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Library Buildings: New Aspects of Library Design

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Abstract

The importance of library building is obvious, regardless of whether one is thinking of the institution teaching and research program of its budget poor building can seriously handicap students and professor where as a good one can contribute to the intellectual health of the whole institution. The study regarding the building of library will play a very important role to design the new building of libraries according to new IT System with total quality management (TQM).

Keywords: *digital library, green library, IT system, library building*

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INTRODUCTION

Library is the basic need of every institution Library means- A collection of book and library building means-Building that house the collection of information sources, resources and services. The libraries of ancient times were usually housed in temples or in palaces. In those days much attention was paid to the quality of material, dimensions, shape, utility and above all, architectural beauty. Library buildings differ in their conception and designing as per the needs of their functions, resources and clientele. A public library or a school library building is very much different from a university library building only because there is a huge big difference in their nature a functions. The growth of higher education in the world. Now the time has come when university authorities should realize the importance of properly planned functional buildings for libraries because of the basic premise that the library is the heart of a university which keeps the entire academic system functioning. In the absence of this vital organ the entire academic life of the university seems to come to a grounding halt. It is because of its indispensability that the planning of a university library building attains added importance and as such need careful consideration.

DESIGN FEATURE

- ***Expendable building***: As the Collection grows the library should be able to grow comfortable too
- ***Green building*** with low energy use, composting toilet, passive and active solar design, super insulation, recycled and recyclable (low impact) materials, nontoxic materials, natural and full-spectrum lighting (where it won`t damage the books), multipurpose furnace appropriate environmental control and preserve the collection.
- ***Community oriented:*** The grounds should include space for a community garden and Bicycle/scooter parking and outdoor reading pavilion/warm-up area. The design should include along with the library collection, space for conference room, office space, a children`s book room, audio/visual both, minerals collection display etc.
- ***Site oriented:*** The building should so much generated as much of its own power as possible, through solar, hydro, and wind power, or such means as heat differential power generators. The building and grounds should fit into their surrounding as though they belong their looking and operating as part of the community and land

OBJECTIVE OF THE STUDY

1. To study the related sections like acquisition section, circulation section, reference section and other facilities of library building.

2. To examine the library building and making the building more suitable for the users.
3. To evaluate the methods of improving library building quality to users in a period to similar resources.
4. To examine the infrastructure equipped with ICT tools.
5. To examine the level of training given to staff, thus increasing use of library building.
6. To study staff participation in decision-making, thus increasing the feeling of "ownership" of decisions and directions own charted.
7. To examine the tools and techniques for develop a university library building.

REVIEW OF LITERATURE

University Libraries in Ancient India

In the Vedic age instructions were imparted "orally, without the medium of books [1] Taxila from 700 B.C. to 300 A.D. was considered to be the most respected seat of higher learning and education in India [2] but still there is no evidence found so far in the archaeological excavations at Taxila that there had been a good library system in the Taxila. Most of what we know of the Nalanda University during the 6thand the 7th centuries A.D. is due to the accounts left by Hiuen-Tsang, who lived in the institution for three years in the first half of the 7th century, and I-t sing who also stayed there for ten years towards the latter part of the same century. Information on the Nalanda University Library is also found in the Tibetan accounts, from which we understand that the Library was situated in a special area known by the poetical name the Dharma ganja, (Piety Mart) which comprised three huge buildings, called the Ratna Sagara, the Ratno Dadhi and the Ratna Ranjaka of which the Ratna Sagara was a nine storied building and housed the collection of manuscripts and rare sacred works like Prajnaparamita Sutra, etc. The library at Nalanda had a rich stock of manuscripts on philosophy and religion and contained texts relating to grammar, logic, literature, the Vedas, the Vedanta, and the Samkhya philosophy, the Dharma sastras, the Puranas, Astronomy, Astrology and Medicine [3] The provision of facilities for reading, writing, editing and translating manuscripts shows that this library was in no way less than its contemporary libraries in importance

University Libraries in Medieval India

The existence of academic libraries during the medieval period of Indian history is not known, though the Muslim rulers did patronize libraries in their own palaces. A lone exception, however, was a library attached to a college at Bidar, (Gawan, 1463–1482) having a collection of 3000 books on different Subjects [4] Aurangzeb got this Library transferred to Delhi to merge it with his palace library. (Keay, 1918). During the medieval period, due to Muslim invasions and political troubles, the powerful empires and kingdoms of Indian rulers fell one by one. This affected higher education and the development of academic libraries as well.

