Journal of Advances and Scholarly Researches in Allied Education (JASRAE)

An Internationally Indexed, Peer Reviewed Journal

Journal of Advances and Scholarly Researches in Allied Education (JASRAE)

- Multidisciplinary Academic Research

Indexing and Impact Factor :

UNIVERSITY GRANTS COMMISSION (UGC) : 49103 (2017)

IIFS : 1.6 (2014)

INDEX COPERNICUS : 49060 (2018)

IJINDEX : 3.46 (2018)

Read / Download More Articles

Study the Advantages of Modern Technology in the Library of Colleges

Mrs. Anita Daulappa Bhalke[1]*, Dr. Joteshna[2]

[1] Research Scholar, Kalinga University, Raipur

[2] Ph. D. Guide, Kalinga University, Raipur

Abstract - The purpose of this article is to examine library technical advancements and potential web-based library service developments. Library development from pre-existing media to today's pervasive presence is examined in this work. The study highlights potential library services that are available to everyone. Based on an extensive analysis of the relevant literature, this research provides a comprehensive picture of the phenomena being studied. An important source of data utilised in this study was the researchers' first-hand knowledge of the library and information services industry, as well as their regular discussions with colleagues in the IT area on how to improve library services offered online. Libraries and LIS workers may use the study's findings to better prepare themselves for a web-based information environment. New library services may be offered to college students by libraries and l!brarians as a result of this study.

Keywords - Academic library services, distance learners, information needs, technology, accessibility, awareness of library services

- -x- -

1. INTRODUCTION

These developments led to the establishment of libraries to collect, store and circulate printed materials to the public. In the ancient period, libraries served to share knowledge only among the specific royal patronage but printing activities shared knowledge and became important to the educational societies, missionaries, social groups etc. This scenario was changed due to initiation of educational activities. In India, till 18th century the education was spread only among higher classes of scholars of the knowledge society. In the 19th century, education became fundamental right of every human in the country. The role of the libraries became pivotal in education as well as among the common society development through academic and public libraries. The libraries are treated as store house of the knowledge and categorized in to the three major types, viz. public, academic and special libraries.

The deferent revolutions made many transformations in the libraries from temple libraries to virtual libraries. The face of libraries have been changed / transformed due to revolutions like writing, printing, blue revolution and the major role played is by ICT revolution which made drastic changes in the activities of any kind of libraries. The major technologies like computers, storage technology, scanning technology, optical technology, networking technology, internet technology, social media, web 2.0, and digital technology etc. forced librarians to reshape their existing library practices.[1]

1.1 Modern Concept of Public Libraries

It conducts user surveys and studies to identify the user and his expressed and potential demand. These are kept constantly in mind while selecting the reading material, so that what is directly related to the actual needs of the user. It is also lends support to literary campaigns by providing easy to read books to the neo-libraries and new reading public. It is also expected to provide appropriate reading material to the dropouts from schools. Being a dynamic institution, it reaches out to the people at their homes and places of work, through branches, bookmobiles and deposit stations at prisons, hospitals and at elder's homes by post It provides special reading material for children, young and adults. The people with impaired vision are provided with books, printed in oversize letters. Thus, no segment of the society is left unserved. The audio-visual media have made group approach possible as distinct from individualized book service.

The modern public library has penetrated deep into life of the community by turning itself into a cultural center by organizing activities such as lectures, book discussion, film shows, musical concerts, plays, art exhibitions and storytelling for children. The old conflict between security and used is resolved today. From the days of securing books to wooden shelves by chains, it has come to a stage of open access for

optimum utilization even at the cost of some losses. A librarian is no longer held responsible for the losses incurred in the use of books. [2]

1.2 Computer Technology in Library

During World War II, the use of computers in science & technology has gradually increased. Most sophisticated nations in the world have achieved significant progress in this area, but India is only getting started, particularly in industry and business, where employees and their trades face intense opposition due to fear of layoff. However, their use in research, technology, industry, & business is growing every day. Railways are their most recent capture. Libraries aren't exempt from this rule. As librarians and library officials become more aware of their potential applications, they are being used more frequently. Perhaps because not only are some courses in computer applications offered on a regular basis by the private sector, but they are also being included in library science courses. For example, one of the papers in Delhi University's master's programme in Library and& Information includes computer use in libraries.

