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Research Paper / Article / Review

Library Automation and Library Management Essential in Digital Era

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Abstract: The paper begins with a brief history of library automation and Library Management System. Library automation refers to the use of computers and other technologies to minimize human intervention in the functioning of a library. Library automation is using technology to streamline and simplify various library operations, enabling libraries to function more efficiently and serve their patrons more effectively. A fundamental component of library automation is the part of Library Management System, which serves as a central platform for managing and automating core library functions. Library Management System typically includes modules for cataloguing, circulation, acquisitions, and reporting, enabling library staff to easily track resources, manage inventory, and monitor the circulation of materials. Through this paper, we present a feasible design solution, the Automation of Library Management System, with a front end of graphical user interface along with its related database.

Keywords: Automation, Effective Management, Library Automation, Library Management.

1. INTRODUCTION:

Library automation packages were introduced in libraries in 1970s. Mini- computers were used in 1970s in the libraries to computerize operations like circulation, acquisition, cataloguing, serials and Library OPAC. Past two decades have witnessed unprecedented developments in computer technology. Resultantly, inexpensive computing resources are now within easy reach of libraries. Computers are being used increasingly to automate various activities in libraries using a suitable off-the-shelf general or specific-purpose software package now available in a wide range for library automation.

Library automation is a process of utilizing software and technology to automate and optimize a variety of essential library functions and tasks. This includes, but is not limited to, cataloguing, circulation, and acquisition of library materials. The use of automated library systems eliminate redundancy within a library, reducing the time and effort required to perform manual tasks and freeing up staff to focus on more important work. Library automation software also enables patrons to access a wider range of resources, including digital repositories and eBooks, and provides a more personalized experience through features such as customized recommendations and tailored research guides.

Libraries are important for organizing and sharing knowledge; managing them in well manner. A Library Management System (LMS) is software designed to simplify library tasks through automation. It reduces manual work, saves time, and minimizes errors for librarians while enhancing user convenience. A library management system (LMS) is software designed to automate and streamline a library's operations, from cataloguing books and tracking user accounts to managing book loans and generating reports. It provides a centralized, digital platform to efficiently manage all library resources and activities, replacing manual processes for tasks like adding new items, issuing and returning materials, and maintaining member information.

2. REVIEW OF LITERATURE:

Bansode & Periera (2008) carried survey on the status of library automation in college libraries of Goa State. The study found that the all the colleges are automated and most of the colleges are using NewGenLib software. The



authors suggest that library professionals must upgrade their skills to meet the growing expectations of users from libraries.

Upadhyay (2012) studied the status, Problems and Prospects of Library automation in Engineering Colleges in Jabalpur City. The study reveals that most of the colleges are partially automated and few colleges are not automated. The major problems faced during the pre and post automation process are the lack of trained Staff, Lack of support by management, lack of Computer facility and Lack of funds. The prospect is both positive and negative, the positive prospects are improved productivity in terms of work output and information retrieval and helped in extending library services. The negative prospects are more finance is required for the implementation.

Ajay Kamble (2015) in his study entitled "Status of library automation in the Institutions of Higher Studies in Punjab" gives an overview of major facets of automation activity and surveys the current state of computer application in 6 areas of library work. For each area discussion briefly indicated the motive of automation and describes current dominant approaches citing examples of representative products and services.

3. METHODOLOGY:

In the present research study researcher used descriptive research method to identify the role of Library automation and Library management system in library's routine operations for getting the information related to research work.

4. COLLECTION OF DATA:

Data has been collected through the internet, magazines, research papers, journals, reviews for articles etc.

