

# Vision & Scope Document

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**Date: 13 May, 2024**

# Vision and Scope Document for Library Management System (LMS)

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# **1. Business Requirements**

## **1.1 Background:**

International Islamic University has a well-established library for its patrons, housing a vast collection of books, journals, and digital resources. However, the traditional library management system in place has several inefficiencies and challenges:

Patrons often face challenges in finding the books they need due to limited availability or frequent misplacement of materials. This leads to frustration and wasted time searching for resources. The current system for reserving books and checking them out is manual and time-consuming. Patrons have to fill out paper forms or visit the librarian's desk, resulting in delays and inconvenience. Returning borrowed books and renewing them for extended periods is not streamlined. Patrons sometimes forget to return books on time, leading to late fees and administrative hassles. The patrons cannot find the books they need due to outdated inventory records. These challenges impact patrons' productivity as valuable time is spent dealing with library-related issues instead of focusing on core tasks.

## **1.2 Business Opportunity:**

A significant number of patrons at the International Islamic University have requested a modernized library management system (LMS) that allows for seamless access to resources. This system would enhance the patron experience by improving search and navigation capabilities, automating reservation and check-out processes, and providing personalized user profiles. Additionally, patrons will have the ability to borrow and return books through the system, simplifying the borrowing process and reducing administrative burdens. By addressing these needs, the new LMS aims to increase productivity for patrons, reduce frustration caused by limited availability of materials, and streamline administrative tasks for library staff.

## **1.3 Business Objective:**

BO-1: Improve patron satisfaction by streamlining reservation and check-out processes, resulting in a 30% increase in positive feedback within 6 months of system launch.

BO-2: Enhance operational efficiency by automating book return and renewal procedures, leading to a 25% reduction in overdue book instances within 3 months of system deployment.

BO-3: Streamline inventory updates by implementing automated scanning and tracking processes, reducing manual input errors by 15% within 4 months of system integration.

## **1.4 Success Metrics:**

SM-1: The average time spent searching for resources on the LMS decreases by 30% within first quarter of implementation and by 50% within 12 months.

SM-2: Patron satisfaction, as measured by post-interaction surveys, increases by 1.5 points on a 5-point scale within 3 months of LMS deployment and by 2.5 points within 12 months.

SM-3: The number of overdue books decreases by 25% within second quarter of implementing automated renewal reminders through the LMS.

## **1.5 Vision Statement:**

For patrons and library staff at the International Islamic University who wants a modernized and efficient library management system, the Library Management System is internet based application software, that enhances resource accessibility, automates processes, and improves user experience. Unlike traditional library management systems or manual processes, our product provides real-time inventory updates, personalized user profiles, and streamlined borrowing processes, leading to increased productivity and satisfaction for patrons and staff alike.

## **1.6 Business Risks:**

RI-1: Adoption of the LMS by too few patrons may result in lower than expected underutilization of system features. (Probability = 0.4; Impact = 7)

RI-2: Insufficient training and support for library staff and patrons on using the new system could result in user errors and reduced system effectiveness. (Probability = 0.3; Impact = 6)

RI-3: Inadequate scalability of the LMS may limit its ability to handle growing library collections and user demands, causing performance issues. (Probability = 0.4; Impact = 5)

## **1.7 Business Assumptions & Dependencies:**

AS-1: Adequate internet connectivity will be available to patrons and library staff for seamless access to the LMS and its online features.

AS-2: The LMS platform will be compatible with common web browsers and devices, ensuring accessibility for users across different platforms.

DE-1: Integration capabilities will be in place to connect the LMS with external databases and digital resources, facilitating the sharing and retrieval of information.

## **2. Scope and Limitations**

### **2.1 Major Features:**

FE-1: Search and browse library catalog for books, journals, and digital resources.