The computer designed in different periods by using advanced technology has been specified by 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. In different generations, the material used in the computer have been changed for each and every part of machine the memory, the arithmetic and logic unit, input/output processes etc. In the first generation computer dating prior to 1959, vacuum tubes were used and all functions ware performed in the central processor unit. In the second generation dating from 1959 to 1964, transistors were used. These had considerable effect on the computer which gradually became smaller in size and lesser expensive in cost.

A microprocessor is the computer on a chip combining memory with logic functions. Using the computer is becoming cheaper and more powerful day-to-day. A computer keeps a significant amount of data in memory, much of it in cache memory, and uses complicated processes to accomplish various computations. As a result, it must be completely trustworthy. The vacuum tubes were less than dependable. Tubes were less than dependable. [3]

1.3 Role of Library Towards Education, Research and Training

In a civilised culture, they have become a vital part of education, research and training. Libraries, information centres, and data centres are clearly more crucial to higher education than they were in the past. The purpose of libraries is to gather, organise, preserve, and disseminate knowledge and information in a systematic manner. For the sake of future generations,

it is critical that we save and protect the wealth of information contained in our written and recorded heritage. For the benefit of future generations, this information can be preserved in a library and made available to the public.Establishment of libraries is not a new concept but its span is developing with the applications of information technology. Information is at the heart of the scientific community as well as scholars and educators and without information it is not feasible to undertake advanced projects or studies. Research communities are dependent on information support and libraries provide value added services to the user community. ―Training and development‖ or "learning and development" is one of the most important aspects in the education system.

Due to application of the information technology, libraries are reshaping and provide better services and library activities. These changes call for new techniques and for a critical re-examination of old ones. One of the important and effective means of accomplishing this task is to undertake reviews of library systems, to analyze its developments. There is a need to assess and evaluate the libraries to provide better activities using technologies. [4]

1.4 Role of Library Professionals in Modern Era

A librarian's role is very vital in an information society. Librarians are the key personalities managing the information resources and analyzing the needs of the users. Traditional librarianship was restricted to the print media and to the limited services to users, but due to information explosion, rising prices and limited budgets it is difficult to provide services economically. However the professionals have adapted different practices to manage libraries economically, e.g. proper collection development, implementing technologies in the profession etc. Information Technology has changed the face of the library and library professionals and its applications have proved to be more beneficial as compared to libraries of the past in many aspects. There is a need to use the modern techniques of management and information technology and make the library procedures simple and economical.Resources sharing are obvious and a must and many organizations have developed library networks at various levels to cooperate. In this context of modernization of libraries, library surveys would definitely be useful in analyzing the problems of libraries and contribute to solving them more effectively and economically. Such studies may highlight the development and progress as well as suggest new methods for the better services.

The role of a librarian is vital to the user community as he serves different users and provides services to make them aware of new events in the area of users' interest. There are many opportunities and challenges in the profession as the libraries are changing from traditional to modern and this also

Mrs. Anita Daulappa Bhalke[1]*, Dr. Joteshna[2]

requires the re-engineering of the role of the librarian. [5]

1.5 Types of Library

Libraries are classified according to their intended usage & users, or readers. There are many different types of libraries depending on how they are used. National libraries, research libraries, reference libraries, public lending libraries, children's libraries, special libraries, and academic libraries are only few of the types of libraries available. Education & academic libraries are extremely significant & beneficial to anybody seeking knowledge.

i. National Library: The establishment of such as an institution is of national importance. These libraries serve as central institutions where all the documents, historical data of the country as well as national importance can be accessed by the researchers. Any publisher in the nation is required to deposit one copy of their work in one of these libraries.