5. OBJECTIVES:

The primary goal of a Library Automation and Library Management is to streamline library tasks and enhance user satisfaction:

- To identify the role of library automation
- To understand the library automation routine operations
- To know the usefulness of Library Management
- To find out what software's are being used in Automated Libraries

6. LIBRARY AUTOMATION:

Library automation has become a critical component in the modernization of libraries across the globe. Library Automation refers to the use of computer to keep track of all the books that are issued, returned and added in the library. Library Automation is another name of Library Management System. It is a user friendly system. It is created to ensure the proper management of books in a library. The rise of digital libraries and electronic resources in the early 21st century expanded access to various digital materials, including e-books and online databases. This period also witnessed the adoption of open-source solutions like Koha, making library automation more cost-effective and customizable.

Library automation revolutionizes libraries' operations, providing a more efficient, accurate, and user-friendly system. The key objectives—from improving operational efficiency to enhancing resource management and user services—are all focused on modernizing the library's infrastructure to meet the evolving needs of today's users. Automation not only benefits library staff by reducing the workload and streamlining operations but also greatly enhances the experience for users, offering them easier access to resources, better services, and more accurate information. Ultimately, library automation ensures that libraries can keep pace with the digital age and continue serving as essential knowledge and learning hubs.

7. NEED & PURPOSE OF LIBRARY AUTOMATION:

Library Automation is a term to replace the physical system in the library. It is most important in today's scenario because of the following reasons:



- 1. Computers are progressively being used in libraries for both internal functioning and for retrieving the details contained in the library.
- 2. Computer applications avoid duplication of tasks and help to save time for all.
- 3. The rapid growth of knowledge has made the physical process unnecessary and the need for computer data storage.
- 4. Effective management of most information is exclusively feasible through the use of systems, which considered enumerate benefit of more precise and provides valuable information.

8. THE ADVANTAGES OF LIBRARY AUTOMATION:

1. Easy Access

The automation of library helps in easy access of library material; one can search the book or journal from home. It makes library more flexible as one can know when to add new books or other items.

2. Collections

Automation of library helps in the updating the library material. Manually it is difficult to keep record of every information but through this system one can check which items is outdated which will automatically make a library' collection streamlined.

3. Paperless

Library automation has made the operation of borrowing and managing inventories in library a paperless. All records are saved automatically in the system and one can track any time the status of any book.

4. Improved customer service

Automation of the library helps in reducing the workload of librarians and other staff members in the areas of acquisitions, cataloguing and circulation, which in turn allows them to better serve their patrons.

9. POPULAR TOOLS FOR LIBRARY AUTOMATION:

The library automation market offers a range of popular tools, including Koha, Evergreen, and Alexandria.

1. Koha

Koha is a free and open-source Integrated Library System (ILS) or Library Software that offers a comprehensive solution for managing library collections and services. With over 3500 installations worldwide, Koha is one of the most widely used ILS in the library community. Its user-friendly interface and customizable features make it an ideal solution for libraries of all sizes, from small public libraries to large academic institutions. Want to know more about Koha? Check out this Beginner's Guide to Koha.

2. Evergreen

Evergreen is a highly scalable and flexible FOSS ILS, well-suited for both public and academic libraries. With over 1500 library installations worldwide, Evergreen has established itself as a robust and dependable ILS solution.

3. Alexandria

Alexandria is an open-source ILS designed specifically for small to medium-sized libraries with paid options; it is a popular choice for libraries due to its simple and intuitive interface, making it easy for staff to manage day-to-day operations and for patrons to access library resources.

Automation offers several benefits, such as cost savings, increased precision, and the ability to operate continuously without the need for breaks or rest. It can free up human workers from mundane tasks, allowing them to focus on more creative or strategic work. Additionally, automation can help businesses scale operations without



proportionally increasing labour costs. The overall goal of library automation is to reduce the administrative burden on library staff, increase the speed and accuracy of service delivery, and enhance the overall experience for library users.

10. LIBRARY MANAGEMENT SYSTEM:

Libraries have an important role to play in facilitating access to information for learning, education and training. It is a known fact that a well-managed library is a successful library. The library management means efficient and effective management of material (information sources), machinery, men (human resource), technology and money to meet the objectives of the library. Thus, librarian as manager performs all the functions of manager/administrator.

