

**MANAGEMENT OF LIBRARY AUTOMATION SOFTWARE IN HIGHER  
EDUCATION INSTITUTION LIBRARIES**

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**Abstract**

Library automation isn't new in the library and information science discipline nowadays; in any case, especially in India it isn't greatly rehearsed on the ground reality. Library computerization manages the automation of the library benefits that are performed by individuals. Modernized information the executives and the use of information and communication technology (ICT) are characteristic pieces of library automation. Now and again, computerization is interchangeably involved with automation in the library the board, yet mechanization is a more extensive term contrasted with the previous one. The current paper, it is examined the way that a library ought to be changed/updated into an automated environment.

**Keywords:** Library Automation, Library Software, Academic Library

**INTRODUCTION**

Library automation is a broad concept that includes database preparation, computerized library services as well as availing library services remotely. The detailed library services include public relations, reference services, referral services, bibliographic services, circulation services, database management, collection development, classification, cataloguing, serial control, etc. As far as the word "automation" is concerned it can be understood as the "converting manual services into machine-based services" and the machine may be mechanical as well as the computerized. Similarly, "library automation" is the conversion of library services from manual to machine-based services. This automation is mainly comprised of computer systems, security systems, and other associated machinery that all are programmed for furnishing particular jobs. In particular, we can name some of them as, computer systems, barcode scanners, CCTV cameras, RFID systems, biometric devices, networking devices, communication devices, etc.

**DEFINITION OF LIBRARY AUTOMATION**

According to Webster's dictionary "automation is the technique of making an apparatus, a process or a system operator automatically" In other words, it is the machinery that mathematically manipulates information storing, selecting presents and records, input data or internally generated data. Automation word is used for automatically technical processes. According to Encyclopaedia Britannica, "The name given to an automatic system of working. The difference between automation and mechanization is mainly one of degree"

## **REVIEW OF THE LITERATURE**

According to Olanlokun (1993), the acquisition of books, reference materials, pamphlets, government publications, audiovisual materials, and databases can be enhanced by an automated library. In selecting the software for library automation, first, it is important to have adequate knowledge of the available software. Secondly, verify the software capabilities, weaknesses, and possibilities to meet the needs of users as well as future improvements. Osaniyi (2010) stressed that the wrong package can lead to failure to support an important process; supporting a process inaccurately or inefficiently; unhappy clients; loss of patronage; etc. As, Ifidon (2006) writes, a library needs to possess the resources that will enable it to meet its goals. he went ahead to say beautiful buildings, well-trained staff and modern information storage and retrieval system can best be appreciated if excellent services are given to users. This can be achieved faster with an automated acquisition process.

## **OBJECTIVES OF THE STUDY:**

1. To work on the current administration from the perspective of the nature of administration and ease of use.
2. To foster library automation programming in Higher Education Institution Libraries.
3. To offer the types of assistance of the current staff successfully through library automation.
4. To keep away from duplication of work of library assortment.

## **METHODOLOGY**

The methodology applied in this research is totally practical based which is the result of the researcher's experience of librarianship as well as the observation of various developed libraries during his tenure. The methodology does not adhere to theoretical base of research methodology strictly however, it is tried to shape up the paper in to a standard format. The data required for the study is taken from secondary as well as tertiary sources. The sources are referred to for the conceptual frameworks of the topic included in the research.

## **NEED FOR AUTOMATION**

There are a few explanations behind automating library exercises, particularly modernizing library exercises. A computerised library is generally better compared to a physically worked library as far as getting sorted out, handling and dispersing data to the clients successfully and effectively. In the event that a library is automated and associated with various library organizations like DELNET, INFLIBNET. It gives an open door to the clients i.e., understudies, instructors, and exploration researchers to have admittance to the scholastic world. The various elements adding to the improvement of automated library frameworks are:

**Information Explosion:** Manifold increment particle the data yield and its use has made it an issue in putting away and coordinating something similar. For the getting sorted out, this huge data, manual and customary strategies for data getting sorted out were not adequate.

**Information in Machine-Readable form:** Now-a day's the greater part of the reports are accessible in machine-meaningful structure and some of them are accessible just in machine-coherent structure.

There are even a couple of essential diaries accessible just in machine-intelligible structure. Due to the new advancements in the Telecommunication framework, it has become conceivable to access such information from any area of the world.