ii. Research Library: This kind of institution is established purely with the objectives catering to all kinds of research works being carried out in different subjects of national and international importance. The collections maintained in such libraries are also of national importance and these libraries also have the same status as National libraries. The term "research library" refers to a huge university library.

iii. Academic Library: There are academic libraries, which are those that are affiliated to academic institutions like colleges or universities. Students, academics, faculty, and other members of the academic community are the primary beneficiaries of an academic library's resources. The primary goal of an academic library is to provide its patrons with as many educational resources as possible, so that they can become completely educated at their various levels. School libraries, college libraries, and university libraries are the three types of academic libraries that may be found in most educational institutions nowadays.

a. School Library: A library in a school serves as a kind of learning laboratory, housing a wide range of educational resources crucial to the school's educational goals. The school library's primary function is to support the instructional curriculum. Effective techniques of thinking, social attitudes, vital knowledge acquisition, and child growth and development are all part of what this programme aims to accomplish. It is the job of the school library to assist students in discovering and embracing their own personal ideas, as well as to boost their academic performance by encouraging independent study and the development of critical thinking skills.

b. College Library: In the educational process, college plays a significant role. As the saying goes, "a tree without roots doesn't grow." Every college's standing is determined by its library's position in relation to the rest of the campus. As a result, the library of every institution should be transformed into a teaching tool in and of itself. The mission of a college library is to assist the educational mission of the institution. As a result, the primary role of a college library is to support its parent organization's programmes.

c. University Library: When it comes to university libraries, they're more vital since they can function without the institution itself, but they can't do so for the university itself. An important aspect of each college or university is its library. For students, faculty members, and researchers, it serves as a primary resource. It plays a vital role in the national life of the community by obtaining educational materials for use by students and teaching departments.

iv. Special Library: As early as the turn of the twentieth century, interest in specialised libraries grew. Special libraries are those that cater to certain groups of individuals, such as the workers of a company or government agency, or the members of a professional or research organisation. Such a library primarily focuses on providing access to knowledge.

v. Public Library: A public library, sometimes known as a circulating library, is a library open to the public and supported by public funds (such as taxes), with the possibility of government officials managing the library. Public libraries may be taxed at any level of government, from the municipal level all the way up to the federal level. Public libraries are fantastic examples of government at its best. Individuals can use it as much or as little as they choose; it is a locally governed public benefit. [6]

2. IMPACT OFTECHNOLOGY IN LIBRARY SERVICES

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.

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 changed and instead these days they have started using OPAC (Online Public Access Catalogue) system whenever you want. This can be said to be a transition period switching from the manual system to electronic system which is less libraries and user friendly and have been helpful to users whenever they need. The advances in information communication technology has the power to satisfy the users with whatever they require whenever they require the quantitative and qualitative information in-store anywhere.

In the age of digitization you can see that prices of Journal especially those journals which have information on latest research are rising day by day and there is increasing trend and a time has come for most college libraries when they cannot afford to renew their subscription for being too expensive and unaffordable for such institutions or college libraries shared subscription is the way out where they can share and adopt the consortia based subscription for those expensive journal which are now out of the reach of such institutions. [7]

3. 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. [8]

4. 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. It was found that Digital Libraries involves 3 key components:-

- Human Resources
- Knowledge Information Resources
- Technology for use.

Explosion of knowledge & flow of information are equally responsible for the changes in the library maintenance and upkeep and conferences seminars and symposia are the way to educate and inform. It is noticeable that in 2005 itself there were three important noticeable conferences of the same nature like Joint Conference on Asian Digital Libraries, 5th International Conference on Asian Digital Libraries and 6th European Conference on Research and Advanced Technology for Digital Libraries.

