

## **AUTOMATION OF LIBRARY SYSTEM**

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### **ABSTRACT**

*Automation of libraries has become essential for efficiently managing all library operation and services. Nowadays many software packages are available in the market place. The article describes the library automation, advantage, need and some software packages of library automation and outlined the library areas in which the library have benefits from the automation.*

**Keywords:** Automation, Library automation, Library functions.

### **Introduction**

Automation means something, which has power of spontaneous motion or self-movement. The term “automation” was first introduced by D.S. Harder in 1936, who was then with General Motor Company in the U.S. He used the term automation to mean automatic handling of parts between progressive production processes.

Library Automation is the general term for information and communication technologies that are used to replace manual systems in the library. Libraries are shifting manual to automate for provide better library and information services to the right users in right time at the earliest. Libraries have automated may be to a single function such as creation of an electronic catalog or index or to all functions such as circulation, cataloguing, Acquisition, serial controls etc. In an automated library, computers are use to perform the different routines, repetitive and clerical jobs involved in the functions and services of the libraries.

Library Automation is the use of automatic and semiautomatic data processing machines to perform such traditional library activities as acquisitions, cataloguing, and circulation. These activities are not necessarily performed in traditional ways, the activities themselves are those traditionally associated with libraries; library automation may thus be distinguished from related fields such as information retrieval fields such as information retrieval, automatic indexing and abstracting and automatic textual analysis (Kent, 1977).

### **Why need for library automation**

Automation of libraries have become necessary for efficiently managing the acquisition of the increasing number of information resources like print and electronic, as well as the increasing number of users who have variety of demands for information. In essence, the capacity to store a large volume of information in a cost-effective manner coupled with accuracy and consistency in processing and efficiency in retrieval of desired information, have made the computer an essential tool for library and information management today. These are major reason, when we need library automation-

### **I. Information Explosion**

The information explosion is the rapid increase in the amount of published information and the effects of this abundance of data. As the amount of available data grows, the problem of managing the information becomes more difficult, which can lead to information overload. (Wikipedia, 2013). In the libraries, there are various methods of handling of information like providing reference service, cataloguing etc. due to the information explosion, these traditional methods of handling information have become inadequate and hence automation is necessary.

### **II. Meet specific needs of library and information users**

Library system contains information about patrons and their transactions, as well as invaluable information about library's holdings, and the status of each item. Without this information, the library would not be able to operate. With the Implementation of automation, library staff generates reports of library's holding within seconds. Latest Advancement in the field of technology has change the behavior of user needs and expectations. Now user needs are more

specific and its expectations are library services to be available 24/7 or explore the worldwide. For satisfy user needs and expectations automation is necessary.

### **III. Increase the staff productivity**

It increase the efficiency and productivity of library staff by using copy cataloguing, sharing of bibliographical records, making union catalogue, use of other external databases. It makes the consistency of the record and the standard quality.

### **IV. Improved Service**

Many activities of a library are routine in nature; a few are repetitive. Automation of these activities helps in managing the library's resources in a better way at the same time saving time, money and manpower. Automation also offers freedom from doing repetitive and routine works as well as enables providing efficient services properly. ( Moorthy, 2004)

### **Areas of Library Automation**

Areas of library automation are as follows:

#### **a). Acquisition**

Acquisition is one of the important functions of any library. The module enables library staff to handle all major function related to acquisition of library material such as Suggestions management, Approvals, Ordering, Cancellation and Reminders, Receiving of Documents, Accessioning, Management of Vendors, Publishers and Currency Table etc. Multi location libraries can perform centralized procurement function such as ordering, invoice processing with the help of integrated library management system.

#### **b). Cataloguing**

The library catalogue is considered as a mirror of the library because it reflects the collection of the library i.e. whether the library possesses good, bad or satisfactory collection. It is considered to be the base for most of the library activities such as acquisition, reference, inter library loan etc. In acquisition activity, the catalogue is referred to avoid duplication of reading materials. In reference and inter library loan activities, the catalogue is consulted to see reference and other

documents which can be provided on loan or can be consulted to answer reference queries. Hence, the catalogue is considered as an important tool in the library. So, if automation of the catalogue is done and then it will be very much beneficial to the users and the staff wherein they can get the desired information with no time. Similarly if the catalogue is made available in a network environment through LAN, then users can have simultaneous access to the same database. So also the library staff will appreciate the automated system since it will eliminate their job of printing the cards, filing the cards, keeping the catalogue up-to-date, etc. The automated catalogue also conserves space as compared to the large catalogue cabinet, which occupies a lot of space in the library. (Saffady, 1988).

