Selection of Hardware and Software for Library Automation

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Abstract - Libraries play a vital role in the educational, industrial, and technological progress of a country. The progress of the nation depends upon advanced knowledge gained by educationists, technologists, engineers, and scientists of the country. Hence the role of libraries in Universities and then educational institutions is to activate a free flow of information from the point of generation to the point of the utilization of information efficiently and effectively. Information Technology has changed the role of the libraries in acquire, maintain, and distribute the information to the users. Library Automation itself is an application of computers in libraries to maintain inhouse operations such as acquisition, cataloguing serials control, and circulation. Effective library automation depends on the selection of hardware, software & proper training to the library staff.

Keyword: Library automation, Hardware, Software, Educational institutions, Circulation, Cataloguing, Acquisitions, Serial control, Administration,

Introduction

Knowledge is rapidly evolving. Libraries, such as Libraries, periodicals, e-resources, and non-book materials, are accumulating a large number of collections to meet the needs of users. The Library is automated by any power that transfers to the Library. This machine can be used for any function of the Library. What is meant here is that if a task is performed using a machine, that task is performed under an automation process. The computer used by today is used instead of the machine in the library that is why computer rays are really considered libraries.

The word Automation also has its origin from the Greek word Automation which means with the power to sing by itself. The word auto mission was first used by Herder Mayoday in 1936 which he did in the context of various types of production activities through motor plants. Gradually, the term was used in all areas where machines were used for the work being done. From around 1950, it started being used in Library works.

Definitions of library automation

Library Automation means the process is done using a computer. In fact, the Library displays a computerized format of automation, library, and information services, which is affected by information technology. Related to information retrieval and search and resource sharing and networking systems starting from the daily work of the library were done. No scholar has tried to define the term Library Liberty the only person Salman was such as Gill is defined as such -It is best to use various traditional library activities and data processing machines. In the current context, library automation refers to;

- Computerize the Library
- Partnering in Library networking

The main objective of automation in the library is to fulfill the needs of the library users with the required efficiency. At present, the library is highly related to automation. In India, instruments and machines have been used in the library for a long time, but the first use of computers was done by Delhi City Fund 1965 (ISA) to create the author and the subject of the subject. But nowadays automation has been implemented in many libraries of the country. In today's context, library automation is done for the following reasons –

- **Information explosion:** Information Tend is growing very fast Therefore; it is very difficult to deal with the Information available on such a huge Tend without the help of a computer.
- Availability of information on machine-readable charges: Nowadays, most of the information is available in machine station charges. So it is difficult to get it without a computer. This can be achieved by computer only, not other types.
- **Multiple uses of machine-readable records:** Any machine-readable record can be used for many users and for various reasons and how many times. For example a record prepared for the Arjuna Department can also be used for any other purpose.
- **Recurring work:** The computer frees the library staff from such tasks which are recurring.
- **Data processing:** The computer takes very little time to process data and retrieve information. Thus saving the time of the employees along with the users.
- Computers are used to share resources under networking arrangements from other libraries.

Features of library automation

Some of the important features of library automation are as follows:

- Library automation is a continuous process. No one should understand that if a computer is set up in the library to perform a task It is not that the entire library is finished.
- It changes the entire working style of the library.
- This library is to help employees stay in their respective offices.
- This keeps the libraries aware of the new development in the area of hardware and Software.
- It provides the idea of a complete network through the networking process.

Areas of library automation

Automation can be done in the following areas of library activities Which can be divided into the following two regions:

In homework activities:

- These tasks mainly include administration and maintenance related activities such as-
- Administration and maintenance
- Tribunal of texts
- Technical process control
- Serial control

Library service activities:

- Providing documentation services
- In making the table of the newly received texts and currents
- In providing selected smooth dissemination service

- In resource sharing
- In search of information
- May provide networking facility

Selection of hardware for library automation

The computer is an important factor for library automation Whose selection and work, it is necessary to take care of some things like - availability of finance in the budget, the number of terminals to be used, session of the computer to be worked such as branded guarantee of various components of computer like knowledge of the status, services and maintenance of servers, printers, UPS, other accessories and hardware vendors The value of the hardware does not remain fixed, varies, so if you are buying for office. So, while purchasing, you should ask for full. Some branded companies do not directly supply hardware they supply hardware only through authorized sellers.

The following hardware is required for any middle-class library;

- Pentium IV 64 megabytes of ram
- 150-megabyte pen drive
- Floppy disk drive
- VGA Color Monitor
- 8 port intelligence I / b paper
- X.25 card drive software
- Internal modem
- Laser printer
- TCP / IP internet

Selection of software's for library automation

Software is one such tool used in the computer through which the computer is capable of performing certain types of tasks. Therefore, to automate or computerize any library, only the first software is required. It is said that the software makes computers useful; they understand the problem and also solve it. So to execute its functions in the library through a computer the utility of software is of utmost importance and software is of utmost importance in automating.

