

NEED OF LIBRARY AUTOMATION IN CURRENT ERA: A STUDY

Avinash Singh¹, Archana Sahu², Priyanka Patel³

HOD Library¹, Librarian², Asst. Librarian³

*Parthivi College of Engineering & Management^{1,3}, Sirsakala, Bhilai – 3, Dist. Durg Chhattisgarh
Chhattisgarh Institute of Management and Technology², Near NSPCL, Patan Road, Ganiyari, Bhilai – 3,
Dist. Durg Chhattisgarh*

Abstract – Today libraries faces more challenges due to knowledge explosion, user are more web savvy having higher expectations of information which is not possible for a traditional libraries to meet their requirements. Now we are in time to switch our libraries towards complete automation and focus on electronic & digital content relative to print materials. The paper briefly outlined the benefits, applications and impact of various hardware & software involved in Library Automation.

Keywords – Library, Automation, Hardware, Software, Barcode, Open Source.

I. INTRODUCTION

The term automation means the procedure where any machine or instrumentation is involved to fulfill any task. Use of machines not only saves the time but also saves the energy of mankind. In USA at the beginning Computer was used in the field of Indexing of Library records. Due to very High price Computers were beyond the reach of Libraries for Automation. But on late 60's price of Computers & its components slashed down and became common in Libraries such as Library of Congress, MEDLARS etc.

The term Library Automation refers as to:

- A. Automation in Acquisition
- B. Automation in Classification
- C. Automation in Cataloging
- D. Automation in Circulation
- E. Automation in Serial Control
- F. Automation in Verification

Hence Library Automation means use of computers & Library software to save the man hours in library and to focus on key areas like CAS (Current Awareness Service) and SDI (Selective Dissemination of Information) to the right user at right time.

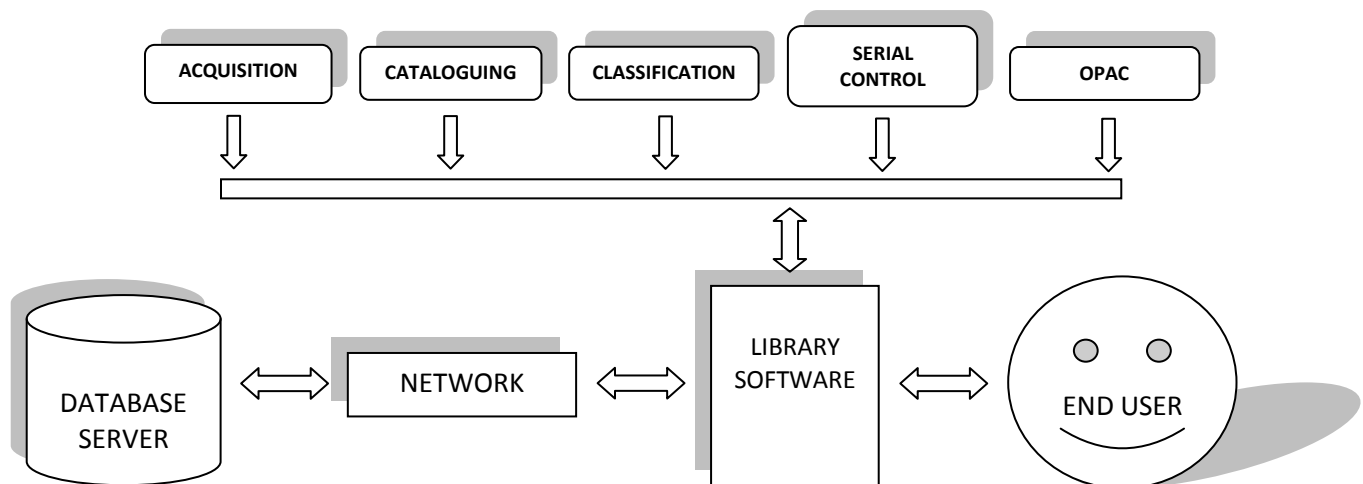


Figure 1.

