A brief study on Library System and Service

Kale Swati Ramesh[1]*, Dr. Ram Narayan Sharma[2]

[1] PhD Student, Dept. of Library Science, Calorx Teacher's University, Ahmedabad, Gujarat, India

Email: swatikale303@gmail.com

[2] PhD Guide, Dept. of Library Science, Calorx Teacher's University, Ahmedabad, Gujarat, India

Abstract - This study explores the current landscape of library systems and services, focusing on how technological advancements and user expectations are reshaping the traditional library model. Libraries have evolved from mere repositories of books to dynamic centers of knowledge, offering a range of digital and physical services.

Keywords: Library system, Service, Impact, Role

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INTRODUCTION

Libraries have long been considered cornerstones of knowledge and learning, providing access to a wide array of resources for education, research, and personal development. With the advent of digital technology, the traditional role of libraries has undergone significant transformation. Modern library systems are not only concerned with the management of physical books but also with the integration of digital content, user-centered services, and the implementation of advanced technologies to enhance accessibility and efficiency.

This study aims to provide a comprehensive overview of the current state of library systems and services, exploring how libraries are adapting to the challenges posed by the digital age. By analyzing the components of effective library management systems and the evolving expectations of users, the study seeks to identify key trends and best practices that can inform future developments in the field.

IMPORTANCE OF EDUCATION AND TRAINING

The most effective tool for enacting meaningful social change is education. It is also the most crucial element supporting the full development of the human psyche. It is no exaggeration to say that education allows someone to reach their full potential. The absence of formal education limits the growth of the human brain. In the workplace, no one can claim to be a human person unless they have completed the necessary training. Education is the process of learning and information collecting. University-based teaching, research, and social service activities are all included in higher education. Education is the process through which knowledge is imparted and shared among instructors and students in order to produce creative ideas for a changing society. In an information age, training, research, and education have gained more importance. The value of emerging methods like remote learning is growing along with the traditional education system.

MODERN CONCEPT OF PUBLIC LIBRARIES

The idea of a public library has changed significantly throughout time due to advancements in knowledge, technology, and society. The following paragraphs will discuss some newly developed contemporary notions. The public library is an essential resource for lifelong learning, but it takes a casual attitude. It doesn't tell you what to read or what not to read. The decision to read is left up to the person. In order to determine the user and his stated and future needs, it does user surveys and research. When choosing the reading material, they are continuously kept in mind to ensure that it is relevant to the user's real requirements. It also supports literary initiatives by giving new readers and neo-libraries accessible literature to read. Giving adequate reading material to school dropouts is also required. Being a vibrant organisation, it interacts with individuals in their homes and places of employment as well as via branches, bookmobiles, and deposit boxes at jails, medical facilities, and senior citizen homes via postal service. It offers unique reading material for young readers as well as adults. Books with large lettering are given to those who have visual impairments. No part of society is therefore left unsatisfied. Unlike personalised book services, group approaches are now feasible thanks to audio-visual technology. The library lends out a vast collection of slides, film stripes, microfilms, and gramophonic films to both people and educational institutions.

COMPUTER TECHNOLOGY IN LIBRARY

Computer usage in science and technology has steadily risen since World War II. The most developed countries in the world have made great strides in this regard, but India is only getting started, especially in business and industry, where workers and their crafts encounter strong resistance because of fear of being laid off. Nonetheless, their use in business, industry, technology, and research is expanding daily. The railways are their latest acquisition. This is not an exception for libraries. They are being utilised more often as librarians and library administrators become more cognisant of their potential uses. Maybe because computer applications are being incorporated in library science courses, in addition to being regularly provided by the commercial sector. For instance, using computers in libraries is covered in one of the papers for Delhi University's master's course in library and information studies. The usage of libraries is expected to increase in India over the next years, although slowly given our current socioeconomic conditions and the prohibitive costs associated with building and maintaining them. A computer is a machine that can automatically collect data or information and run a series of preset commands on it. Often included are input and output devices, control units, and storage arithmetic and local units. The computer is a tool consisting of several finely connected components. Apart from the main device, which is the central processing unit, there are other auxiliary devices that are referred to as peripherals. Because of its tremendous computing power, speed, reliability, and capability for complex processing activities, computers are used in almost every industry. The rapid developments in computer technology brought about by the enormous achievements in these subject areas might be seen as a revolution. The advances in computer technology over the last several decades have been realised in both software and hardware. The physical components of the machine and how it operates are clear examples of technical advancements.

