Library Changing Role in the Information Economy

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Abstract

This paper mainly focuses on the concept digital library. The various characteristics need and role of a digital library have also been discussed. The digital information system have changed the way librarian acquires, process, stores and delivers information to users.

Keywords: Information Technology, Economy, Future of libraries, Library Partons, Digital Technologies, Libraries Roles.

1. INTRODUCTION

Twenty first century is expected to change the entire scenario of information science. Then it will be possible to communicate the information in voluminous amount with the help of information technology over long distances in a few seconds. The present information age is going to face much more challenges due to rapid technological advancement, which will create new wave of opportunities for using information virtually in all human pursuits. The meaning of the word "library" has changed considerably in recent times. So far, this word has been used for organized collection of books for consulting and reading purpose, now it can be described as the organized collection of books, documents and non- book materials viz, microfilms, micrographs, pictures, facsimiles, floppies, CDs, online databases etc., which can act as depositories as in the case of national libraries or a library system of a country. A library whether public, academic, or special its main objectives and function are collecting, organizing and disseminating information to its users effectively and efficiently. Application of

information technology in the organization and services of libraries has brought about a drastic change in the functioning of libraries, in the last two decades through, out the world. In India, the application of information technology in libraries is still in its infancy.

2.   OBJECTIVES OF THE STUDY

➢ Identify and use best practice assessment strategies and tools to determine the needs and expectations of the libraries user.
➢ Initiate a systematic library services process with new damnation that accommodates both current and future information resource needs.
➢ Study the impact of information technology on library resources.
➢ Identify the impact of information technology on information services.

3.   METHODOLOGY

The present study utilized   questionnaires and personal interviews for data collection. The questionnaire method was quite useful in soliciting information from the librarians of institutes. Hence, the data collected for this study was a combination of primary as well as secondary data. The survey was undertaken with the help of questionnaires designed for the purpose. While designing the questionnaire, care was taken that it has the mix of closed and open-ended questions. To enhance the response rate, multiple-choice questions were included in sufficient numbers. Interviews were also held with the librarians to interpret the questions to them and to collect the data. Researchers visited in person all the libraries of professional education institutes affiliated with the end met with the librarians. Repeated checks and reviews were done on the questionnaire. Librarians, teachers and statisticians were consulted to critically review questions and improve their reliability and validity. Data collected from published sources and the questionnaires were evaluated and analyzed to produce the results. The Software Package used for analysis the data. After interpretation, inferences were drawn and recommendations were made.

4.   INFORMATION EXPLOSION

The information explosion and recent development of information technology has created problems in procurement, organization and dissemination of information for librarians and actual users, the growth of scientific literature is creating numerous problems, even biggest library systems cannot afford to procure all the documents even on a micro topic. No individual can retain in his memories all that he read for his current or future interest and the traditional library tools have become considerably inefficient to provide the specific information for an individual's interest. The overwhelming mass of available information and its ever-increasing characteristics create difficult problem for searching or locating information pin pointedly and expeditiously. The quality of information rarely improves with the quantity. So, the problem gets complicated further. The information explosion seems to offer three options for today's information

workers, i.e. to exploit, to ignore and to be overheated by it. A worldwide information and intelligent network is not far away as the beginning has already been made in this direction with the application of computer and communication technology.

5. CHANGING SCENARIO

In this age, huge amount of information can be stored in computers, which helps to reduce the bulk of the printed material Thus, the computer Also, has significant role in building the libraries. Modern developing countries have already reached a point where technology threatens the existence of traditional libraries. In the present scenario, any individual, rather than visiting the library, might be able to search the library file electronics and receive a printout of specific information or a facsimile copy of the desired document. so far as the role of the libraries is concerned. The libraries still must play important role in collecting, cataloging and indexing materials of user's interest it seems likely that libraries and other type of information personnel will have a vital role to perform in a paperless system. The information professionals who are familiar with the resources available in machine readable form and with terminology, language, indexing techniques and search strategies will still be needed to explore these resources most efficiently and effectively. In the electronics world, the libraries still may have a role to play in giving the training to scientist and others in using of machine-readable resources. In fact, training has become one of the major activities of the librarians in 21st century. The computer has started replacing all manual documentation work including letter writing, report writing, DTP works, etc. Now it is the time for the organization to study its various responsibilities. Technical implication to meet the challenges of the paperless society.