A Library Management System is a comprehensive web-based application designed to provide librarians and library administrators with easy access to a wide range of services for managing books, patrons, and library resources. A Library Management System (LMS) can be defined as a software solution designed to manage all aspects of a library's operations. This includes cataloguing books, managing user accounts, tracking borrowed items, and handling returns. By integrating various functionalities, an LMS ensures that library tasks are streamlined and executed efficiently.

11. FEATURES OF A LIBRARY MANAGEMENT SYSTEM:

Several features make a Library Management System indispensable for modern libraries. These include:

Catalogue Management: A robust cataloguing system allows for the easy classification and retrieval of books and other materials. This feature ensures that users can quickly find the resources they need.

User Management: The system manages user accounts, including membership details, borrowing history, and current checkouts. This helps in maintaining a comprehensive record of all library users.

Circulation Management: This feature tracks the issuance and return of books, ensuring that items are returned on time and managing overdue fines if necessary.

Reporting and Analytics: Detailed reports and analytics provide insights into library usage, popular books, and user demographics. This data is invaluable for making informed decisions.

12. ADVANTAGES OF A LIBRARY MANAGEMENT SYSTEM:

The implementation of a Library Management tools offers several advantages:

Improved Efficiency: By automating routine tasks such as cataloguing and circulation, an LMS frees up time for library staff to focus on more important activities. This leads to a more efficient operation overall.

Enhanced User Experience: With features like online catalogues and user-friendly interfaces, library users can easily search for and locate the resources they need. This improves their overall experience and encourages more frequent use of library services.

Accurate Record Keeping: An LMS ensures that all records are maintained accurately, reducing the chances of errors in user accounts or book inventories. This accuracy is crucial for effective library management.

Cost Savings: By reducing the need for manual labour and paper-based records, an LMS can lead to significant cost savings over time. Additionally, the ability to track and manage resources effectively helps in reducing losses and damages.

Better Resource Management: With detailed analytics and reporting, libraries can make informed decisions about resource allocation, acquisitions, and user services. This leads to a more optimized use of available resources.

Library management system allows the librarian to maintain library resources in a more operative manner that will help to save their time. It is also convenient for the librarian to manage the process of books allotting and making payment. Library management system is also useful for students as well as a librarian to keep the constant track of the availability of all books in a store.



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13. CONCLUSION:

The primary goal of automation is to increase efficiency, reduce errors, and enhance productivity across various industries and sectors. Library Management System is a vital tool for modern libraries. By automating routine tasks, enhancing user experience, and providing accurate record-keeping, an LMS significantly improves the efficiency of library operations. As libraries continue to evolve in the digital age, the adoption of a Library Management System will undoubtedly play a crucial role in their success.

REFERENCES:

- 1. Singh, Y. (2003). Library automation in academic libraries in India: Problems and prospects. CALIBER 2003. Retrieved Dec 10, 2015, from http://dspace.inflibnet. ac.in/bitstream/ 1944/188/3/03cali 19.pdf.
- 2. Anas, M., Iqbal, J, Ahmed, P. (2014). Impact of automation on library management services of four selected management institutes at Aligarh, The Electronic Library, 32(3): 296–307.
- 3. Venkatesha, S., Sarasvathy, P. (2018). Users perception on library automation in the university libraries a comparative study in Karnataka and Tamil Nadu, International Journal of Library and Information Studies, 8(2), 13–15.
- 4. Emasealu, H.U. (2019). Automation of academic libraries and web development: A reverie or reality, International Journal of Knowledge Content Development and Technology, 9 (1), 43–56.
- 5. Nayana, J. (2019). A study on library automation status among the aided college libraries in Bengaluru, Library Philosophy and Practice (e-journal), 3048.
- 6. Singh, R., & Arora, J. (2020). The impact of library automation on the performance of library services. International Journal of Library and Information Studies, 10(3), 23–32.