The first generation computer, the computer designed between 1959 and 1964, the second generation computer, the computer of the period between 1964 and the late seventies, the third generation computer, and so on have all been identified as examples of computers designed using advanced technology at different times. The materials used in computers have evolved throughout decades, affecting every aspect of the device including the memory, input/output procedures, arithmetic and logic units, and more. Vacuum tubes were utilised in the earliest generation of computers, which were manufactured before 1959, and the central processing unit handled every task. Transistors were utilised in the second generation, which operated from 1959 to 1964. These had a significant impact on the computer, which progressively shrank in size and cost. Using integrated circuits, the third generation of computers was constructed using microelectronic components, which were first made available in 1964. The memory storing was done using magnetic media. In order to achieve higher circuit densities, sophisticated microelectronic principles were used to create the fourth generation computer, which debuted in the late 1970s. The new circuitry was little. The dimensions shrank even more, and the price dropped. Contemporary technological developments have an impact on computer hardware across the board, operations, and casting. The machine's main result was a smaller footprint. The size of the prior computer was sufficient. ENIAC was thirty tonnes in weight. It produced a lot of heat and used a lot of power. The use of electronics and microelectronics has led to the ever smaller second and third generation computers. Despite being smaller than previous models, a modern computer has more than 50,000 integrated circuits. The silicon chip, which is made of a wafer-like material, has allowed current computers to shrink significantly in size. More than 20,000 components can fit into a single, safe inch of silicon. It is anticipated that in the future, even more components will be able to fit on smaller chips. Because it is inexpensive, has little circuits, and can include memory and logic, chips are remarkable components for computer technology. It is possible to create a great deal of microelectronic circuitry on a tiny chip, which results in the large-scale integration seen in current computers. A chip is referred to as a memory chip because it has the capacity to store enormous amounts of data. A microprocessor is a computer on a chip that combines logic and memory operations. Every day, using a computer becomes more and more powerful and affordable. A computer employs intricate procedures to carry out different calculations and maintains a large quantity of data in memory, much of it in cache memory. It must thus be totally reliable. The vacuum tubes did not perform well. Tubes weren't very trustworthy. Additionally, there were several flaws in the transistors. Sometimes they broke apart from smaller circuits. The failure points are thus almost nonexistent, and it has become very reliable. A significant advancement in the storing of data and information was made possible by the silicon ship and advanced magnetic media. Compared to their equivalents in prior computers, magnetic media such as the magnetic drum or disc for online service and the magnetic tape for offline service can store more information.

ROLE OF LIBRARY TOWARDS EDUCATION, RESEARCH AND TRAINING

Human society cannot exist without acknowledging the intellectual contributions of the past in its members. Additionally, he has to stay current with the expanding and constantly updating body of knowledge in fields like engineering, defence science, science and technology, social sciences, and humanities. Libraries are the sole resource that can aid with this. Libraries are at the forefront of information collection today. They are now a necessary component of a civilised society that supports training, research, and education. It goes without saying that libraries, information centres,

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data centres, etc. are increasingly essential to higher education. Libraries are created with the purpose of methodically gathering, organising, preserving, and sharing knowledge and information. Because future generations could need the priceless knowledge and information found in books and records, it is imperative that humans preserve and protect them. This information may be made accessible to others for their benefit by being preserved in a library.

The use of information technology is transforming libraries and enabling them to provide greater services and activities. These modifications need the use of fresh methods as well as a rigors reanalysis of time-tested ones. Examining library systems and tracking their advancements is a crucial and efficient way to complete this assignment. To provide better technology-based activities, libraries must be inspected and evaluated. To maximise cooperation, a survey of libraries operating in comparable locations and regions must keep up with developments. Only once a study of libraries is completed and their value to society assessed would this be achievable. Aspects of contemporary technology have caused libraries to change. Due to ongoing developments, libraries are going through many phases of modernisation. New technologies and management strategies are being used to streamline operations and provide users with access to information more quickly. As a result, libraries are becoming more contemporary in their function, and librarians now face new difficulties as a result of emerging technologies and management techniques.