While selecting the software, first of all, it comes to the problem that information about it should be obtained from where. Today there is no such systematic and real source where information related to the library is available. Currently, the only means of obtaining information regarding software is published on revisions and education. Reviews and studies are published separately and are published in library-related subjects. Although any review is expected to be flawless, yet there is some exaggeration of the case. Therefore, reviews have been put in question in the air. The following are some documents that publish information about software related to the library:

- Computer in libraries
- The electronic library
- Library micro nation news
- International journal of information management
- Microcomputer for information management

Today in the Indian market, much-related software is available in the library like TECHLIBplus, LIBSUITE, LIBSYS, NEWGENLIB, NEXSLIB, SLIM 21, SOUL, SUCHIKA, TULIPS, ULISYS, VIRTUA, WILISYS, AUTOLIB, DLMS, Krveger Library, NETLIB, NIRMAL, SSLIM++, Archives, CATman, Goden Libra, Libman, Libsoft, Salim etc. The following points need to be kept in mind while selecting and purchasing the appropriate software for your library –

- After-Tax Service Warranty
- Knowledge of various modules contained in the software (C)Training related to the use of computers and software to library staff
- Reduction in prices on the simultaneous purchase of software required to perform all the functions of the library
- Use of company resources such as staff, software, and computers to prepare data library of library
- Modification of software as per library requirement
- Keeping in mind the above-mentioned things as well as the functions and procedures to be performed in the library the following points should also be given more attention when choosing and purchasing software.

Value of software (Cost): Financial resources of each library are limited It is necessary that special attention should be paid to the cost of the software while purchasing it. It should also be kept in mind that the value that is being paid for the software is equally useful and useful because the success of the library operation depends highly on the quality of the software itself. Good software reduces the cost of library work.

Hardware: It is also necessary to take care of the hardware of the computer while checking the software. If the hardware is available with any library, it should choose the software according to its hardware or should take software for which hardware costs are low. Despite the plethora of software in the Indian market, today you meet the hardware subordination of the software.

Operating system: It is also important to keep in mind the operating system while selecting the software. All operating systems have their own specialties. Some circulation systems are very convenient to use, some are not so. Therefore software should be selected keeping in mind the features of these circulation systems.

Programming language: It is also necessary to take care of the programming language while selecting the software. What features are available in software depends on the language of the computer in which it is written. All languages have their own distinct characteristics.

Data storage technique and search response time: In a computerized library, when one wants to get appropriate information about a document So how long the computer took in this search depends on many things like-File Size, Administration Operating System, Hardware Platforms, etc. Data collection techniques also play an important role in determining the information it takes to search. It has been felt that the speed of information search of the final file structure is faster than the structure of the file.

Library services: In spite of the extreme similarity in the service provided by all the libraries, there is some differentiation. Some libraries provide certain types of services. It is necessary to see that those who want to provide a library to service students Whether

available in the software to be selected? It is not necessary that all the software have all the facilities.

Up-to-date: The software is also required to be updated to date. It is necessary to have the facility to change the software as per the requirement the experience so far suggests that the software developed by the private sector is more advanced.

Easy in the use: The Library should adopt software that is easy to use That is, while using, he should give clear instructions on the screen how to use it. Instructions for use should also be the simplest.

Whether the library should develop the software itself or purchase from the market

There is a whole bunch of software programs. The task of writing a program is a very specialized and complex task, requiring a high level of services. Because the computer just directs. So if you want to get the computer working properly, there should be no difference in the instructions. The computer wants completeness and accuracy in its instructions. So, when a library develops software with thousands of instructions for its own use, it has the best advantage. Is it necessary that he is facilitated to do the work as per his need and does not have to depend on others, but it also hurts that the maximum time of the library staff is spent in software development, which makes the library useful to others?

And if the library does not develop its own software and purchase it from the market, then it also has its advantages and disadvantages. The biggest advantage in purchasing the market is that the time taken by the library to develop software and keep it up to date The time is saved and the staff of the library can serve the users fully. While purchasing software from the banner, it is necessary to keep many things in the attention The first thing is that the person or organization supplying the software has more than its profit or social welfare Today many sector companies are producing software's, in which most of them have to earn a strong profit. There are also companies like second and some lesser number whose purpose is more social welfare, so it must be taken care of. Therefore, the library has to decide on its own whether to develop the software itself or to buy from the market. For this, attention should be paid to the number of employees and their qualifications in the library.

Conclusion

Often all types of Libraries are trying to computerize themselves. By the way, many colleges, Industrial organizations, research and development institutions, and Government Departments have started to computerize in the library. Therefore many types of computers are being developed for use in their hardware and software libraries in the market today. The most important thing for libraries is to select the appropriate Software to execute their work. Software's have their own different features; it is a difficult task to choose software for their library. But if the software is selected keeping in mind the above factors, it is necessary that there will be no error in the work of the library. This article is useful for those who are planning to computerize/automate their libraries, will certainly be immensely useful

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