**Economic Feasibility:** Sharing the assets become inescapable due heightening of costs in distributing and circulating of data among the libraries. To make it practical is sharing the assets, the use of PCs in libraries these days become obligatory.

**Routine Jobs:** Relieving the tension of calling from a normal occupation in a few sectional exercises, for example, flow control and thinking upon the specialized administrations mechanizing the libraries is better.

**Expansion in Users:** The expansion in data clients and the requirement for specialization of data by these clients requirements execution of new techniques like SDI. These techniques can be executed in a superior and quicker way by utilizing PCs.

**Storage Capacity:** The expansion in the innovation of capacity gadgets made it conceivable to store tremendous measures of data in a tiny and minimized media for the legitimate usage of the space accessible.

In addition, there are different explanations behind modernizing the library housekeeping tasks

1. To further develop command over the assortment
2. To have viable command over the whole situation
3. To work on the current administrations from the view point of
  - i) Quality of administration
  - ii) User-amicability
  - iii) Regulatory
4. To successfully divide the assets between different libraries in an area
5. To keep away from duplication of work
6. Grants further developed financial plan control.
7. To really utilize the administrations of the current staff (Singh, 2007).

## **PLAN FOR LIBRARY AUTOMATION**

An automated library movement results when a PC is utilized to help a library like acquisition, processing of circulation materials, or giving admittance to data in an automated library action staff and PC share responsibilities regarding performing work on the other hand like a staff part performs first handling tasks, the PC and the staff part. Because of sharing of liabilities, the computerized exercises can be called 'human-machine capacities. A PC is just an instrument empowering custodians to do things quickly, precisely and more affordable than the manual, strategies. There is no such thing as complete automation without human mediation and control and dislike to exist from here on out.

## **SOFTWARE SELECTION**

It is time to choose the software required for your library to manage your resources i.e., users, printed material, digital resources, and online resources. There are various options at this time to choose from.

We can go for standalone library management software, server-based dedicated software, customized ERP software, open-source software, etc. whatever the need may be. Every software has its pros and cons. We ourselves have to choose the best-suited one for us. A well-versed institute library may require software for the management of users, books serials, CD/DVDs and internet databases. Apart from those services of abstracting, indexing and translation are also required. It can be properly done by dedicated library management software not by ERP software. Software should also be compatible to different file formats such as docx, xlsx, jpeg, pdf, etc. as well as the cataloging formats. The reports generated should also be compatible with other popular software for safeguarding the failures. AMC should also be signed for proper maintenance of the software with its vendor.

## **AREAS AND SERVICES OF LIBRARY AUTOMATION**

Library automation is a conventional term used to mean the different exercises connected with the location, acquisition, storage, update, control, handling, repackaging or reproducing, dissemination or transmission or correspondence, and working on the nature of items and administrations of the library. It upgrades the speed, efficiency, sufficiency and proficiency of the library proficient staff and saves the manpower supply to stay away from a few daily schedule, redundant and administrative assignments, for example, documenting, arranging, composing, duplication-checking, and so on which we can monitor expensive professional manpower supply for specialized help' and perusers administration. The fundamental exercises and administrations of library robotization are given below.

### **1. Information resource building**

Procurement of books, monographs, general media, electronic materials like CD-ROM, maps, etc. There are a few explicit elements of a procurement interaction. Ideas, suggestions and determination of library collection:

- Duplication checking, library holding checking.
- A vendor selection.

- Preparation of order, cancellations of order lists with terms and conditions of the supply. Checking of overdue orders.
- Record of items on order.
- Record of received and non-received items and receipt to the vender.
- Items verification with order file and invoice.
- inspection of items by the concerned department.
- Prepare for payment after accessioning.
- Prepare budget and maintain accounts and statistics subject wise etc.
- Final report. Items, subjects wise, chronologically, booksellers report etc.

## **2. Data Entry Database is required for each**

- Books
- Clients/ members
- Serials
- Audio-visual
- CD-ROMS, Floppies
- Gifted items
- Maps, Reports, etc.

## **3. Classification and cataloguing**

- Catalogue card production.
- On-line cataloguing.
- Duplication checking of catalogue cards.
- Production of duplicate catalogue cards.
- Preparation of authority file subject heading list.
- Shorting, checking and filing of catalogue cards.
- Automatic generation of added entries (author, title, series etc.). Generation of monthly accession list.
- Developing centralized and on-line cataloguing.

