu and Kashmir, and determine the obstacles to the continuing education programs. It also tries to identify different methods to motivate librarians towards continuing education programs.

Broady-Perston and Bell (2001) evaluates the importance of continuing professional development for library and information science professionals through a case study of MLIS distance programme of Department of library and information studies, University of Wales in UK

Desai (2001) reports the results of a questionnaire survey conducted to analyze the continuing education needs of science and technology librarians. Survey questions include teaching tips, web designing, career development, various current topics etc.

Smith (2001) examine the pattern of staff development activity in Australian University libraries, State Libraries, the National Library etc. The study reveals various factors influencing staff development. Most of the responses show that increased information technology applications have led to a greater need to train staff in IT applications.

Moorthy (2001) surveys the impact of electronic media on library and information centres with special reference to India, to assess the infrastructure available in libraries, the level of automation and extent of usage of electronic media in library and information work, the study includes R&D institutions in science and technology and Universities. The study reveals that the extent of use of electronic media is improving with the impact of digital libraries, online journals etc in the library system.

Davarpanah (2001) examined the status of IT application in 79 Iranian University libraries under the jurisdiction of two ministries – Culture and Higher Education (MCHE) and Health, Treatment and Medical Education (HTME). The author concluded that overall IT application was in different section of housekeeping, information service and networking whereas office automation was least popular technology in application.

Mambo (2001) felt that need for a comprehensive national Information Technology and Communication policy, strategies for resource mobilization for strengthening of the information and communications and national mechanism to assist in the development, coordinate, follow up and implement plan for information and communication plan for Tanzania.

Misra and Satyanarayana (2001) concluded the Internet being a great tool for library and information professionals in performing their duties.

Goswami (2001) discussed the important component of information technology and its application in the libraries activities like collection development, cataloging, classification, circulation and reference work and preservation measure and mentioned various networks among libraries and the impact of Internet on storing, processing and dissemination of information.

NEED FOR THE STUDY:

Today's academic libraries are confronted with challenges on several fronts: Information availability, rising costs, mega bookstores, online information providers, multimedia products, document delivery services, and other competitive sources of information are apparently threatening their role and even their very survival. With evolving technological innovations and the variety and abundance of information that is becoming available to information users, competitive pressures will continue to intensify for academic libraries. The products/services introduced in the library should match the requirements of intended users. The majority of the services introduced by the librarians in academic university libraries are based upon their past experiences. There is little attempt to access new services from users' perspective. Thus a study on assessing the impact of technological-based products, processes/functions and staff would definitely be beneficial for library administrators and policy makers to adopt appropriate services in their libraries.

RESEARCH METHODOLOGY:

This study is empirical in nature, was conducted in the form of a survey designed to know the status of University Libraries, identify the perception and

expectation of the faculty and researchers in different universities of Haryana state with respect to various roles played by the academic Librarians e.g. their involvement in information services, managing resources, teaching & research, etc. The expectations of the faculty from the academic librarians and specific measures to be undertaken to improve their perception about the libraries, library services and the staff. Survey approach has been used to collect the data from the faculty members and research scholars.

The draft questionnaires were subjected to pre-testing on a small number of 24 respondents chosen from Kurukshetra University faculty representing varied subject specializations, faculty ranks, etc and Kurukshetra University library itself. The faculty from Kurukshetra University and librarians of National Institute of Technology and Kurukshetra University Library selected for pre-testing can thus be considered as having the same attributes as possessed by the larger sample chosen for the study.

Pre-testing of the questionnaire was carried out and a number of suggestions, mainly of the nature of concept clarification were made by the respondents and were incorporated in the final questionnaires after proper discussion. A few new questions were also added. Thus, the questionnaires were finalised. A brief structure of various aspects and number of related questions is given in Tables 4.1 and 4.2

Table 1.

Parts of the librarians' questionnaire

Sr.No	Factors	No	No of Questions
1	General Information		16
2	Library Planning and Management		3
3.	Collection Development		4
5.	Information Technology		8
6.	Document Processing		5
7.	Library services		2
8	Information Resources		4
9	Status of Computerization		11
10	Participation and contribution in networks		1
11	Problems experienced		1
12	Suggestions		1
13	Special features of your library		1

The questionnaire contains 13 categories of headings such as :

1. General Information ; Under this mainly the information sought is about the facilities -reading seats, stacking space, furniture, air conditioning, security and disaster mitigation measures etc.

2. Library Planning and Management: covers information relating to manpower, timings and users.

3. Collection Development: The information collected here is for model for resource building, current status of collection, annual average intake of the library in print and in e-resources.

4. Information technology: Covers networking, band width rate, problems faced in networking, hardware, software, ICT solutions etc.

