

Status of Library Automation Software Use in Mumbai College Libraries

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Abstract: - *The present study is about the use of library automation software in college libraries in Mumbai. Using a survey method an attempt is made to find out which automation software is used, the impact of automation on library development, problems while handling library automation software and reasons for non-automation in the library. Findings indicated that most of the libraries are automated. Lack of trained manpower, financial crunch were some of the problems related to use and acquisition of the software.*

Keywords: Library Automation, India, College Libraries, Software, Mumbai

Introduction

Library automation refers to use of computers, and utilization of computer based products and services in the functioning of all type of library operations. “The utilization of computers and related techniques make the provision to provide the right information to right reader at the right time in a right form in a right personal way”. (Bhardwaj, 2000).

The benefits of library automation are many, such as:

- Accuracy of library data

- Reducing duplication of work thus increasing speedy processing of data
- Improved use of resources by providing better customer services
- Providing better information retrieval features through Web OPAC
- Better stock control through computerized stock verification
- Creating better image of the library
- Generating better statistical records about memberships, usage of stock
- Helping in management of information explosion by acquiring e-resources

- Helping in space management as many libraries have shrinking space
- Helping to meet the demand of technology savvy readers who want information 24/7 on their desktops/laptops/mobiles

Software for Library Automation:

Many readymade commercial and open source library automation software packages are available in the market for libraries to select. All these packages differ in their capabilities, they provide a wide range of features and their prices vary and their versions keep on changing.

Compared to readymade commercial software, open source software is freely downloadable, and customizable. But many times librarians are not ICT experts so they find it difficult to install the software without support from ICT personnel. Also if there is any problem, it is difficult to find instant solutions as there is no annual maintenance contract done with any service provider. Comparatively readymade commercial software is installed and maintained by the service providers. Though they are expensive, libraries prefer them because they are user friendly, easy to use and are upgraded at regular intervals. Maintenance help provided by the company makes it easy for libraries to get help whenever there is a problem.

Examples of library automation software are SOUL (Software for University Libraries), Koha,

LIBSYS, SLIM, and E-granthalaya, Virtua to name a few.

When deciding to go for automating library functions, choosing of a software suitable to the specific needs of a library is a must. It is necessary for any libraries to document all the activities performed in the library and check whether the software will provide automation of all these activities. Comparative analysis of all software available in the market should be done to select the most suitable software.

Library activities such as acquisition, cataloguing including Web OPAC, circulation, reference, serials subscription, inter library loan, and indexing are automated through library automation software. Detailed analysis of each activity performed by the automation software, types of records and statistics generated for each activity are important criteria to check for selection of a software.

Hardware and software used for automation must have fast response time, minimum downtime, and should be compatible with existing hardware and software system if any in the library.

Software should be user friendly, should provide self-instruction and accessible through computer network of the library.

Review of Literature

Issues and application of library automation has been widely discussed in the literature. In India many libraries have installed automation software, but are not using it to its full capacity.

Numerous studies have been carried out on library automation in India. A selection of these are outlined below, and fall into two groups:

1. Studies on features of library automation software
2. Surveys on implementation of library automation

1. Studies on features of library automation software

Das & Chatterjee (2015) discuss about the concept and need and various components of library automation with 28 library automation software developed and used in Indian libraries. Lack of funds for initial installation as well as maintenance, lack of trained manpower, issues related with retrospective conversion of existing data in large libraries and issues related to updating of the software, lack of support from the management were some of the problems stated by the authors.

Yuvaraj (2016) has studied SaaS- based integrated library management software 'Librarika' based on the feedback received from the library staff using this software at Central University of South Bihar. The cloud based software to be used by libraries is an option worth considering according to findings.

Issues related to data ownership, migration and portability in the cloud are discussed.

Rai & Kumar (2011) have compared features of six library automation software packages: Liberty, Alice, LsPremia, Virtua, E-granthalaya, Netlib used in various libraries of Delhi. Various features and modules of software are compared. It was found that all software packages provide basic modules of library automation. However Liberty, LibSys and Virtual were user friendly and provide web based platform.

Lihitkar & Lihitkar (2011) studied the features of ten library automation software packages and compared their features. Merits and demerits of this ten software are described and software were ranked accordingly. Out of ten software packages studied by the authors, the first three software ranked are SOUL, LIBMAN, and LibSys.

Ahmad (2014) studied the use of library automation software in three university libraries namely IIT Delhi and Kanpur and Kashmir University with special reference to cataloguing and OPAC. LibSys and Virtua software are discussed in detail by the author.

The study by Tyagi & Senthil (2015) analysed types of library service platforms used in India with special reference to whether cloud platform was used by library software packages. It is found that in open source software, Koha was offered on cloud platform to libraries. Other two software that offered cloud platform were E-granthalaya and

Cybrarian. Library SaaS is still not much applied in India

2. Surveys on implementation of library automation

A survey of status of library automation in engineering college libraries by Tyagi (2016) revealed that only 50% of the surveyed libraries were fully automated. The study examined barriers to automation and lack of funds, lack of staff training were some of the issues identified.

A survey was done by Anas, Iqbal & Ahmad (2014) to study impact of library automation in libraries of management institute at Aligarh, India. Both librarians (70%) and readers (85%) were of opinion that automated library is better than the traditional library. The findings indicate that only one library was fully automated whereas other three libraries were still in the process of automation. Problems of funds, shortage of space and lack of trained manpower were some of the barriers to library automation.

The paper by Sampath Kumar & Biradar in 2010 studied the use of ICT and status of library automation in college libraries in Karnataka. The findings indicate that application of ICT in college libraries is not satisfactory due to lack of funds, non-availability of skilled man power. According to authors library staff should be given in-depth training on application library automation software to various activities performed in the libraries Authors found that ICT applications in college libraries was not in good status. Library

staff showed positive attitude towards library automation and ready for training on ICT

The survey of 102 engineering colleges in Karnataka was done by Mulla, Chandrashekara & Talawar (2010) to find out the status of the type of software packages used and opinion of librarians about these software. It was found that in addition to other software, maximum libraries used Libsoft and EasyLib library automation software. Only administrative, cataloguing and circulation modules were automated. Lack of computer facilities, inadequate finance, lack of trained manpower, less interest of management and having less collection, need for staff training were some of the problems identified.

Research Methodology

The present study is on the Status of Use of Library Automation Software in College Libraries in Mumbai. The present study investigated the current status of automation in Mumbai college libraries.

Objectives of this study

- To find out which software the libraries use for automation.
- To find out which library functions are automated.
- To discover the reasons for non-automation in libraries.
- To find out problems while handling library software.

Methodology

The present study was done using a survey method. A structured questionnaire was used as a tool to collect data from college libraries in Mumbai. The population for this study comprised librarians drawn from various colleges from Mumbai. Random sampling method was used as the sampling method in the survey.

The draft questionnaire was first tested with a small group of respondents. Four different College librarians were selected for the pilot study. Librarians were requested to point out if the questions and instructions were clear, and if any more questions needed to be included or to be reframed. Based on responses received, the questionnaire was revised and the final questionnaire was sent to 41 libraries. Out of these, 27 filled questionnaires were returned. Out of 27, 5 libraries were not automated. So 22 questionnaires were considered useful for the data analysis. The responses were analyzed using MS-Excel.

Findings

Library Automation Status

22 (81.5%) libraries were automated and 5 (18.5%) libraries were not automated. Though one of the criteria for granting accreditation to the colleges is use of ICT in its library, still 18% of libraries were not automated. Out of 22 libraries 10 (45.5%) libraries were fully automated, whereas 12 (54.5%) libraries were partially automated.

Reasons for no automation were given as lack of computer facilities, inadequate finance, lack of trained manpower, some libraries has less collection, no staff coordination and disinterest of authorities.

Type of software is used for automation

Out of 22 respondent libraries 6 (28.6%) libraries used open source software and 16 (76.2%) libraries used proprietary software. The reason for less use of open source software was that many college libraries did not have IT expertise internally to handle installation of open source software. Due to Lack of IT expertise, 20 (90%) libraries used readymade software and only 2 (9.1%) libraries used in-house software.

Library automation software in use.

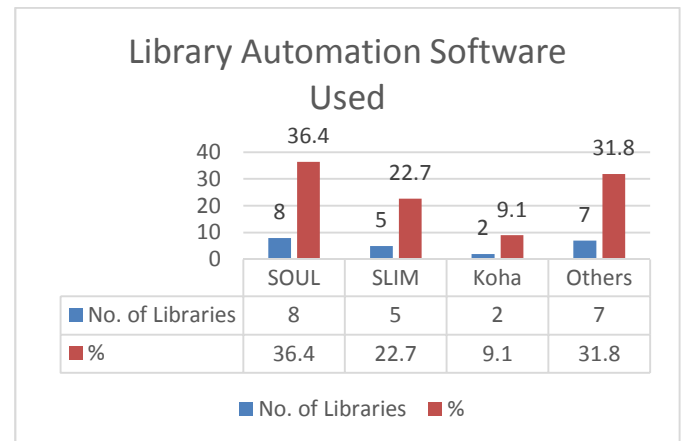


Figure 1 – Library automation software currently in use.

Figure 1 shows that SOUL (Software for University Libraries) was used by the highest number of libraries, i.e., 8 libraries (36.4%). 5 libraries (22.7%) used SLIM software, 2 libraries (9.1%) used KOHA software and 7 libraries (31.8%) used other packages like Libsuit, E-

granthalaya, Brainstorming, Bookworm, Liberty and Libex.net. SOUL being developed and marketed by Information and Library Network of India (INFLIBNET), could be one of the reasons for it being a highly used software.

Implementation of automation

Table 1 – Automation Implementation

Year of implementation	1995 - 2000	2001 - 2005	2006 – 2010	2011 – 2015
Libraries	1 (4.5%)	7 (31.8%)	8 (36.4%)	6 (27.3%)

Table 1 indicates that the highest number of libraries were automated during the decade of 2000-2010, when there was tremendous growth in affordable technology during the period. Growth in use of internet, publishing of electronic resources also encouraged libraries to go in for automation.

3 (13.6%) libraries installed software on its institution’s server, which was located outside the library premises and 19 (86.4%) libraries installed software on the library server which was located inside the library. None of the respondents used cloud storage for installation.

Most of the libraries are still using different versions of Windows as operating system. 21 (95.5%) libraries used Windows operating system. Only one library used Linux operating system.

Library Functions Automated

Automation of cataloguing function was done by 18 (81.8%) whereas 12 (54.5%) libraries had Web OPAC. Circulation was automated in 19 (86.4%) libraries and 10 (45.5%) libraries had serials control automated, whereas only 3 (13.6%) libraries did article indexing using automation software, 14(63.6%) libraries did current awareness service (CAS).

Only 4 (18.2%) library software had limited record holding capacity whereas 18 (81.8%) library software had unlimited record holding capacity. The results indicate that libraries are still not using all the features of library automation software.

Updating Policy of Library Automation Software

It was observed that most of the proprietary software suppliers supported maintenance of software and the Annual Maintenance Contract is provided by the developers. Also software developers provided other features like retrospective conversion facilities, backup of data on Clouds, providing more new features regularly. It is observed that only 15 (68.18%) libraries were going for regular updating and Annual Maintenance Contract of the software with developers.

Access to Library Data on other than desktop computers.

Only 5 (22.7%) libraries provided access to library data such as catalogue on mobiles and notepads and 17 (77.3%) libraries did not have such features installed.

Multilingual Support

The results indicated that only 16 (72.7%) libraries were using multilingual features of the software and 6 (27.3%) libraries were not using multilingual scripts. One of the reason for not using multi lingual features was non availability of trained man power.

Software Security

It is observed that 20 (90.9%) libraries had security software and 2 (9.1%) libraries did not have any type of security software. Security features used are as follows: 17 (77.27%) libraries had provision of-user id, password and use of barcode system, 10 (45.5%) libraries had restriction to access certain records/fields, 11 (50%) libraries had provision for students and staff to log in and log off on their own, 5 (22.7%) libraries had RFID system and 3 (13.6%) libraries were using biometric security. All 22(100%) libraries took backup of their data using backup features of the software.

Customer Support

Documentation of Software

The study showed the 20 (90.9%) of responding libraries had the software working manual and 2 (9.1%) libraries did not have any manual.

Physical Format of the Manual

Out of 22 respondents 5 (25%) libraries had electronic copy, 8 (40%) libraries had hard copy of the manual and 7 (35%) libraries had electronic as well as hard copy of the manual and 2 libraries did not have any type of manual.

E-mail Discussion Group for the library software

The study revealed that the 11 (50%) respondent libraries participated in e-mail discussion groups developed by the software developer and 11 (50%) libraries did not participate in any type of e-mail discussion group.

Newsletter or User information up-date regarding the software

9 (40.9%) libraries accessed newsletter for updated information regarding the library software and 12 (54.5%) libraries did not use such facilities available and 1 library was not aware of this facility.

Training for Library Automation Software

12 (54.5%) libraries used onsite training facility and 10 (45.5%) libraries used offsite training facility provided by the software provider.

Impact of automation

Findings indicates that due to automation there was increase in inter library loan request in 4 (18.2%) libraries, and membership increase in 13 (59.1%) libraries. Increase in circulation of resources was observed by 15 (68.2%) libraries and 14 (63.6%) respondent libraries found library automation helped in building appropriate collection.

Other Issues It is observed that 2 (9.1%) libraries faced the problem of lack of vendor reliability, 4 (18.2%) libraries faced non- availability of technical expert/software specialists, 3 (13.6%) libraries faced lack of administrative support, 3 (13.6%) libraries faced problems related customization of the software.7 (31.8%) libraries

faced up-gradation of software problem and 4 (18.2%) libraries faced customer service problem.

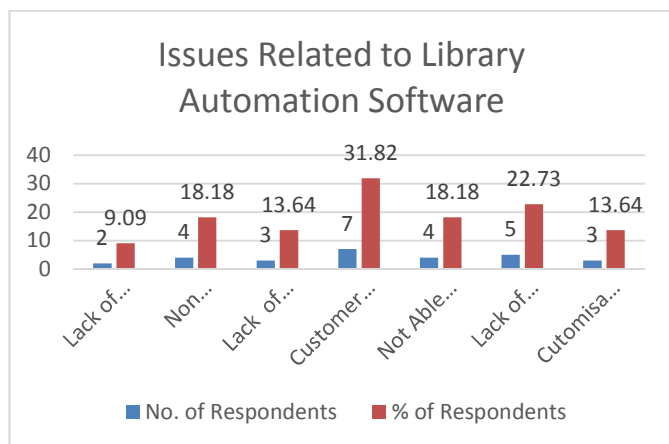


Figure 2- Library Automation Software Related Problems

Overall 20 (90.9%) libraries were satisfied with their existing software and 2(9.1%) libraries were not satisfied with their existing software.

Conclusion

Though many library automation software packages are available in Indian market, still use of automation software to its fullest capacity is very poor. Lack of trained manpower, poor technological infrastructure, financial crunch and less interest from authorities are not permitting college librarians to adopt automation. Many of the college libraries now have computers and the new generation of librarians already have basic knowledge of ICT during their LIS studies. In future college libraries should be fully automated and reach the readers where they are in this digital world.

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