#### **c). Circulation control**

Circulation control support lending, return, renewal, place on hold, manages materials type, location and status, patron database, privileges, lists on loan, books due for return, facilitates reservation of titles, prompts overdue books, calculates fines and automatically generates notices to the borrowers and other related information and transaction. Some systems also support integration with security systems (such as Radio Frequency Identification) that complements the self-charging and discharging features of the circulation module.

#### **d). Serial control**

Serial control broadly handles Suggestions, new subscription, renewal, canceling, and claiming orders, returning defective, invoice processing and accounting and statistical information. The module also provides a system for recording issues and keeping track of undelivered issues by generating claim reports.

#### **e). Information services**

Make available the library resources to the users libraries provided information service such as current awareness service, Printed Indexes, Selective Dissemination of Information, Inter Library Loan, Reference service.

#### **f). Library catalogue**

Catalogue is the mirror of library holding. The catalogue has shown what items are in the library and where they are located. All the library resources can be searched by using the catalogue. These resources can also be accessed from the outside library using the implementation of automation. OPAC enables searching through Author, Title, Key Words, Publisher, and Class Number etc.

#### **g). Office automation**

Office automation means the complete integration of basic activities of an office such as word processing, electronic filing, diary management, and communications such as e- mail, fax. These types of function are the basic requirements of any office or department within an organization.

#### **Advantages of Library Automation**

- Easily searching of information o Time saving
- Maintains a stranger level of accuracy vs human error o Speedily communication
- Improve the quality, speed and effectiveness of services. o Helpful in stock verification
- Easily working with the help of automation o Helpful in resource sharing
- It motivate to library staff
- Development of human resource

#### **Software for Library Automation**

There are many options and a large variety of software packages available in the market place, some are given below:-

Sl.No	Name of Software	Platform Support	Manufacturer
1	Automation of Libraries and Documentation Centers	Windows, Linux	BIREME
2	Alice for Windows	Windows	Softlink
3	CDS/ ISIS	Windows/ Dos	UNESCO
4	DELPLUS	Windows, Linux	DELNET
5	Evergreen	Linux	Georgia Public Library Service

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6	E-Granthalaya	Windows	National Informatics Centre
7	Koha	Linux	Katipo Communications
8	IO Library suite	Windows	Agilent
9	Libsys	Windows, Linux	Info-Tek Consultants
10	New Genlib	Windows	Verus Solutions
11	SLIM++	Windows	Algorhythms Consultants
12	SOUL	Windows	INFLIBNET

### Selection of Automation Software

(Randhawa, 2013) suggest that, librarian must have the following information about the software which might help them to select the right software for housekeeping operations as well as information retrieval:

- library's requirements
- Product quality
- Features and functions
  - Staff training and support service
- Hardware and software requirements
- Functionality
- User interface
- Design
- Scalability: Single user-multi user network.
- User-controlled customization
- Reports that help to take decisions
- Security levels migration of data or data transfer

### Conclusion

The automation is economically feasible and technologically required in modem libraries to cope up with the requirements of new knowledge, the enormous increase in the collection of materials, problems of their acquisition, storage, processing, dissemination and transmission of

information. The capabilities of computer associated peripheral media and its application in library activities and services led to a highly significant quantitative and qualitative improvement especially in online technology ( Bhardwaj & Shukla, 2000). Our country is very much behind in computer application in library operations and services. The reasons could be many; however, the situation is changing fast. Conditions are turning to be favorable and also the government is laying great emphasis on modernization, which covers libraries as well. Above all library professionals are getting motivated and showing keenness to get trained to take up computer based work (Harinarayana, 1991). All libraries need automation for enhances the housekeeping operations and services of the library. It improved the library's relevance to the academic community. Therefore, in the future for development of libraries should be focus on automation system.

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