The research conferences were no doubt successful in their approach as far as research and development world over is concerned but in addition it was able to focus on wide variety of areas where digital libraries can play an important role and not only this they can prove to be detrimental in further research and discoveries. These can be summarized as areas:-

a) Digitization and collection of data

b) Trends for tools and technologies in architecture

c) Metadata

d) Interoperability

Mrs. Anita Daulappa Bhalke[1]*, Dr. Joteshna[2]

e) Maintenance of Standards

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. [9]

5. CHANGING NATURE OF THE LIBRARY

Libraries are changing as a result of advances in information technology. It is referred to by three different names: the digital, the virtual, and the hybrid library. A digital library is a "controlled collection of information, with accompanying services, where the content is kept in digital formats and accessible across a network." As defined by the American Library Association, a virtual library is "remote access to library materials, services, and other information resources, combining an on-site collection of up-to-date and frequently used materials in print and electronic form with an electronic network that provides access to" A hybrid library is one that provides access to both electronic and print resources. In Rajasthan, a large number of engineering colleges and institutes have libraries that fall under the hybrid category. [10]

6. 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.[11]

It is notable that INFLIBINET a consortium of resources provided by UGC under MHRD Ministry will be playing on instrumental role in providing resources to higher education institution all over India. Institute of science in India situated in Bangalore is providing a useful insight to the activities of higher education initiative through INFLIBINET and similarly SOUL software based on database management language is going a long way in serving the libraries and making them standardized, Similarly in India National Informatics Centre (NIC) have also contributed to the library development as they are considered to be the nerve centers of any academic institution in pursuit of this developed a Del-sis software where Del-Net have prioritize access to contents in Indian languages and in Urdu using this software.[12]

CONCLUSION

Libraries have played a significant role in contemporary civilization in terms of fostering knowledge and conducting research. In other words, it's a crucial instrument for society's advancement since it promotes educational opportunities and scholarly inquiry. Thousands of people rely on them for information. With the advancement of Science and Technology, there has been an explosion in information. Efforts are being made to improve and create new ones in order to fulfil the rising demands of consumers.. Access to data and information is critical for the growth of both individuals and businesses. Information is power.

REFERENCES

1. Agarwal,S.P.,(1987).Library and Information services in India. New Delhi: Concept Publication.P.84-113.

2. Ahmad, Moin, Haridasan, Sudharma (2006). Use of Periodicals by the Scholars at National Library of Veterniary Science; A User's Survey ", IASLIC Bulletin, Vol. 51, (2), PP. 05-17.

3. Bader, A. (2008) Academic libraries, 2nd ed. Cairo: House Strange.

4. Balasubramanian, P. (2011) Library information and communication technology. New Delhi: Deep and Deep.

5. Chopra, H.S. (2000) Electronic Library in the New Millennium-Vision of Library and Information Centre. New Delhi: Viva.

6. Eguaveon, O.E.L. (2011) Attitudes of library staff to the use of ICT: The case of Kenneth Dike library. Journal of Social Sciences, 4(1): 1-9.

7. Farahi, Mina Tavassoli and Ramesh Gandhi, R. T. D. (2011) Adoption of information technologies in medical libraries in Karnataka, India and Iran: A comparative

Mrs. Anita Daulappa Bhalke[1]*, Dr. Joteshna[2]

study. International Journal of Library and Information Science, 3(2): 38-45.

8. Gordon, Rachel Singer (2011) Information tomorrow reflection on technology and the future of public and academic libraries. Delhi: EssEss.

9. India, Ministry of Education.(1949):Report of the University Education Commission 1948-49; Delhi, Manager of publication. P.113

10. India. Planning Commission (1952).1st Five year plan. 1951-56. Delhi :Government of India.

11. Jeevan, V.K.J. (2002) Electronic information services: Are we turning away users or are they bypassing libraries? Herald of Library Science, 41 (1-2): 16-26.

12. Kothari, C.R. (1999) Research Method and Techniques, 2nd ed. New Delhi: Viswashi .

Corresponding Author

Mrs. Anita Daulappa Bhalke*

Research Scholar, Kalinga University, Raipur