## **4. Circulation control**

- Registration/ cancellation and make bound time for membership.
- Issue, return, renew reservation of documents and produce the slip for proof.
- Charges for a late, lost book, binding and production of penalty slip.
- Maintenance of circulation... Statistics.
- Interlibrary loan.
- Use of bar code system.
- Report statistics of circulation.

## **5. Serial control**

- Input essential serials data.
- Order a list of new serials.
- Mode of payment, prepare for payment.
- Receipt and update the records.
- Receipt to vendors or publishers.
- Preparing the list of present holding, additions, missing, canceled serials chronologically, subject-wise etc.

- Renewal and cancellation of present subscriptions.
- Sending reminders and follow-ups of missing issues.

### **Binding control.**

- Accession registers of bound serials.
- Prepare budget and maintain accounts statistics such as subject wise, binding etc.

### **6. Documentation and allied services**

- Indexing and abstracting of micro and macro documents. Thesaurus construction.
- Compilation of union catalogue.
- Bibliographic control.
- Current awareness services.
- Literature search.
- Selective dissemination of information.
- Newspaper clippings.

### **7. Information retrieval**

- Database creation and maintenance, interactive searching, saving of in-house as well as external databases.
- Search and printouts of queries against the specified requirement.
- Such as about the books (issued, reserved, lost, overdue, weed-out), membership, interlibrary loan, penalty charges, periodicals, newspaper clippings, reports, etc.
- According to alphabetically, chronologically, subject-wise, members-wise, keywords with each particular such as accession no-wise, title, author, call number, edition, etc.

### **8. Communication networks**

#### **Library Cooperation:**

Cooperative acquisition, cataloguing, and coordinated information services, Resource sharing.

#### **Access to Database:**

- Information service
- Back up service
- Document delivery

#### **CD-ROM Services:**

- Information searching
- Text delivery

#### **Online search:**

- Access to Database
- Downloading

**E-mail:**

- Electronic mailbox Bulletin Boards

**Access to Internet**

- Information superhighway
- Cyberspace
- World Wide Web (WWW)
- DIALOG and other databases.

**9. User Orientation:**

A librarian should arrange face-to-face user orientation programmes from time to time to familiarize with the new system/s of the library services failing which the effectiveness of library automation will be of no use. We should display "how to use" printouts at various corners of our library guiding the users to use the new library system. For this purpose, social networking and messaging technologies can be used in addition.

**10. IT-Enabled User Relationship Management (IT-eURM):**

ICT can be used in an optimized way by using various social networking websites and messaging services. Such as, a Facebook account can be created with closed access. Networking sites for Professionals like, LinkedIn can also be used. WhatsApp groups can be created for communicating with the users. With the help of the above-said technologies, one can perform better in URM practices. Library rules, timings, new arrivals, user orientation, CAS, SDI, etc. services can be exercised with the help of these technologies to ensure good URM practices

**IMPACT OF COST FACTOR ON LIBRARY SOFTWARE**

Software pricing is certainly not a clear issue, since every acquirement includes a unique business course of action between a library and its picked supplier. I imagine that it's sensible to scale the expense of an item to such factors as the size of the library, the intricacy of the establishment, the quantity of synchronous clients, or the quantity of assets included. While some might feel that it's odd for various libraries to pay various sums for similar software, changing the expense by these elements by and large permits libraries with more humble requirements and more unassuming financial plans to pay not exactly those inside the library automation industry, evaluating isn't simply scaled by different variables, it's likewise a consequence of a private exchange. A vendor will propose a cost in light of a solicitation for recommendations put together not just with respect to its standard recipe of size and intricacy factors yet additionally on the particular serious circumstance. Acquisition with exceptionally cutthroat offering might bring about an alternate cost proposition than could somehow or another be advertised. Expansion, for instance, will normally be thought about in contrasting programming costs over the long run. Costs may likewise change as per global areas, scaled not exclusively to money trade rates yet in addition changed on top of nearby business real factors. (Emeryville, 2012)

## CONCLUSION

The principle justification behind the significant expense of software is that product projects are much of the time extremely huge, include numerous users, and length over numerous years. The improvement of these frameworks is frequently done in an adhoc way, bringing about successive timetable slippage and cost invades in programming projects. A few ventures are basically deserted. Henceforth, there is a critical requirement for legitimate software improvement procedures and task the executives methods. more complicated needs and bigger financial plans. The help and backing needs for enormous and complex associations cost more to satisfy than more limited size establishments.

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