II. NEED OF LIBRARY AUTOMATION

Traditionally all the work is being done manually in Libraries i.e. with all entries of transaction done in Issue registers, manual stock registers, Patrons registers etc. But due to following reasons the need of Library Automation is arising rapidly:

- A. **Information Eruption** – Due to information explosion tones of information is producing day by day. To handle a Meta Data Library Automation is essential.
- B. **Various types of information in various formats** – Now a days information is being generating in various formats viz. txt, jpeg, pdf, docx, gif etc. To handle the data in various formats Library Automation is essential.
- C. **Effective Management** – To handle big collection and various patrons an effective library management is essential which can be done only through Library Automation.
- D. **Effective approach towards Information Storage and Retrieval** – Library Automation is efficient approach towards ISAR. Any information can be stored and retrieved within friction of seconds.
- E. **Time saving** – Library Automation not only saves the time of the readers / users but also it saves the time of library staff as ISAR can be done without wasting time of every one.
- F. **Better Library Services** – Library Automation is very helpful in providing best library services as compared with manual system.
- G. **Proper utilization of Resource Sharing Activities** – As every record / data / information is digital which can be accessed worldwide. One can share their resources to everyone when and where it is demanded.
- H. **Economic Feasibility** – Due to Library Automation effective resource sharing activities can be performed. There is no need to invest on such information which are available with other libraries they can be gathered via Resource Sharing hence forth Library Automation is economically feasible.

III. OBJECTIVE OF LIBRARY AUTOMATION

The sole objective of Library automation is to:

- A. Optimum use of resources available in library.
- B. Setting up best suitable system.
- C. Save the time of Staff.
- D. Save the time of user.
- E. Efficient use of Human resources.
- F. Accuracy in Stock Verification.

IV. BASIC REQUIREMENTS FOR LIBRARY AUTOMATION

Following resources are required for Library Automation:

- A. **Financial Assistance** – No library can flourish without financial assistance. A good library needs good amount of money. Purchase of Books, Journals, Magazines, needs large funds.
- B. **Hardware** – Basic Hardware like Computer, Printer, Barcode Reader, Barcode Printer etc are needed for Library Automation.
- C. **Software** – Software is very important part of Library automation. One can install any Library Software according to their budget.
- D. **Good Collection of Books & Library Material** – Last but not the least a good collection of library materials is also needed for Library automation so that maximum user satisfaction should be claimed.

V. ADVANTAGES OF LIBRARY AUTOMATION

- A. **Time Saving** – Automation is a time saving technique it fulfills the 3rd and 4th Law of Library Science of saving the time of the reader and the library staff.
- B. **Easy Working** – Automation leads towards easy and efficient working of Library staff which provides complete user satisfaction.
- C. **Easy Searching of Information** – Library Automation makes the user to search their queries in better ways which saves their time and efforts.
- D. **Helpful in Resources Sharing** – Resource Sharing can be done in better ways as libraries can be inter connected with each other and can be able to help each other by providing Resource Sharing facilities.
- E. **Efficient Book Keeping** – Not only Patrons but Library man get benefitted by automation by keeping their Book Keeping efficiently with less efforts.

VI. BARRIERS OF LIBRARY AUTOMATION

- A. **Costly Affair** – Library Automation is costly affair for small libraries with less number of users. But in the other hand where there is large collection of materials and many users it is cost efficient. Hence Finance is one of the Barriers towards automation.
- B. **Untrained Staff** – A large amount of data is converted in to various databases where accurate data punching is required. These databases were later fed into Library software for automation. Hence untrained library staff is one of the barriers in Library Automation.
- C. **Internet Facility** – There are many places in rural areas where Internet Facilities are not available which is required for Resource Sharing, Information Searching etc which is a barrier towards complete automation.
- D. **Less Collection** – Some Libraries doesn't have sufficient numbers of materials so it is not worth for them to go for Library Automation.

VII. HARDWARE REQUIREMENT FOR AUTOMATION

SN.	HARDWARE	SPECIFICATION
1.	Monitor	CRT / LCD / TFT Standard Size
2.	HDD	Min. 40 GB
3.	CPU	P IV or Above
4.	RAM	512 MB or Above
5.	KEY BOARD	Standard 104 Keys
6.	MOUSE	Standard Optical Mouse
7.	SYSTEM TYPE	1 GHz 32 Bit or Higher
8.	OPERATING SYSTEM	Windows 98 / XP / LINUX / UBUNTU
9.	BAR CODE READER	Any Brand
10.	BAR CODE PRINTER	Any Brand