6. LIBRARY AUTOMATION

Before the evolution of the computer, other types of machines such as punched cards, unit record machines were used for automating the library functions. These machines required considerable human supervision and intervention. Now on the other hand computers have become capable of introducing more automation in operations, processes, techniques and methods of the libraries, since they are electronic, programmable and are capable of exercising control over the processes performed. Therefore, library automation means principally the use of computers, associated with magnetic tapes, disks, optical disks, etc., computer based products and services in library. Thus, library automation is the computerization of all the housekeeping operations of the library. Operate a computerized library management system offer new services based on the technologies and integrate the traditional library operations. To improve and control over increased volume of work load of the library

7. WHY LIBRARY AUTOMATION

❖ It takes less time to process data and retrieve information thus saving the time

of the users and staff.
- ❖ A machine-readable record can be used by many users for various purpose at numbers of times.
- ❖ Automation is needed to share the resources with other libraries.

8. LIBRARY ISSUES

Today Library faces numerous issues. Libraries of all types are challenged to provide high information access and improved levels of service, while coping with the pace of technological change and ever-increasing budget pressure. The need for staff trained in technology as well as the traditional library disciplines has increased the cost of attracting and retaining staff. Investments in continuing education are required as well as boosts in compensation for new employees so that libraries can compete with corporate employers.

Llibrary users have grown accustomed to using the Internet as a research tool and do not always appreciate the difference in quality of information available through a library's specialized collections, especially when compared to what can be located through an Internet search engine. Thus, libraries with substantial collections of information often find those collections underused if the user interface is not designed to make it easy to locate information of interest. The vast array of new technologies and tools can be daunting to introduce into library environments. Although the benefits may be significant, many libraries do not have the capability of maintaining and upgrading a complex environment over time. In addition, there is a significant demand for standards-based, open systems that easily integrate. Widespread use of the Internet has heightened users' expectations. Access to library digital information is expected all the time, from anywhere. This is forcing a shift in role from repository to gateway, with users expecting online libraries that can provide around the clock service. Thus, connectivity and availability are critical service elements. In higher education, libraries are now being asked to work closely with all parts of the institution to develop campus-wide portal and content management and delivery strategies. In summary, technology is changing the nature of libraries and librarians, and it continues to exert a major influence on the strategic direction of libraries in society.

9. NEW LIBRARY TECHNOLOGIES

Traditional Integrated Library System (ILS) products commonly include modules that perform:
- ❖ Acquisitions: tracking the purchase of materials through ordering, claiming, receiving, invoicing, and processing. Cataloging: creating catalogue records.
- ❖ Circulation: allowing librarians to check materials in and out, place renewals or holds, and enter payments.
- ❖ Online Public Access Catalogue (OPAC): an electronic record of holding, bibliographic, and item information.
- ❖ Serials: automating ordering, receipt, routing, and renewals of all serial subscriptions.

❖ There have been tremendous improvements in the capability of software products; at the same time, entirely new library technology tools have been created in response to the growth of electronic library resources, as described below. Many of these enhancements were influenced by the advanced capabilities of commercial Internet bookstores, which have made huge investments in personalization, content, and functionality.

10. DIGITIZATION AND DIGITAL MEDIA MANAGEMENT

With the advent of the Internet, individuals' expectations for access to information have increased dramatically. It is no longer considered practical or acceptable to travel to a specific location during certain hours to locate needed information. Library patrons are not satisfied to locate an item of interest that is housed at yet another physical location, request the item, and then wait days or weeks for the item to arrive at the building where it was requested. Patrons increasingly expect instant access to all the Information resources they require, from any location, at any time, and from any device. This trend has propelled the digitization of physical documents and their storage in multimedia management systems, accessible via browser from any location. Libraries wishing to digitize their own collections must make use of digital media management technologies to:

❖ Convert content from physical to digital form.
❖ Extract or create metadata or indexing information describing the content to facilitate searching and discovery.
❖ Store digital content and metadata in an appropriate multimedia repository

Several ILS vendors have developed specialized multimedia management applications to provide a packaged solution tailored to the needs of libraries. Alternately, some libraries choose a generalized multimedia management solution and tailor it to their specific needs. Digital Library Technology Trends, a Sun White Paper, discusses these alternatives and describe many of the best-of-breed solutions available for digital library applications.

11. THE EXPANDED OPAC

The OPAC has become more accessible to library patrons through Web interfaces, allowing them to access the library catalogue from any location through a standard browser. The most advanced OPACs today provide enriched content related to library holdings, such as depictions of cover art, tables of contents, summaries, and reviews through links to commercial information providers. Some expanded OPACs also provide access to collections of selected and catalogued web sites.