Libraries in Modern India (1757–1947)

During the British rule in India, numbers of academic institutions were established by the East India Company, and by the Christian missionaries. Some of the worth mentioning events which led to the growth and development of higher education in India during this period were the establishment of the Calcutta College in1781, Jonathan Duncan, then a British agent, founded the Benaras Sanskrit College in 1792. The Calcutta Fort William College was founded in 1800. All these colleges were having their own libraries. The Charter Act of 1813, the foundation of Fort William and Serampore Colleges, Calcutta, Madras and Bombay universities and their libraries, Hunter, Raleigh and Calcutta University Commissions, library training programme, the establishment of Inter University Board, Sargent Report and appointment of the University Grants Committee, the establishment of Madras

University, University of Bombay, University of Calcutta and their libraries, the constitution of Inter University Board, the appointment of Hartog Committee, the Montague-Chelmsford reforms of 1919, the Government of India Act of 1935, and the Sargent Committee Report etc. laid foundation for establishment of libraries in various parts of the country. The University of Madras appointed Dr. S.R. Ranganathan as its Librarian in 1924. He was trained at the

University of London Library School before joining his duties at Madras. Things did change rapidly after his joining. For example, he introduced the lending and reference services at the Madras University Library and extended the library hours for the benefit of the readers. Whereas the hours had previously been 7 a.m. to 4 p.m., they were changed to 7 a.m. to 6 p.m. [5].

SELECTION OF SITE

Selection of site should be done carefully because location plays a vital role of fulfillment of the functions the libraries. As library is the focal point it should be located a centrally with respect to teaching department, laboratories, hostel etc. The selection of site should in any case be include in the master plan of the university development. The master plan should consider among other things the following:

(1) The objective of the institution.
(2) The estimated prospective size of the student body and faculty including separate figures for graduate and under-graduate students and professional schools, if there are or are to be any.
(3) The size of the physical plant that will be required in the next generation, and if possible, for a longer period.
(4) The parking facilities required for faculty, staff and students.
(5) The general landscaping and servicing plan for the campus.
(6) Policy decision in regard to the type and architectural style of the buildings to be erected.

Five major factors should be taken into account in evaluating a site for a library. These are:

(1) Is its size adequate?
(2) What is its relation to neighboring buildings and to the whole population distribution and traffic flow of the institution?
(3) What orientation is possible for a library building erected on it?
(4) Are there advantages or disadvantages in the slop of the land?
(5) What complications would arise from the nature of the ground beneath the building? [6]

REAR LOCATION IN AN "H" "T" "U" SHAPED BUILDINGS

It was usually placed there on the theory that stacks must have an abundance of natural light as well as room for expansion; some University libraries have retained that location on the ground that natural light is supposedly needed for carrels. In all buildings of this general type, the stack is comparatively far removed from the reading areas. In the rear location pattern, the stacks are erected at the rear of the library buildings which are generally „H", „T", „L" or „U" shaped. The advantages that seem to go along with this pattern are the abundance of natural light all over the stacks, the space for future vertical and horizontal expansion, and the provision of research carrels on the largest size having plentiful of natural light.

NEW TRENDS IN THE LIBRARY BUILDING

Main Library

Libraries are responsible for the preservation of the culture through the storage, retrieval and dissemination of knowledge. Thus, libraries should possess various types of printed and non-printed documents, as well as highly developed technological and communicational equipment. Library holdings should be housed in easily accessible places. Convenience and comfort should also be provided for the users through well-planned library buildings. It is believed that the technological developments of the last 10 year are equal to all the progress and achievements that man has ever obtained.

