

# LIBRARY AUTOMATION USING WEBLIB ILMS

**Lakhpat Singh**

Librarian

Maharaja Agrasen Mahavidyalaya,

Jagadhri (Haryana)

Email: bablukuk@gmail.com

**Abstract :** This abstract explores the implementation and impact of WebLib ILMS (Integrated Library Management System) in library automation. The WebLib ILMS system revolutionizes traditional library management by integrating web-based technologies. It examines how this system streamlines the cataloguing, circulation, patron/membership, serial, technical services while enhancing accessibility and resource utilization. The paper reveals into its features facilitating efficient data management, user-friendly interfaces, and comprehensive analytics for informed decision-making for library management. It evaluates the transformative effects on librarians' workflows, user experiences, and the overall library ecosystem. By embracing WebLib ILMS, libraries experience heightened efficiency, improved accessibility, and the empowerment to adapt to evolving technological landscapes in the information age.

**Keywords:** WebLib ILMS, Library Automation, Integrated Library System, Cataloguing, Circulation Management, OPAC (Online Public Access Catalogue), Resource Management, Patron Services, Analytics and Reporting

## 1.0 Introduction

Library Automation refers to the integration of technology to streamline and enhance library functions, and WebLib Integrated Library Management System (ILMS) stands at the forefront of this revolution. WebLib ILMS embodies a comprehensive platform designed to modernize and optimize library operations, offering an array of functionalities that redefine traditional library management.

At its core, WebLib ILMS revolutionizes the way libraries catalogue, organize, and disseminate information. This sophisticated system digitizes cataloguing processes, allowing for efficient handling and retrieval of vast volumes of data. With its user-friendly interface, patrons can navigate through the library's collection seamlessly, accessing resources with the help of online patron's portal.

Moreover, WebLib ILMS transcends the boundaries of a physical library, enabling remote access to resources and services. Its web-based architecture facilitates real-time updates, ensuring that the collection remains current and accessible to users from any location. The system's versatility extends to administrative tasks, simplifying inventory management, tracking circulation, and facilitating resource allocation.

By harnessing WebLib ILMS, libraries experience a paradigm shift in efficiency, accuracy, and user experience. Embracing this innovative system not only modernizes library functions but also amplifies their impact in a digitally-driven world. In an era where information is abundant and its accessibility crucial, WebLib ILMS stands as a beacon, transforming libraries into dynamic hubs of knowledge dissemination and accessibility.

## 1.1 What is Library Automation?

Library automation refers to the use of technology and software to streamline and enhance library operations. It involves the implementation of systems for library housekeeping operations such as cataloguing, circulation, and management of library resources like books, periodicals, and multimedia. Automation simplifies tasks through databases, enabling efficient searching, borrowing, and returning of materials. It incorporates barcoding, and integrated library systems, empowering librarians to focus on user services rather than administrative duties. Automation facilitates accessibility, tracks inventory, and enables remote access to digital resources, improving overall efficiency and user experience within libraries. Its integration optimizes resource utilization and fosters a more seamless library experience for patrons.

### Concept of Library Automation

The word automation has been derived from a Greek word "Automose" which means something which has the power of spontaneous motion or self-movement. Automation, when used in a library context, refers to the computerization or mechanisation of all library activities. ALA Glossary of Library and Information Science defines automation as "the performance of an operation, a series of operations or a process by self-activating, self-controlling, or automatic means. Automation implies the use of automatic data processing equipment such as a computer or other labour saving devices". The term automation was first introduced by D. S. Harder in 1936 but the

word library automation has been used in literature for the last five decades. According to the International Encyclopaedia of Information Technology and Library Science, it is the technology concerned with the design and development of process and system that minimize the necessity of human intervention in their operation. Library automation has been defined as ‘integrated systems’ that computerize an array of traditional library functions using a common database. While this is still generally true, rapid technological change is forcing a reexamination of what it means to “automate the library.”

### **2.0 Needs of Library Automation:**

An ILMS enables libraries to streamline their workflows, reduce errors, and improve access to information for patrons. For example, a cataloging module allows librarians to create and manage bibliographic records for books, journals, and other materials.

Library Automation through WebLib Integrated Library Management System (ILMS) is pivotal in modernizing and optimizing library services. It revolutionizes the traditional library model, offering numerous advantages in today's digital landscape.