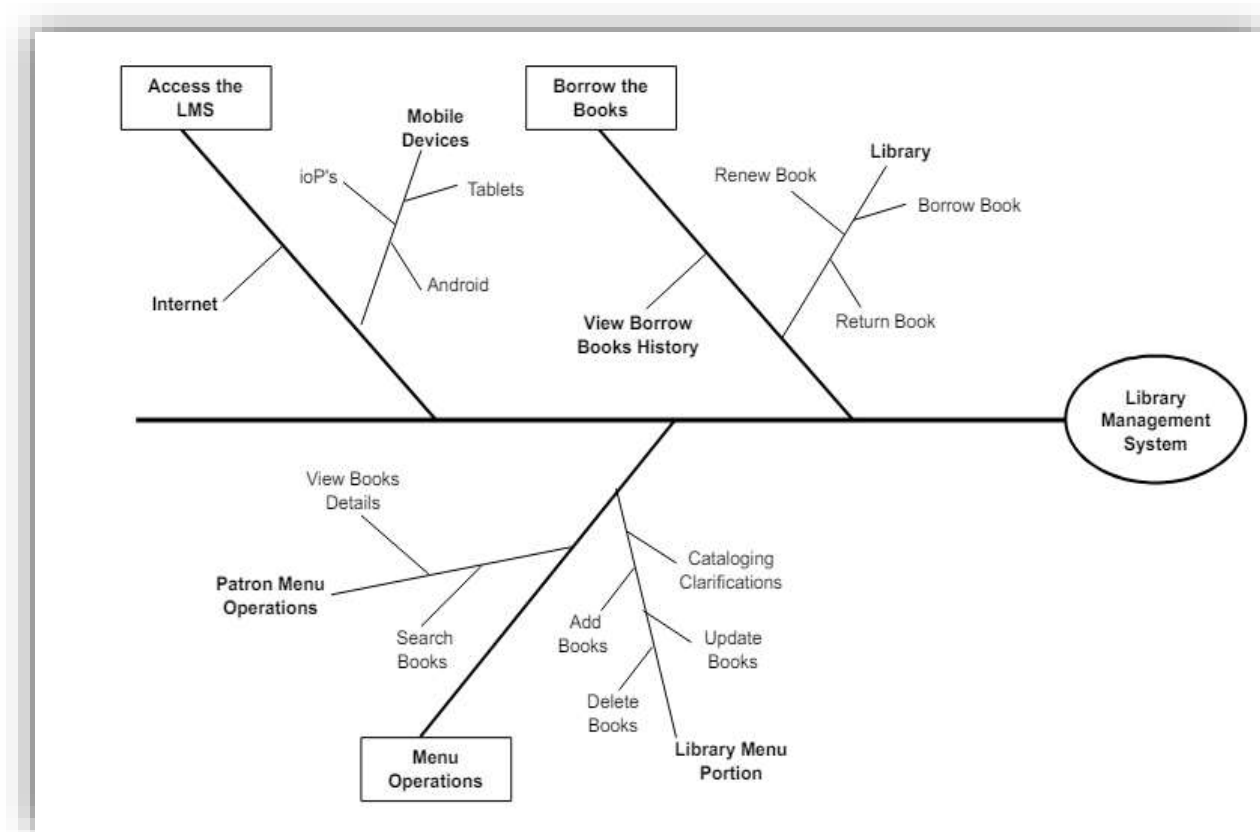
FE-2: View real-time availability status of library materials and reserve items for borrow.

FE-3: Track borrowing history, due dates, and renewal options for borrowed items.

FE-4: Receive notifications for overdue items, reservation confirmations, and library events.

FE-5: Participate in online discussions, book clubs, and collaborative research projects.

## Features Tree Diagram



## 2.2 Scope of Initial and Subsequent Releases:

Features	Release 1	Release 2	Release 3
FE-1, Search Catalog	Browse Catalog for Physical Books.	Browse Catalog for journals.	Browse Catalog for Digital Resources.
FE-2, View Status availability	View Status Availability.	View Reserved items for borrow.	Fully Implemented.
FE-3, Track Borrowing History	Not Implemented.	Track Borrowing History, due Date.	Renewal option for borrowed items.
FE-4, Notifications	Not Implemented.	Notification for overdue items.	Notification for Reservation confirmation and Library events.
FE-5, Online Participation	Not Implemented.	Online Discussions.	Book clubs & Collaborative research projects.

## 2.3 Limitations and Exclusions:

LI-1: Participation in online discussions, book clubs, and collaborative research projects (FE-5) may require additional permissions or approvals from library administrators, and access to certain resources or groups may be restricted based on academic affiliations or roles within the university.

LI-2: The LMS will not offer language localization or translation services for library resources and content will be specified by the library administration.

LI-3: The LMS will not provide support for advanced features such as virtual reality or augmented reality experiences within the library environment.

## 3. Business Context

### 3.1 Stakeholders profiles:

Stakeholders	Major Values	Attitude	Major Interest	Constraints
<b>Patrons</b>	Access to a wide range of resources. Convenience in borrowing and returning materials.	Expectation of a user-friendly system that meets their information needs effectively.	Seamless access to digital and physical resources. Ability to track borrowing history and manage due dates efficiently.	Limited availability of certain resources and adherence to library policies regarding borrowing limits and due dates.
<b>Librarian</b>	Efficient library operations, accurate inventory management.	Emphasis on system reliability, scalability, and ease of administration.	Automated cataloging and tracking of library materials and integration with existing library systems.	Training for staff in internet usage needed. System expansion.

### 3.2 Deployment Considerations:

DC-1: Apps will need to be developed for smartphones and tablets as part of the second release of the LMS, with plans for corresponding apps for Windows 10/11 to be developed in the third release.

DC-2: Any necessary infrastructure changes, such as server capacity and network bandwidth upgrades, must be implemented prior to the second release to support the increased user load from mobile app usage.

DC-3: Training videos, limited to a maximum length of five minutes each, will be developed to educate users on using both the Internet-based and app-based versions of the LMS. These videos will be made available to users as part of the deployment process to ensure smooth adoption and usage of the system.