12. BROADCAST SEARCHING

The growth in the number and volume of electronic resources has created a new problem: how can the average library user identify the best resources to search for

desired information and learn to navigate the disparate user interfaces to make effective queries? In many cases, when Libraries have invested significant sums to make commercial databases available to their patrons, they have experienced very low utilization of those resources. Faced with large numbers of potential sources and interfaces, many users revert to the ease of using well-known Internet search engines. even though the quality of information returned is usually poorer than that available through specifically focused subscription databases. New broadcast search tools eliminate the need for the user to make repetitive searches in different databases and present a single user interface for all searches. With a single query, a library patron can search many different sources simultaneously. These tools can be single protocol or multi-protocol. Single protocol products translate search queries into a standard format, such as 239.50. Multi-protocol products translate search queries into the native language and protocol expected by each data source. Some broadcast search products offer additional capabilities such as reduplication of results; filtering, sorting, storage and re-execution of searches; and categorization of results. Some libraries have implemented broadcast search tools in such a way that the libraries' own holdings can be searched along with other electronic resources, allowing the search tool to replace the OPAC and act as a portal to all library resources.

13. REFERENCE LINKING

Reference linking software provides a means of intelligently navigating from one piece of information to other related information of interest. This saves the user time and allows discovery of more information related to a user's interest. Linking from a bibliographic record to full text is a common linking function, as is clicking on an author in a citation to perform a search for other works by the same author. The Open URL standard is evolving as a vendor-neutral standard for linking among online resources. Several companies have announced their intention of offering Open URL solutions.

14. PERSONALIZED PORTALS

A major library technology trend is the desire to integrate all library resources and services behind a single Internet presence with personalization features, allowing patrons a customized view into the library. This would allow, for example:

- ❖ A single point of authentication to validate access Permissions and enable links to available resources.
- ❖ The ability for patrons to design a customized view of their favorite information sources.
- ❖ The ability to save searches or hits and develop custom views of resources.
- ❖ The ability to automatically re-perform stored searches on a timer and place the results in a private work area for further use.
- ❖ The ability to alert the user to new books or articles of interest based on the user's specific interests.
- ❖ The ability to view account information, renew books, check requests, etc.

❖ Although few library portals include this complete set of functionality, there are many instances of personalized library portals. An Internet search for "My Library" will yield millions of results from this type of portal implementation.

15. VIRTUAL REFERENCE SERVICES

With users increasingly using library resources from remote locations, traditional reference desks have also had to change the way they serve library users. Researchers no longer want to stop work and travel to the library to utilize reference services. Also, the limited hours of a traditional reference service are not consistent with the expectations of users who have grown used to the convenience and constant accessibility of information on the Internet. E-mail could be used as a substitute for face-to-face inquiries, but this introduced delays and the need to clarify requests. New virtual (or digital) reference services now marry email, Web browser, and chat technologies in real time to allow users to access reference desk services through a computer connection in much the same way as users would traditionally interact with a reference librarian. Digital reference desk technology enables a researcher to begin an interview with a reference librarian remotely, converse in real time to clarify the inquiry, and get an immediate response. Experiences to date show a large percentage of activity outside of "normal" library operating hours.

16. CONCLUSION AND SUGGESTIONS:

In the 21st century approach of modern library having so many aspects including the develpoment , storage managements and other then that . In this modern society still digital libraries are infancy. Digital libraries are not fully established in all over the world . still people are not well known with day to day updations in same field. Most of the institutions in the rular area have no internet connections ,so the lack of expertness and unawareness leads to the students avoiding the electronic information resources. The change of society is related with its changing environment .while analyzing society technological , social, economic, culutural also the infrastructure of information. Information technology created not only qunatative changes but also creats qualitative changes . In this modern society there are so many social instutions and the library is one of them. Libray having different roles for the different members of society . its depends on the needs of the serviced society .In this age over flow of the information creating so much troubles for the users in this situation libraries are playing role like mediators of information . Its very important of the immigrants of the digital world because its allow them to freely access and get their quality information on the other side , the natives of the digital world that are constantly being surrounded by technologies had huge ammount of information , might need the library as a space to communicate to be in share their experiences. The accomplished analysis has allowed to theoretically evaluating . The influence to the roles of the libraries by the changing society.

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