Efficiency is paramount. WebLib ILMS streamlines cataloguing, circulation, and inventory management. Automated processes reduce human error, enabling librarians to focus on enhancing user experiences. Accessibility is equally crucial. By digitizing collections and enabling remote access, patrons can browse, borrow, and return materials seamlessly. The system's user-friendly interface ensures a smooth experience for all.

Moreover, WebLib ILMS facilitates data-driven decision-making. It provides comprehensive insights into patron preferences and library usage patterns, aiding in collection development and resource allocation. This data-driven approach enhances the library's relevance and responsiveness to its community's needs.

Cost-effectiveness is a significant advantage. Automating repetitive tasks minimizes operational costs and optimizes staff time, allowing libraries to allocate resources more efficiently. Additionally, WebLib ILMS fosters a sustainable environment by reducing paper usage through digital catalogues and online transactions.

In an era where information is accessed instantly, libraries must adapt. Embracing Library Automation with WebLib ILMS isn't just a modernization step; it's a strategic necessity. It empowers libraries to evolve into dynamic, accessible, and efficient knowledge hubs, meeting the demands of the digital age while preserving the essence of traditional library services.

### **3.0 WebLib ILMS:-**

WEBLIB is a library automation system. It is fully compatible with finger impression machines, Barcode scanners, webcams and SMS system. It keeps every record relating to books, magazines, newspapers etc. It also keeps the record of any book issues and returns, late fine and generates all reports that a computerized library needs. Here are some more features listed below of library management system:

### **4.0 Major Features of WebLib:**

#### **4.1 Secure and reliable:**

We can trust it to store your data (Database: MS-SQL-SERVER). It comprises all modern standards. WebLib ILMS offers secure and reliable library automation, streamlining cataloguing, circulation, and patron management. Its web-based interface enhances accessibility and user experience while ensuring data security. With robust features for seamless operations, it optimizes library functions, fostering efficient information retrieval and management in a protected digital environment.

#### **4.2 Freeware:**

It is freeware software and you cannot require buy any license for weblib. WebLib ILMS is provide streamlines cataloguing, circulation, and patron management. This Integrated Library Management System digitizes records, optimizes search ability, and enhances user experience. Its user-friendly interface empowers librarians to efficiently manage resources, lending, and memberships, promoting seamless accessibility to a diverse range of information.

#### **4.3 Easy to access:**

Its quick access features can save your time. WebLib ILMS simplifies access, streamlining cataloguing, circulation, and patron management. Its user-friendly interface enhances accessibility, fostering efficient library operations and seamless resource utilization

#### **4.4 Security integrity:**

The most reliable feature of weblib finger recognition so that no unauthorized person can access data without your permission.

**4.5 User friendly:**

It's easy to access feature has made it user friendly software. Any layman can understand the flow of software after basic training.

**4.6 In depth reporting:**

There is a wide range of reports which helps to analyse the data. Data can be filtered with various options to facilitate analysis.

**4.7 Expertise:**

WebLib ILMS offers cutting-edge library automation, streamlining library management. Its expertise in feature-rich systems ensures efficient, user-friendly library operations, enhancing accessibility and information retrieval.

Effectiveness:

Library Automation via WebLib ILMS optimizes library operations. Its intuitive interface streamlines tasks, enhances accessibility, and boosts efficiency, elevating overall library functionality and user experience. eSoftSolutions have professional trainers who provide an effective training in online mode

Scalability:

**4.8 Library automation** leverages WebLib ILMS's scalability, enabling seamless expansion of library services. Through its scalable features, WebLib ILMS efficiently manages resources, enhances user experience, and supports evolving library needs.

Complacency:

Feature Complacency ensures continuous improvement, adapting to evolving needs, enhancing efficiency, and optimizing library operations for efficacy.

**4.9 Other Features of WebLib:**

- WebLib is a Freeware and Web-Centric Library Automation and Digitization Software.
- It is Biometrics Finger-Print Supported with unlimited Fingers.
- It has Web-OPAC facility (Advanced Search for Books, Periodicals, Thesis/Project Reports, NBM with any angle. **Download the Previous Question Papers, Syllabus, Newspaper Clips etc**)
- Users can check the own status, Issued Document, Returned Document Detail as well as fine detail (Deposited and Pending) throw online.
- SMS/Email Alerts facilities on every transaction, Periodical Reminder, Over-Due Documents Reminder, Sent any type of Notice for Student/Staff.
- Any kinds of Documents can be Issued/Returned.
- Live Photo capturing of Members within second from any client machine.
- Live Finger registration of Member within second from any client machine.
- Automatic Identification of the documents/Members on Library Gate-Entry.
- A full featured modern integrated library management software (ILMS).
- Inbuilt Barcode facility, Spine Label (CallNo, Title+Author) Generating software for print on Laser Printer.
- Two way fine collection module (taken by library OR taken by Account Office).
- Other fines charging facility such as Mobile Using, any damaging, misbehaving, Book-Binding, Book-tearing etc. from the users.
- Set Multiple storage location for Backup (Remote location also supported).
- Provide ultimate advanced security.
- Alarm alert system for suspended Members and document not issued at Library Gate Module.
- It is Web-Centric application with ASP.NET as front end and Sql-Server 2014/2016 edition as back end and Adobe-Flash, AJAX, JavaScript, JQuery, HTML, C# languages are used.
- Report customization facility and it can be exported in MS-Word, MS-Excel, PDF.
- Dynamic report (create custom report at run time).
- Database Export facility in any type of database.
- Advance Stock-Verification Module (All Stock-Verification Record Saved for future record) based on Barcode Technology.

- Display library rules and Notices facility on the first page for Public Access.
- Comprises all house-keeping operation with 14 modules.
- Multi Web-Browser supported.
- WebLib is based on client-server architecture.
- No need any installation for Client Computer.
- It runs over any TCP-IP networks.
- Library staff can be access only the authorized modules and pages of the software which it has allotted by the Authority/Librarian.
- Authority/Librarian can be Created Unlimited Housekeeping Users.

### **5.0 Requirement for WebLib:**

#### **5.1 For Server:-**

- Operating System: Windows-Server 2016 Standard or above version
- Database: Microsoft SQL-Server 2016 Standard
- 16 GB RAM
- Dot.net Framework 4.5
- JavaScript enabled Web-Browser
- IIS (Internet Information Services) Web-Server
- WebLib Software
- Internet Connection (4-10mbps) with Static IP

#### **5.2 For Client:**

- Operating System: Any
- Adobe Reader for PDF
- Microsoft Office (MS-Word, MS-Excel)
- Barcode Scanner (if documents bar-coded)
- Finger Scanner/Reader
- Laser Printer/Thermal Printer

#### **5.3 Detail of Modules:**

WebLib consists of the following 14 modules. Each module has further been divided into sub modules to cater to its functional requirements:

1. Administration Module
2. Master Module
3. Cataloguing Module
4. Technical Module
5. Membership Module
6. Circulation Module
7. Serial Module
8. Gate-Entry Module
9. Report Module
10. Web-OPAC Module
11. Backup Module
12. Tools Module
13. Email/SMS Module
14. I-Card Module

#### **6.0 Conclusion:**

The implementation of WebLib ILMS for library automation promises an innovative shift in managing library resources. With its robust features and user-friendly interface, it streamlines cataloguing, circulation, and patron services. This system optimizes resource utilization, enhancing accessibility and efficiency. By integrating automation, it reduces manual tasks, liberating librarians to focus on enriching services. Its adaptability ensures scalability and compatibility with evolving technological landscapes. WebLib ILMS revolutionizes library operations, fostering a seamless experience for both librarians and patrons. As libraries embrace this technology, it

propels them towards a future where information dissemination and management transcend limitations, fostering a more connected and empowered community.

**7.0 References:**

1. Aswal, Rajinder Singh (2006). "Library Automation for 21st Century." Ess Ess Publication.
2. Basawaraj Malipatil ( 2017). Automation of Engineering College Libraries in Kalaburagi and Bidar District of Karnataka State. PESQUISA Online Journal. Vol. 02, Issue 02. pp 77-86.
3. Brown-Syed, Christopher (2011). "Parents of Invention: The Development of Library Automation Systems in the Late 20th Century: The Development of Library Automation Systems in the Late 20th Century." ABC-CLIO.
4. David, L. T. Introduction to integrated library systems. Bangkok: Information and Informatics Unit, UNESCO Bangkok, Thailand, 2001
5. Dula, M., Jacobsen, L., Ferguson, T. and Ross, R. Implementing a new cloud computing library management service. In Computers in Libraries, 32.1(2012), pp. 6-40
6. Shilpa S Uploankar (2013). Use of electronic information sources and services in S. Nijalingappa Medical College : A Study. Library Progress. BPAS Publication, New Delhi. Vol. 33, Issue No. 01. pp 1-11.
7. Wilson, K (2012). "Introducing the next generation of library management systems". Serials Review. 38.2, pp. 110-123.

**Website:**

1. <https://library.mac.ac.in/>