VIII. LIBRARY SOFTWARE

Library software is very essential part of Library Automation. There are many software available in National and International market. Some of them are :

A. SOFTWARE AVAILABLE IN INTERNATIONAL MARKET :

- 1. CDS / ISIS
- 2. MINTSIS
- 3. CAIRS
- 4. BASISPLUS & TECHLIBPLUS
- 5. SUPER DOC
- 6. AILEPH – An Integrated Library System
- 7. SCI – MATE
- 8. SOFTLINK
- 9. INMAGIC
- 10. IV +V System
- 11. LSSI
- 12. KOHA

B. SOFTWARE AVAILABLE IN INDIAN MARKET :

- 1. SANJAY
- 2. SUCHIKA
- 3. MAITRAYEE
- 4. LIBSYS
- 5. DELMS
- 6. DELSIS
- 7. DEL-WINDOWS
- 8. DEL-DOS
- 9. GRANTHALAYA
- 10. LIBRARY-2000
- 11. WILYSIS

IX. SELECTION OF BEST LIBRARY SOFTWARE

There are many Library Software(s) available in market. Acquiring or selection of best Library software depends upon the Type of Library, Types of Users, Stock / Material in the Library. Library software must be purchased by keeping in mind about your need and requirement. Library Software may be classified in to three categories:

- A. **Commercial Software** – Any Software which is designed and developed for sale is called commercial software. User gets the license of this software for commercial use. User also holds proprietary rights for his copy. Some of the Commercial Software for Library Automation are: **LIBSYS, SLIM, SOUL, EASYLIB** etc.
- B. **Open Source Software** – Open source software are developed for the betterment of the society. These software were made available to the public with its original source code & license. User also holds the copyright to study & make changes in the software according to their need and redistribute it to anybody for any purpose. Some of the Open Source Software for Library Automation are: **KOHA, PhpMyLibrary, LIBRARY MANAGER** etc.
- C. **Free Ware Software** – Software which are distributed free of cost are called Freeware. These software holds no warranty, update options & can be redistributed to anyone but the copy right and source code remains with the original software developer. Some of the Free Ware Software for Library Automation are: **CDS/ISIS, WINISIS** etc.

X. FEATURES OF LIBRARY SOFTWARE

- A. Should have OPEC.
- B. Must follow the stand of Mark 21, AACRII and Z39.50 Protocol.
- C. Should have Barcode facilities.
- D. Should handle Acquisition, Circulation & Serial Control.
- E. Should have search facility.
- F. Should be user friendly.
- G. Should have Article Indexing.
- H. Should have accuracy in Stock Verification.
- I. Should have Report/ Display / Print facility.

XI. STEPS IN LIBRARY AUTOMATION

Library Automation needs to be done in following steps:

- A. A good Computer Hardware and Software must be installed.
- B. Install any Library Automation Software.
- C. Make data entry of all your records viz. Accession Register, Patrons Register, Serials and Journals etc Convert them into Database of each in separate entity.
- D. Import your Database in your Library Software.
- E. Take a printout of Bar codes and paste it on the books.
- F. Use Cello tape or Bar code protectors to protect your Bar codes on books for long use.

Time taken on complete automation depends upon the quantity of your stock, time given to Data Entry, time given for Bar coding, number of staff employed and technical Skills of Staff.

XII. CONCLUSION

Library Automation needs perfect planning & implementation. Selection of suitable hardware & library software is very essential part where financial issues are involved. A standard Software package must be used which is very common so that you can effectively use the resource sharing facility. Librarian and library staff must have adequate knowledge of Hardware and software so that he/she can manage the operations smoothly and very efficiently. Hence Library Automation will not only improve your Library Standard but also helpful in imparting good library services to the users.

References:

- [1] Khaparde (Vaishali), Advancement in library and information science, Library Automation, P.3-57,2012.
- [2] Rao (Ravichandra K), Library Automation, 1990.
- [3] Kochar (R.S), Library Automation, A. H. Publishing, 2012.
- [4] Riaz (Muhammad), Library Automation, Atlantic Publisher and Distributors, 1992.
- [5] Satyanarayan (N.R), Pustakalaya Computerikaran Nirdesh Pustika, Pustakalaya Swachalan, P. 53-64.