NEED AND IMPORTANCE OF LIBRARY AUTOMATION

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ABSTRACT:
This title sharpen on the need and concern of library automation, overview of library automation and the changing scenario of library management. The bump of ICT has changed the library operation and its functionality into a fast to faster mode. Clients demand not to visit shelf to shelf to detect out a document. They quite get their documents sitting in front of a desktop. Automation has increased the man power. This work will discuss about the theme of automation, its requirement and various components helps to automate library. Some software package has given which are available for automation purpose.

KEYWORDS: Library Automation, Software for Library Automation.

INTRODUCTION
The library plays a critical role in our society it is an important factors of any educational institution, which is middle of the teaching and learning activities where students, researchers and teachers can explore the vast resources of information. In the age of information communication technology, computers are being used for day-to-day housekeeping activity of the library which saves the time of the end users, and library professional also and at the same time avert duplication of work and make the library service easy and effective. This progress in library field has been drastically recover in terms of collection, organization and services. Generally, user's needs and attitudes have changed in its kinds. Also the information seeking behavior of user has strongly changed. They want relevant, authentic information very quickly within a single place at their hand. This idea has posed challenges for library professionals for easy delivery of library services and information. This progress in library field has brings the idea of Library Automation.

HISTORY OF AUTOMATION:
The automation of libraries begins in the early 1960s with the development of computer use. The period from 1965 to 1975

(Boss, 1990) encompasses virtually all principle development in the application of computer to information retrieval. Among the earliest true computer based systems were those established at the Naval Ordnances Laboratory, Silver Spring, Maryland in 1959 and the system put in to operation by Western Reserve University for the American Society for Metals in 1960. Armed services Technical Information Agency in the period 1959-1963, National Aeronautics and Space Administration in 1962 and the National Library of Medicine launched Medical Literature Analysis and Retrieval System Services (MEDLARS). These agencies must be regarded as the pioneer of large scale
produces of bibliographical information by computers. These agencies have been important and influential in the development of information retrieval in the USA. In India, computerization and networking activities started with the establishment of National Information System for Science and Technology (NISSAT) in 1979.

NEED OF LIBRARY AUTOMATION:

- Information explosion
- Availability of information in various formats Print-non-print, graphical, audio-visual etc
- Different approaches and needs of user
- Limitation of library (time, space & human power)
- Duplication in house keeping operation
- To well management and retrieval of information
- To search national and international database
- Impact of communication technology
- Increasing numbers of users
- To Obtain Increased operational efficiencies
- To improve the quality, speed and effectiveness of services
- To improve the access to the resources on other networks and systems, including the Web
- To improve the management of their physical and financial resources
- To facilitate wider dissemination of their information products and services
- Enable their participation in resources-sharing library Networks

IMPORTANCE OF LIBRARY AUTOMATION:

- More time to work with the library users
- Speedup of searching for users
- Better access to the collection
- Allows easy sharing of resources sharing with other libraries
- More interface with the library users with other information resources
- Better facilities for the users as other libraries are also automating
- Enhances consistency in the collection, streamlines circulation
- Time saving of clerical and repetitive works
- Comfort of maintenances of statistics and over charges
- Report to the management
- Problems for Automation:

TYPES OF AUTOMATION:

1. Fixed automation (Solid Automation)

   Fixed automation apply to the use of special purpose equipment to automate a fixed sequence of processing or assembly operations. Each of the action in the arrangement is usually simple, involving perhaps a plain linear or rotational motion or an uncomplicated combination of two. It is almost tough to accommodate changes in the product design. This is named solid automation.

   Advantages:
   1. Low unit cost
   2. Automated material handling
   3. High production rate.

   Disadvantages:
   1. High initial Investment
   2. Relatively inflexible in accommodating product changes.
   3. Programmable automation
In programmable automation, the production equipment is designed with the capability to change the sequence of operations to accommodate different product configurations. The operation sequence is controlled by a program, which is a set of instructions coded. So that they can be read and interpreted by the system. New programs can be prepared and entered into the equipment to produce new products.

**Advantages:**
1. Flexible to deal with design variations.
2. Suitable for batch production.

**Disadvantages:**
1. High investment in general purpose equipment.
2. Lower production rate than fixed automation.

**Example:** Numerical controlled machine tools, industrial robots and programmable logic controller.

**Fixed Automation:** (Soft Automation)
Flexible automation is an extension of programmable automation. A flexible automation system is capable of producing a variety of parts with virtually no time lost for changeovers from one part style to the next. There is no lost production time while reprogramming the system and altering the physical set up.

**Advantages:**
1. Continuous production of variable mixtures of product.
2. Flexible to deal with product design variation.

**Disadvantages:**
1. Medium production rate.
2. High investment.
3. High 'unit cost relative to fixed automation.

**Functions of Library Automation Software Packages:**
A good library software package should be the integrated for the entire range of library activities. The main functions of software packages can be listed as follows:

**Acquisitions:**
This module automates the book ordering process, keeps track of items on order and allows for tight control of budgets. Acquisitions is usually linked to the cataloguing module providing an easy means of checking for items before ordering to ensure against duplication, and enabling library users to see (and often reserve) items on order. A brief catalogue record is created at the time of ordering which allows the item to be put into circulation as soon as it is received in the library.

**Cataloguing:**
This is commonly the center module of an automated library system, without which no other modules will function. It allows bibliographic records to be created, imported to the system and parameters relating to them to be set. The catalogue can commonly be searched via a menu or a command driven system. Systems are usually flexible enough to give a choice in how the information is displayed in a records. Such records can also be edited and deleted and may include provision for entering abstracts and free text.

**Circulation:**
Serial Management
Report Generator.
Interlibrary Loan
Advantages of Library Automation:
- Easily searching of information
- Time saving
- Speedily communication
- Helpful in resources sharing
- Easily working with the help of automation
- Helpful in resource sharing
- It motivate to library staff
- Development of human resource

Disadvantages of Library Automation:
- It is long term and time consuming process
- Financial expenses
- Continuous staff training are required it
- Security problems
- It is totally depended on the electricity
- Costly maintenance
- Untrained user information.

Requirements for Library automation:
The basic requirements for any library automation Programmers are software, hardware, manpower and finance. These four primary components are discussed below.
- **Software**
The success of library automation mostly depends upon the nature of the software used for the purpose.
- **Hardware**
  Hardware is the next important elements of library automation programme, number of products and manufacturers are available for this purpose. The hardware configuration primarily depends upon the software. There are two types of PCs are accessible in the market such as
- **Manpower**
  For running any programme including library automation programme, trained manpower are required. Therefore the library professionals should be skilled properly with requisite computer knowledge for making the automation programme successful. Some software package manufacturers are giving onsite training to the staff at the installation time of software. The user also needs to be trained about the OPAC system.
- **Finance**
  For any programme finance is the important component. The finance of any automation programme includes both installation and ongoing expenditures which includes maintenance, stationeries etc.

PROBLEMS FOR AUTOMATION:
1. Initial investment for automation programme is very high.
2. Library staff has to undergo intensive training on automation.
3. The professionals are initially psychologically traced.
4. Other departments of the organizations need to be systematic for successful running of the programme.
5. Retrospective conversion of data for big libraries.
6. Recurring expenditures needs to be bear positively approved by the authority.
7. Regular update of the software package.

REFERENCES: