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Status and problem of Integrated Library Management system among Engineering college Libraries in TamilNadu with Special Reference to Kancheepuram district

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Abstract— Libraries are becoming more and more dependent on information and communication technology (ICT), especially with regard to automation and technological know-how. The prevailing paper is displays the reputation and troubles of Library automation in aided university Libraries affiliated with Anna College In Kancheepuram district. The check was changed to unquestionably state that the Kancheepuram district' 87.50% of libraries are automated. And basic problems that are currently not automated include a lack of staff, a lack of infrastructure, a lack of funding, and the absence of human education in libraries. A status view of the software packages that libraries and modules use is also provided by this. The availability, applicability, and issues encountered during the process of implementing and using library automation software applications are the study's specific areas of focus**.**

Keywords- Library automation, Aided college libraries, issues of Library Automation ,Library Software

I. INTRODUCTION

A library is a crucial institution in a cultured and civilized society. The idea of an information society or information-focused society was created as a result of the growing expansion, use, and value of information. "Libraries may not create civilization, but a civilization cannot exist without them," says Hutchings (p. 65). To put it another way, libraries are thought of as places of learning where visitors can access services and relevant information from the collection. But in the modern period, the definition of a library has been expanded to include an organization that identifies selection, collection, management, process, and dissemination to the appropriate audience at the appropriate time. Libraries are now thought of as locations where information may be retrieved from sources like full-text magazines, electronic catalog listings, and internet access. Harder originally used the phrase automation in 1936 while working for General Motors in the United States. In his initial definition, he stated that it involved "the automatic handling of parts between progressive production processes." Although saving labor is automation's main advantage it can also save energy and resources and enhance quality, accuracy, and precision. Automation has made it easier for libraries to keep up with modern development. Accuracy, adaptability, and dependability in the library and information center have also been made possible by this. Automation of libraries decreases repetitive work, saves time, and increases speed and accuracy. Users can now effortlessly process vast amounts of data thanks to the computer age's extremely productive functioning of library operations and management. The entire library network gains extra energy and dynamism from a touch of timelessness and the accessibility of material via computers, from collection to distribution.

II. LITERATURE REVIEW

Yogendra Singh (2003) makes an effort to study the different elements that either directly or indirectly influence the advancement of library automation, such as management challenges, resources accessible to libraries, staff skill levels, the availability of appropriate software, and geographic location area. Additionally, he goes over the reasons for and regions of automation. There has also been discussion on INFLIBNET's

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function. He draws the conclusion that these changes were taking place for the benefit of library operations and services.

Raval (2013) focused mostly on issues that came up before and after automation. Technology, economics, and attitude issues are said to be the three main issues encountered during the pre- and post-automation process. Technology difficulties include both hardware and software issues, economic issues include the costs associated with establishing and maintaining the program, and attitude issues include the librarian's ignorance of the potential and effects of library automation.

Jayamma K V & Krishnamurthy M (2015) has drawn attention to the situation of library automation in the university libraries in Bangalore, Karnataka state.

Veeranjaneyulu (2017) investigated the state of Indian Agricultural University libraries' automation and digitization at the moment. The degree of automation, the status of digitalization, membership in the KrishiKosh institutional repository, membership in the AgriCat Union Catalogue, and the use of RFID technology in agricultural libraries are just a few of the variables that were examined. According to the report, 80% of libraries at agricultural universities are automated.

III. OBJECTIVES OF THE STUDY

- To identify the prevailing reputation of library automation.
- To find out which areas of the library features and offerings are automatic
- To discover barriers to library automation confronted by using library staff.
- To recognize the software program used within the library
- To pick out the assets of the fund for library automation

IV. METHODOLOGY

The usage of library automation software in assisted degree college libraries connected to Anna University in the Kancheepuram District is the study's primary Focus. It was concluded that the survey approach was more suitable for the investigation. For the current work, the survey method was therefore recommended. Typically, survey research employs the following instruments to gather data: The methods of questionnaires and interviews In this study, a questionnaire is typically the main instrument. However, as necessary, informal interviews have been added to this. After being circulated to 32 libraries, the questionnaire has received responses from 28 of them

V. RESULT AND DISCUSSION

Analysis and Interpretation Current Status of Library Automation in affiliated colleges

The growth and development of ICT play an important role in library and information research, especially in library automation.

Section 1 shows the status of library Automation among the affiliated colleges. Libraries in Tamil Nadu

Table -1 Status of Automation

Automation Status	Frequency N	Percentage (%)
Automated completely	10	35.71
Partially Automated	18	64.28

It is empiric from Table 1.1 that, of the 32 libraries that were surveyed, 28 (87.50%) are absolutely automatic and 4 (12.50%) are not automated. It indicates that the majority of the libraries are partially automated by both proprietary and accessible predecessor software based on their requirements

TYPES OF THE SOFTWARE

Any library automation must use software that does the necessary task of automating library operations and services. Depending on the needs, the type of software used could be as straightforward as performing the acquisition, cataloging, and integration of library administration tasks with software that can handle the tasks of collection development, cataloging, and circulation, among others. All of these applications are either available online as open source, counter, or internally produced, which are all acceptable options. The available libraries utilizing a variety of software, including native, proprietary, free, open source, are aggregated and displayed in the table.

Table. 2 : Type of Software

Type of Software	**Frequency**	**Percentage**
Commercial Software	15	53.57
Open source Software	5	17.85
In House developed Software	8	28.57

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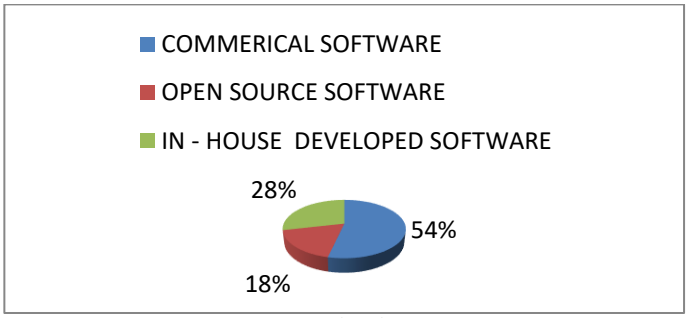


Figure 1. Types of Software

Reading from the Table 1.2 53.57 % of users said their library uses commercial software, 17.85% said they use open source software , and 28.57% said they use software developed by their own specialists.

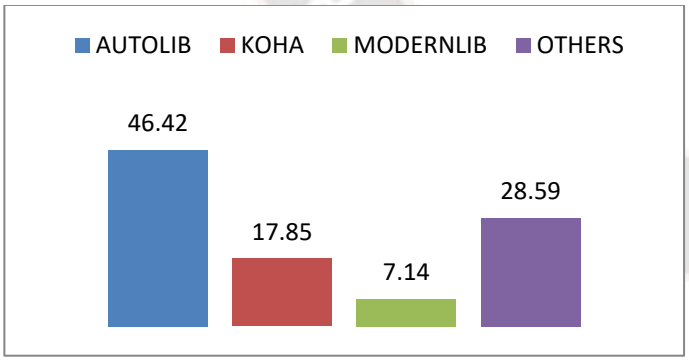
SOFTWARE USED FOR LIBRARY AUTOMATION

The key element in automating the Library is software. Software selection is crucial for any library. Software will be chosen in accordance with the needs, infrastructure, people, and budgetary assistance. Autolib software is most widely used in affiliated college libraries located in the Kancheepuram district. The presentation of the automation software is shown in Table 1.3.

Table 3 : Software used for library automation

Name of the Software	Frequency	Percentage
KOHA	5	17.85
AUTOLIB	13	46.42
MODERNLIB	2	7.14
OTHERS	8	28.59

Figure 2. Library Automation Software



In 46.42% of libraries, AUTO LIB software is used, KOHA software in 17.85% of libraries, 7.14% of libraries use MODERN LIB and software like Lib-Sys, SOUL, New GENLIB etc. in 28.59% of libraries.

MODULES APPLIED IN AUTOMATED LIBRARY ACTIVITIES

The implementation and use of library automation software, as well as its state of implementation and kind of software, have all been depicted in previous tables and figures. Despite the fact that these efforts are being made in the background, the success of library automation depends more on how the software is actually used. The goal was to determine the types of modules being utilized, such as those for budget allocation and purchase, cataloging, circulation control, serial control, libraries, OPAC, etc.

Table .4 : Modules used for library automation

Modules in the software	Frequency	Percentage
Acquisition	20	71.42
Cataloguing	26	92.85
Circulation	27	96.42
Library Catalogue (OPAC)	15	53.57
Administration	18	64.28
Other function	13	46.42

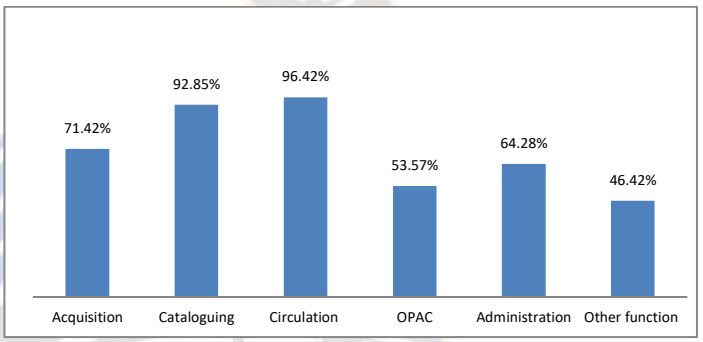


Figure 3. Modules used for Library Automation

Reading from Table 1.4, 96.42% of the time is spent on circulation, 92.85% on cataloging, 71.42% on acquisitions, 53.57% on OPAC access, 64.28% on administrative tasks, and 46.42% on miscellaneous activities.

CHALLENGES FACED DURING THE POST AUTOMATION PROCESS

Library automation makes it easier for staff to serve patrons in an effective and efficient manner, but it's also vital to consider how the automation system is maintained and the kinds of issues that may arise after installation. Lack of funding for training and improvement, aging hardware and software compatibility, user awareness, technical issues, upgrading to the most recent version, etc. could be the main obstacles.

Table 4: Challenges faced during post Automation process

Impact of Automation	Frequency	Percentage
Lack of training	17	60.71
Technology Barrier	16	57.14
Lack of Fund	23	82.15

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Lack of Hardware	20	71.42
Lack of enough ICT staff	13	46.42
Lack of Administrative Support	19	67.85
All the Above	10	35.714

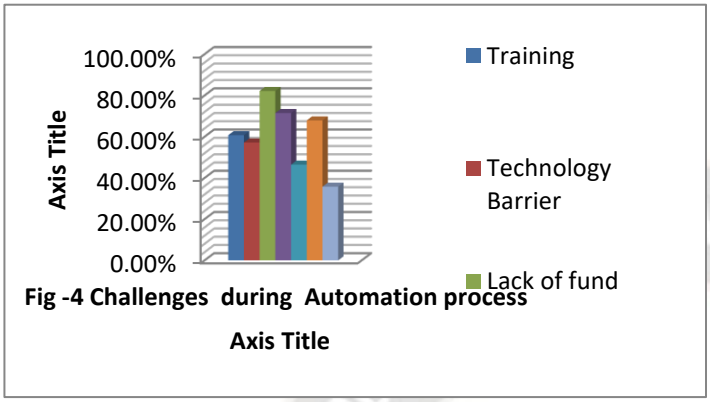

Figure 4. Challenges during Automation process

According to Table 1.4, the main issue facing libraries during the post-automation era is that 17 (60.71%) of them reported having training issues. 16 (57.14%) reported having technological barriers. 23 (82.15%) reported not having enough funds for improvements. 20 (71.42%) reported having issues with hardware and software compatibility; 13 (46.42%) reported having trouble finding enough staff; 19 (67.85%) reported having less administrative support; and 10 (35.71%) respondents said their libraries are experiencing all of the aforementioned issues.

VI. FINDING OF THE STUDY

- According to the data gathered, it can be shown that the majority of the chosen libraries have access to IT-based services via the web, OPAC, E-journals, E-books, repositories, digitalization, etc. Also accessible at the library are electronic devices. A few examples include workstations, LCD projectors, and large-capacity servers. Along with these libraries, other resources, including RIFD technologies, bar code printers, CCTV, scanners, file servers, inverters, and battery backup, are also accessible.
- In the chosen libraries, it is discovered that automation is only fully implemented in less than 35.71 percent of the cases and partially automated in more than 64.28 percent of the libraries.
- According to the respondent's information, software programs like Autolib and Koha are used in nearly all libraries.
- The majority of libraries are found to fully automate tasks like acquisition, circulation, cataloging, etc. Other tasks like stock or physical verification, serials, reference services, etc. are all entirely automated. According to the respondent's information, software programs like Autolib and Koha are used in nearly all libraries.
- According to the information provided by the respondents, it was discovered that all teaching, non-teaching, and research departments are connected to the network in the majority of management institutes. In some institutions, only workers, students, and a select few departments have access to the network. Additionally, Wi-Fi connectivity is available at the majority of institutes.
- There are now distinct Internet connections for different purposes in many academic libraries. According to the respondents' information, it is seen that the majority of libraries have a separate internet connection available to provide users with a variety of services. In addition, other library tasks like physical verification, circulation, acquisition, etc. are performed over the Internet. It is observed that the majority of the selected libraries use the internet extensively in many different areas.

VII. SUGGESTION

- It is advised that libraries adopt open-source operating systems. This would lower the overall automation process's significant cost.
- Staff workers must receive on-the-job training on a regular basis. This enables library workers to stay current on the most recent events in the relevant fields.
- Professionals working in libraries should adhere to the defined library policies for efficient resource management and resource sharing.
- Web OPAC functionality should be made available both on and off campus, and users should be made aware of how to use the library catalog (OPAC) for the best use of library resources.
- All libraries should provide all services, such as book and periodical circulation, reference services, OPAC, bibliographic services, current awareness services, interlibrary loan, newspaper clippings, and listings of new arrivals, in order to make the best use of their resources.
- For efficient resource management and resource sharing, library workers should adhere to defined library guidelines.

VIII. CONCLUSION

Libraries are renowned throughout society for collecting and preserving information. Everybody may readily access a constant flow of knowledge from these institutions, regardless of time or place. Nevertheless, there are some barriers to the effective integration of libraries, such as the need for careful planning, a solid budget, ignorance of the recognized formats, and a shortage of skilled or qualified personnel. The researcher

concluded from the study's findings that the modules for cataloging and circulation are employed in the majority of college libraries. KOHA is an open-source program, and because of this, more libraries may adopt it in the future. To provide efficient and better services to patrons, librarians must assess their integration needs and plan the selection and implementation of integration systems (information and communication technology). These systems must meet the institution's goals and priorities. The fact that things are genuinely changing is undisputed. Now, college libraries are discovering that there is no way to avoid library automation and that they cannot ignore the transition lest they be written off as outmoded.

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