ROLE OF LIBRARY PROFESSIONALS IN MODERN ERA

In an information society, the function of a librarian is crucial. The important individuals in charge of overseeing the information resources and determining user requirements are librarians. Traditional librarianship was confined to the print medium and offered few services to users; but, with the proliferation of information, growing costs, and constrained budgets, it is becoming more and more difficult to provide services profitably. To operate libraries profitably, experts have adopted new techniques, such as developing collections properly and integrating technology into their work. Information technology has transformed libraries and library workers, and its uses have shown to be more advantageous than those of traditional libraries in many ways. Utilising contemporary management and information technology approaches is necessary to streamline and reduce the cost of library operations. Sharing resources is clearly important and necessary, and many organisations have created several tiers of library networks in order to collaborate. Library surveys would undoubtedly be helpful in assessing the issues facing libraries in this setting of contemporary library modernisation and in helping to find more efficient and cost-effective solutions. These kinds of investigations might draw attention to advancements and developments as well as provide fresh ideas for improved offerings. In the era

of information and technology, librarians need to learn new skills in order to stay in the field. The most effective way to gauge a library's development in a certain area is to evaluate and analyse its operations. With the increasing use of technology in the field, librarians' roles are growing. In addition to the conventional skills required for managing libraries and information centres, there is a need to learn new abilities. In order to inform users about new events in their area of interest, librarians serve a variety of users, which makes their function essential to the user community. The job offers a plethora of possibilities and problems as libraries transition from conventional to contemporary, necessitating a re-engineering of the librarian's position.

IMPACT OF INFORATION TECHNOLOGY (IT) ON COLLEGE LIBRARIES

The evolution of library system and its form in the 20th century had its own challenges and when the technology revolution took place with the advantages it brought some of the challenges of this new invention. The very change was conceptual and a library which was virtual and physically noticeable changed its character and became digital, with the provision of CD Rom and other electronic resources like internet which is essential for the digital library. The new media has also changed the financial needs as in some cases it extended like anything and in some cases was reduced considerably. The role of librarian from a section head, changed to becoming a facilitator and ultimately a contributor in shaping the destiny of students availing the facility of that particular library. It is imperative these days that the library should make available necessary information required by its end user in order to make it meaningful.

The step towards automation is the need and a way to achieve the objective of sharing the resources they have with all those connected to them and have the quest for knowledge. A stage have certainly come when the users are not ready to want and they want the information required instantly without any delay weather the information is available within the library or outside the library, in this context the engineering colleges libraries and the professional institution libraries are way ahead than their counterparts who are traditional libraries. In this connection it is necessary to understand that college's libraries are a connecting link between teachings and learning activity, this is a place where you can supplement the user with that information which they have not been

able to obtain from the class. The influence of modern libraries is phenomenal on the traditional libraries and that is the reason why these days the libraries are shifting from the collection mode i.e. collecting books to the access mode by providing them access to different areas where knowledge is readily available as per their requirement. It has also been seen that many card catalogue have been

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changed and instead these days they have started using OPAC (Online Public

LIBRARY NETWORKING IN INDIA

The post globalization era brought men, money material and technology in India and so also the change in libraries in India where the collections became more visible accessible and usable. This change was due to technology and which required a large network as its base. The carrying of information, transmission and retrieval of information are much different compound with traditional methods. Hence the expectations from the libraries of the users have also changed, users demand for quick and timely provision of information have put up a different kind of challenge in front of the traditional libraries where with the structural changes they are expected to provide a network which will give user more access to information of highest quality. In other words end users of that particular library require at least a set of information in that particular domain so that the classified information is up to their expectation and fulfill their academic needs.

Basically if you see there are two types of network services which are provided by the libraries one is local and the other one is remote. Here in local network the users can easily access the digital resources stored in the local computers and servers through a network platform. Here it is also noticeable that while providing support of network, libraries can also lead or provide workstation like transaction processing system such as library management system. Through LMs users can easily find out locate required books and material through online catalogue.

CURRENT TRENDS IN DIGITAL LIBRARIES

New economic policy initiatives in the 1990's and the all round growth of economy thereafter have opened new horizons for each individual as per his or her expectations. Academics is not what it was few decades back and knowledge flow is one of the reason getting this modern and scientific education fast and accurate. The changed scenario was equally applicable to libraries as it was in academics. Digital libraries became the talk of the town and knowledge flowed with greater speed from the way it used to flow two decades back. Digital library federation have also acted fast and accepted the changes in the structure and expectations with open heart. Digital Library are considered to be organization which are providing to the users a special kind of staff competent to handle the e-resources, this competent staff select and also offer intellectual access to the user with proper interpretation and also preserve the integrity of providing information from digital sources in time.

