Library Automation: An overview

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Abstract*:* The purpose of this article was to provide an overview of library automation and how library management has changed over the year. With the impact of ICT, library operations and functionality have changed into a fast paced mode. Patrons are not required to find a document by visiting shelf to shelf. They just use a desktop to access their documents, manpower has been reduced due to automation. This article has discussed about the concept of library automation, its needs, benefits and problems faced by using it. Some special features and areas where library can use it. This paper has also discussed some software packages which are available for automation purpose.

Keywords: Library automation, ICT

Introduction

As one of the most important component of any educational institution, the library plays a vital role in connecting learning and teaching activities. The library provides a wealth of information that can be explored by teachers, students, and researchers.

With the advent of ICT, housekeeping activities of library are now done mostly using computers, which saves time and makes the services efficient and smooth. In the era of information communication technology, the scenario of libraries has changed dramatically in terms of holdings, organization and services. At the same time, users' attitudes and demands have changed in different ways. The information seeking behaviour of users has also changed dynamically. Relevant and authentic information must be available to them very quickly and within a single location.

For library professionals, this concept presents a challenge to provide fast information and services. With this development in libraries, the idea of automation has emerged. Machineries are used for automation so that work can be done easily and time can be saved.

Concept of Library Automation

A system that can move spontaneously is called an automation, which comes from the Greek word 'automose'. Automation was introduced in 1936 by D.S. Harder, but it has been referred to as library automation for the last 50 years.

As defined by the Oxford English Dictionary, automation consists of "using electronic or mechanical devices to replace human labor or to control the branch of industry" (Simpson & Weiner, 1989).

According to the American Library Association Glossary of Library and Information Science, automated systems perform functions automatically or on their own. The ALA Glossary provides examples of automated data processing systems that include computers and other labour-saving devices.

In the McGrew Hill Encyclopaedia of Science & Technology, automation is defined as "a term without a precise technical meaning, but widely used to describe machines and systems that are highly automated" (McGrew, 1982).

The process of automation is using the machineries for easily working and saving the time and manpower. A library automation process involves mechanizing activities like acquisition, serial control, cataloguing, circulation and so within a library. Automatic indexing and abstracting, automatic text analysis, and information retrieval are all related to library automation.

Currently, the distinction between library automation and related fields is not as clear as it used to be and the library automation sometimes includes related fields as well. It is true that computers are a major component of library, but telecommunication and reprography technology play just as important a role as computers.

Need and Purpose of Library Automation

As information grows exponentially, manual systems have become redundant, resulting in the need for computerized information storage and retrieval. It is only through the use of computers that huge quantities of information can be handled effectively and efficiently, which additionally enhances the value information by being highly accurate and timely.

In today's world, no one has time to shift through and find the appropriate information among the massive quantities of data that are collected. There isn't time to browse the bookshelves. Therefore, library automation is necessary. The majority of libraries have not been automated yet.

A manual library system was replaced by an automated library system for the following reason---

i. In an automated environment, library records can be kept effectively.

ii. Books can be circulated and catalogued quickly and OPAC is a powerful library automation tool which is used for searching documents.

iii. Keeping computerized form of bibliographic records of all materials.

iv. A branch library staff member can check order status without having to maintain duplicate files or make inquiries.

v. A patron can find out if a book is on the shelves or out on loan at the library.

vi. Library operations become more efficient with the use of information technology. By creating an automated system, human labour will be carried out more quickly, accurately and economically.

vii. Housekeeping operations should be made less repetitive.

viii. By implementing new processes, libraries can share resources and provide high quality information.

ix. The library is able to provide better services due to it.

x. The use of qualitative services saves time and manpower.

Special features of Library Automation

Here some of the special features of library automation are follows----

i. In this activity, human use electronics to carry out tasks.

ii. Providing library services is made easier by it.

iii. Work in libraries is standardized.

iv. Productive work.

v. Providing information as quick as possible.

vi. Ensure that library work is not duplicated.

vii. Availability of information and a trained staff.

viii. Time can be saved with this system.

ix. This system is user friendly.

Areas of Library Automation

Users are the heart of library services and libraries are designed to meet information needs of patrons in as comfortable a way as possible. It is clear that today's library users are more comfortable with electronic technology devices and information in that format, these librarians have incorporated the use of modern technology for processing information and making it accessible and visible.

Some of the following are areas of library automation—acquisition, cataloguing, circulation, serial control, indexing, OPAC, resource sharing through library, information retrieval etc.

i. **Acquisition System:** Automation of the acquisition, ordering, receiving, and claiming of materials from suppliers, as well as return and cancellation of materials. Connecting the gadget to an external network can enable the acquisition to be completed online.

ii. **Circulation System:** Manages circulation activities like borrowing, returning, renewal and placing items on hold.

iii. **Cataloguing System:** The process of creating, storing, managing and retrieving bibliographic records.

iv. **Serial Control:** This system processes orders, cancels, claims and returns defective, unwanted and statistical data.

v. **OPAC:** There are many resources to be founded in the OPAC such as books, journals, newspapers, e-books etc. Using the OPAC user can access books and e-content from anywhere and at any time.

Library Automation Software Packages

Some of the library automation software is as follows—

a. Sanjay

b. Granthalaya

c. Libsys

d. SOUL

e. Koha

f. E-Granthalaya

g. Greenstone

h. Winisis

i. AutoLib

j. NewGenLib

Benefits of Library Automation

i. The usage of electronic resources is made simpler for users by library automation.

ii. Using automation in the library reduces the workload of staff who deal with cataloguing, circulation, and acquisitions. This frees up time so that library users can enjoy better services.

iii. It includes the process of switching over to computer and software from conventional paper based methods.

iv. It facilitates easier access to information and increases its availability.

v. It facilitates time and financial saving for libraries by automating administrative duties.

vi. The majority of tasks are automated, thus libraries that employ it need less staffs.

vii. To reduced errors and increases data accuracy, libraries can automate their databases.

viii. Automation eliminates the potential for data and resource duplication.

Problems of Library Automation

Library automation is plagued by several underlying problems. The following are some of them: -

i. It takes a significant amount of money to start an automation program.

ii. It is difficult to find qualified staff.

iii.   The library is not organized well enough.

iv.   Throughout the year, software updates are performed.

v.   To ensure the programme runs smoothly, other organisational divisions must be organised.

Conclusion

In today's world, library automation has become a buzz world and is becoming an essential requirement for all libraries. Library automation is that the method that wants correct coming up with timely implementation and periodical analysis. A library with automated services can provide users with better services and maintain the library more efficiently than one with manual service. Using an automated library system, keeping records and generating repost is very easy. A library automation programs success depends on how well it is planned and implemented. Professionals in library management must therefore take the appropriate initiative.

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