Impact of Technological Advances on Future Library Buildings

Numerous Librarians and library planners believe that, the use of various technological equipment for library Services has changed the need for the old standard space of library buildings. Thus, if we do not understand the technological and information progress of our tie, and if we do not ascertain the needs of our users, we may plan unsuitable and not functional library buildings that are unable to provide users present and future needs.

Electronics Library

A digital library is a special library with a focused collection of a digital object than can include text, visual material, audio material,

video material stored as electronic media format along with mean for organizing storing and retrieving the files and media. Libraries are also changing to meet the demand put on them. The new generation whose demand for information is never met is always demanding that traditional libraries should be developed as a well=equipped and interconnected as digital libraries. According to Arms a digital library is a managed collection of information with associated services where the information is stored in digital format and accessible over a network. A digital library is an organized collection of digitized material or its holding in the digital form, which can be accessible by a computer on the network by using TCP/IP or other protocol. The Internet and World Wide Web provide the impetus and technological environment for the development and operation of a digital library some of the requirement for digital libraries are:

1. ***Audiovisual****:* Color T.V., V.C.R., D.V.D., Sound box, Telephone, etc.
2. ***Computer****:* Server, P.C. with multimedia, U.PS. Etc.
3. ***Network****:* LAN, MAN, WAN, Internet etc.
4. ***Printer****:* Laser printer, Dot matrix, Barcode printer, Digital graphic printer, etc.
5. ***Scanner****:* H.P. Scan jet, flatbed, Sheet feeder, Drum scanner, Slide scanner, Microfilming scanner, Digital camera, Barcode scanner, etc.
6. ***Storage devices****:* Optical storage device, CD-ROM, Jukebox, etc.
7. ***Software****:* Any suitable software, which is interconnected and suitable for LAN and WAN connection PC.

Factors of Change to Digital Libraries

The limited buying power of libraries, complex nature of recent document, storage problem etc. are some of the common factor which are influencing to change to digital mode, some other factors are:

1. *Information explosion*
2. *Searching problem in traditional libraries*
3. *Low cost of technology:* When we consider the storage capacity of digital document and its maintained then it can be easily realize that the cost of technologies is much more less than that of traditional libraries.
4. *Environmental factor:* the use of digital libraries is the cleanest technologies to fulfill the slogan "Burn a CD-ROM save a tree"
5. *New generation needs* [7]

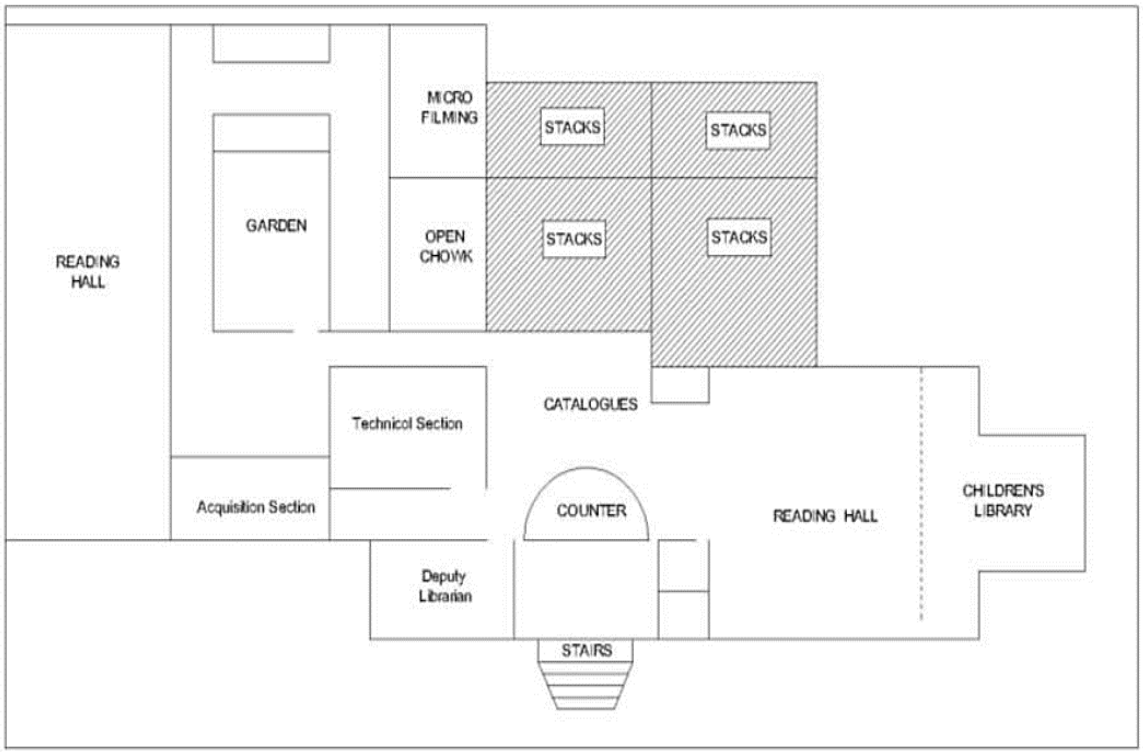

Fig. 1. *Rear Location (L-shaped). Rajasthan University Library, Jaipur (Ground Floor).*

Green Library System

A green building is one which uses less water, optimizes energy efficiency, conserves natural resources, generates less waste and provides healthier spaces for occupants, as compared to a conventional building. A building designed to minimize negative impact on the natural environment and maximize indoor environment quality use of natural construction materials and biodegradable products, conservation of resources (Water, energy, paper) and responsible waste disposal [8]

Components of Green Libraries

1. Use of renewable materials
2. Water Conservation
3. Energy Efficient
4. Building construction
5. Indoor Air Quality

CONCLUSION

The library is an essential institutional concomitant of the university in the scheme of higher education. As such each of these universities came to possess a university library of its own and this study has examined the physical set-up of the library that is the university library building in detail and in all its aspects. Optimum utilization of space both horizontal and vertical as well as the utilization of natural resources like the sun light and adequate air became the main-stay in these library buildings. Finally, with the advances in IT and communication systems and the need for using various technological equipment for faster and easier library services, the need for the third generation of library buildings was felt. Electronic sources of information, digital libraries, paperless libraries, libraries at home, libraries without walls, Internet as a personal library, etc. are some of the advances, which have challenged the existing characteristics of well-planned library buildings. At present, almost any library function services, such as cataloguing, circulation, acquisition, indexing, etc. have been computerized. In other words, technology has imposed itself on the libraries for providing easier, better and more convenient and economical library services. Consequently, the form and the plan of the library buildings will be affected due to technological developments and their use for the library services. Since, we live in a fast-changing world of IT, it has changed many traditional customs of the people and it will change the existing concepts of functional library buildings as well. The Libraries can improve our University research impact by supporting research data management and global research collaboration. Discoverable and directly usable research data will lead to future partnerships with new and deeper research opportunities for the University.

REFERENCES

1. Agarwal JN. *Libraries in Ancient India*. India: 8.4 Indian Librarian;1954. pp.141
2. Chakravorty SN. *Libraries in Ancient Times with Special Reference to India*. India: 9.2 Indian Librarian; 1954. pp. 53.
3. Mukherjee AK. *Librarianship. Its Philosophy and History*.1966; 84p
4. Mukherjee AK. *Librarianship. Its Philosophy and History*.1966; 88p.
5. Subrahmanian S. Op. cit;83p.
6. Metcalf Keyes D. *Planning Academic and Research Library Buildings*.1965; 304p
7. Ranganathan SR. Library Administration.2006; 678p
8. Ranganathan SR. Library Manual: For school, college and public libraries.2006; 482p

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