Hence, this provided a cue to move forward in a systematic manner, similarly providing an insight in the field of architecture with new information on environment data which can be fashioned and can be useful in their future endeavors of planning & execution

forward and backward integrations, The visual backup which is the most important support for innovative planning in architecture and a way to innovate with technicalities, This also can be very useful if the visuals support and the they are stored for further changes such as 2D and 3D interfaces.

INDIA & DIGITAL LIBRARIES

It is also the naked truth that India is facing a big challenge as to upkeep of digital libraries and that India may suffer a great deal due to the paucity of factors where we :-

a)   Lack the concerned or relevant content on a particular subject or theme

b)   There is also the problem of connectivity in urban areas and the grave situation in the semi-urban and remote areas of India which if they want also will not be able to have access to digital libraries.

c)   There is also a severe lack of maintaining the metadata capabilities in India. Take for example states in India where you will find that in Karnantaka 70% students in primary schools live in rural areas and when they are in rural schools actually they lack the facilities like their counterpart in urban areas of Karanatka State right from books to libraries and E connectivity, here both the stakeholder teachers and students are unable to access information and this has proved to be a barrier in their academic pursuit.

Digital Libraries are an indirect answer to the lacunas or shortcomings due to physical infrastructure in rural India. Digitization of schools especially in rural areas and other organizations in other areas will be the backbone of future India.

PROGRESS IN INDIA & DEVELOPMENT OF ICT

Economic Development in India is going constantly @ 5 to 5.5%. The acceleration of economy especially in the post globalization era is responsible for reducing the poverty and not only this it is a fact that growth has taken place internally at national level and similarly at international level also. This phenomenal growth in Indian economy opened many avenues for business for Indians in India and abroad. The opportunities started flowing inside and outside India. Software exports are not an exception. Information technology is considered as the technology of future and it is here to stay for the long time. Indian Information Technology market was initially dominated by the west & US and it is now that Asian and Indians have made strides in the field of IT and that too covering both the Hardware and software industry. IT applications, software and consulting all have been mastered by Indian in India & Abroad as well. The Indian IT sector progressed

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by leaps and bound and this is evident from the fact that the skilled labor or professional required is available, the telecommunication network required is present in India, the improving policy and regulatory environment is very well available and has enabled both the indigenous and foreign firms are rapidly expanding in the competitive IT sector which includes in it I.T. services sector. It. is the large coverage necessary for the domestic market depending upon imports like components/ parts and most of I.T. finished goods. ICT have placed India at the global map and this certainly is an achievement for any country to have taken strides for development and each one way by only exporting and making country strong in this particular segment.

Growth in exports or merchandise and IT related activities or services have contributed to the increase of export in GDP of India. The resultant factor effect can be seen when India is able to absorb lakhs of IT professional passing out are getting absorbed in the open market indirectly increasing the employment ratio of India.

CHANGING NATURE OF THE LIBRARY

Information technology is transforming the nature of libraries. Three terms digital, virtual and hybrid library are used to refer to the academic library. A digital library can be defined as a —managed collection of information, with associated services, where the information is stored in digital formats and accessible over a network.‖ The virtual library is defined as —remote access to the contents and services of libraries and other information resources, combining an on-site collection of current and heavily used materials in both print and electronic form, with an electronic network which provides access to, and delivery from, external worldwide library and commercial information and knowledge sources.‖ Hybrid libraries are libraries that provide access to both electronic resources and paper-based resources. Most of the engineering colleges/ institutions libraries of Rajasthan fall under the hybrid category.

CONCLUSION

The study concludes that libraries must continue to evolve to meet the demands of the digital era. While the core mission of libraries—providing access to information—remains unchanged, the methods and tools for achieving this goal are rapidly changing. Effective library systems today require a balance between managing physical and digital collections, improving user experience, and leveraging technology to enhance service delivery. The findings suggest that ongoing innovation and adaptability are crucial for libraries to maintain their relevance and continue serving as vital resources for communities. Future research could focus on specific technological interventions and their impact on library services, further contributing to the development of effective library systems.

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Corresponding Author

Kale Swati Ramesh*

PhD Student, Dept. of Library Science, Calorx Teacher's University, Ahmedabad, Gujarat, India

Email: swatikale303@gmail.com