5. Document processing: Classification schemes, cataloguing, subject heading tools manual and automatic processing.

6. Library services: Manual and IT based.

7. Information Resources: Mode of accessibility and availability of e-resources

8. Status of automation: Acquisition, reference, periodical, circulation, technical processing, registration, cataloguing, Internet etc

9. Participation and contribution in various networks, Problems faced while adopting IT and future plans.

Table 2. Questionnaire for users

Sr. No.	Factors	No. of question
1	General information	11
2	Expectations from a good library	34
3	Perceptions/experiences about your library	34
4	Overall opinion about your library	9

The user questionnaire has been divided into four parts namely

a) General Information: Contains 11 questions covering – about the user, usability of libraries and library services.

b) Expectations from a good library: having 34 questions relating to

- 1) Physical infrastructure (4),
- 2) Collection/Resources (5),
- 3) State of art technology (6),
- 4) Library services (11),

5) Library staff (7),

6) Participation with libraries and consortia (1).

C) The third part is perceptions/experiences having 34 questions contain the subject areas as in part (b).

d) Overall opinion about your library is the fourth part of the questionnaire having 9 areas such as: library facilities and services; quality of services; adequacy of print resources; nature of IT enabled services in your library; adequacy of e-resources; sharing of good points of your library with friends; impact of IT in your library and the last is suggestions for improving of library services.

IMPACT OF TECHNOLOGY:

In academic environment, library is a place of intellectual stimulation and knowledge centre. It holds thousands of results of past research studies providing scope for further research. Until 1980s, the information seekers were greatly dependent on print resources and libraries were unique places for provision of such information. The past two decades have seen a great deal of change due to ICTs resulting in a demand for new patterns of scholarly information. These technological advancements have made significant impact on the growth of knowledge and unlocking of human potential. In library environment, the impact is clearly visible on information resources, services and people. Some of the library services where the impact of technology has been noticed are products, process /functions and People-users

Today a library collection goes beyond the print collection and includes the CD-ROMs, audio videocassettes, e-Books, e-journals. Storage media and format is getting replaced with electronic media such as tapes, CDs/DVDs and Webpages.

Automation of library in-house operations to reduce the effort and time required for repetitive job is essential. ICT has helped in establishing networking. In India INFLIBNET, DELNET, INDEST and many regional level consortiums are in action. The advent of communication technology has revolutionized the activities of library and information system. Today the internet provides efficient means of communication and libraries/librarians are using it extensively to communicate with vendors of library products and services, scholars, researchers and users via email. The internet technology and search engines are very powerful tools to connect people for networking, exchange the information and solutions to problems and navigate documents all over the world. Application of information technology has contributed immensely for the improvement in provision of quick, quality services in the libraries. By providing quality service the libraries try to achieve user satisfaction.

Access to information is not a new phenomenon but it exists through ages. Libraries being the centre for

information storage and retrieval did exist from ancient times in one form or the other. The libraries have transformed from museums wherein the media of communication was Clay, Brick etc and accessibility was Physical visit through to print, the traditional library having accessibility with physical visit to reach through information and communication technologies (ICT) to digital library where the accessibility is online. The issues related to current technology in the present day libraries are digitization of collections, implementation of wireless technologies, bar-coded library transactions, application of RFID in library security systems, web-site development, integration of web OPAC, production and use of e-books and e-journals, the services of distance learning etc.

REFERENCES:

- Raman Nair, R. 2001. Kerala Agricultural University library and information system: A working model for the new millennium. CLIS observer 18(1&2):3-32
- Rana, M. S. 1992. Funding of University libraries. University News 30 (35):101-02.
- Ranganathan, S. R. 1959. Library administration. 2nd ed. Bombay: Asia Publishing House.
- Ranganathan, S. R. 1965. Academic library system: Fourth plan period. Library Science with a Slant to Documentation 2(4):227-28.
- Ranganathan, S. R. 1966. Vitalizing the education of university librarians. Paper presented at Seminar of University Librarians in India, Jaipur, 1966.
- Richards, Diane And Paula Elliot. 1988. How others see us: Examining the image of the academic librarian. College and Research Libraries.49(july/August): 422,424-5.
- Saroja, G. 2001. Information resource centers in distance education. University News 39(38):8-10.
- Schuman, Patricia Glass. 1990. Image of librarians: Substance or shadow? Journal of Academic Librarianship. 16(2): 86-9.
- Sewell, Robert G. 1983. Faculty status and librarians; The Rationale and the case of Illinois. College and Research Libraries 44():212-2.
- Shokeen, Ashu, and Sanjay K. Kaushik. 2003. Emergence of digital resources and university libraries in Delhi and Haryana. In Electronic information environment and libraryservices; a contemporary paradigm(48th ILA Conference Papers), edited by Pandey S K Sharma, 57-32. Delhi: ILA.