

Library for the Future: Delhi, India

As a product manager tasked with designing a library for the future, I'll approach this systematically by asking clarifying questions, defining the scope, identifying users and their needs, proposing solutions, and outlining success metrics. Below is the detailed design process for a forward-thinking library in Delhi, India, that embraces innovation while serving its community effectively.

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Clarifying Questions

To narrow down the scope of the product, I'll start with some key questions:

1. **What does "library for the future" mean?** Are we envisioning a physical space with advanced technology, a digital platform, or a hybrid model? For this exercise, I'll assume a hybrid model (physical space with integrated digital tools) to balance accessibility and innovation.
2. **Is it a physical library, a digital platform, or both?** I'll assume a physical library with digital enhancements (e.g., app integration) to meet future needs while maintaining the traditional library experience.
3. **Is it for a specific region?** As specified, the library will be located in Delhi to focus on local needs and cultural context.
4. **Who is the primary audience?** Are we targeting students, researchers, families, or a broad community? I'll assume a diverse community audience, including students, professionals, families, and older adults, reflecting Delhi's varied demographic.
5. **Is this a standalone library or part of an existing network?** I'll assume it's a standalone library designed to set a new standard for future libraries in Delhi.

Clarified Scope and Goal

Clarified Scope

- **What:** We are designing a hybrid library (physical space with digital tools) in Delhi that provides access to resources, fosters community engagement, and leverages technology for personalized learning and accessibility.
- **Target Features:** The library will prioritize seamless access to resources, innovative spaces, and inclusive technology tailored to Delhi's diverse population.

Goal

To create a future-ready library in Delhi that empowers users to access knowledge, collaborate, and engage with their community through a blend of physical and digital experiences tailored to diverse needs.





User Profiles

Library Patrons

- **Students:** Seeking study spaces, exam prep materials, and digital resources (e.g., UPSC, JEE).
- **Professionals:** Accessing resources for upskilling or research, often in tech and business.
- **Families:** Engaging with educational programs and children's literature in Hindi, English, and other regional languages.
- **Older Adults:** Seeking accessible resources, social activities, and local history materials.

Librarians

- Manage resources, assist patrons, and curate programs.
- Need tools to streamline operations and cater to Delhi's multilingual, high-demand environment.

Key Assumptions



Multilingual Requirements

Delhi's diverse population requires resources in multiple languages (Hindi, English, and regional languages like Punjabi).



Digital Accessibility

High smartphone penetration supports a companion app, but physical spaces remain crucial for community engagement.



Educational Focus

Students and professionals in Delhi rely heavily on libraries for competitive exam prep and career resources.



Inclusive Design

Accessibility (physical and digital) is critical, especially for older adults and those with disabilities.



Platform Scope

For this scope, I'll focus on a physical library with a mobile app for both iOS and Android.

Priority Use Cases

User Type	Use Case	Priority
Library Patron	As a patron, I want to easily find and access resources (books, e-books, exam materials) in my preferred language.	P1
Library Patron	As a patron, I want a comfortable space to study, work, or engage in community activities.	P1
Library Patron	As a patron, I want digital tools to access resources remotely or reserve materials.	P1
Librarian	As a librarian, I want to efficiently manage multilingual resources and assist patrons.	P1
Librarian	As a librarian, I want to track usage to optimize offerings for high-demand areas (e.g., exam prep).	P2

Focus: For this scope, I'll prioritize P1 use cases to establish core functionality.

Potential Solutions: Multilingual Resource Access & Innovative Spaces

Multilingual Resource Access System

- Smart catalog system (physical and digital) with AI-powered search supporting Hindi, English, and regional languages for books, e-books, and databases (e.g., UPSC materials).
- Mobile app (iOS/Android) for browsing, reserving, and downloading digital resources, with language toggle options.
- Self-service kiosks with touchscreens and voice navigation (multilingual) for locating physical books.

Business Impact: High (core to serving Delhi's diverse patrons).

Cost to Build: Medium (app development, kiosks, multilingual support).

Priority: P1

Innovative Physical Spaces

- Modular spaces for study, collaboration, and events (e.g., quiet rooms for exam prep, community halls for cultural programs).
- Accessibility features: ramps, wide aisles, adjustable furniture, and sensory-friendly zones for inclusivity.
- Tech hubs with AR/VR stations for immersive learning (e.g., virtual tours of Delhi's history).

Business Impact: High (drives engagement in a bustling city).

Cost to Build: High (construction, tech integration).

Priority: P1

Potential Solutions: Digital Integration & Resource Management

Digital Integration

- App features: personalized recommendations (e.g., exam prep guides), event RSVPs, and digital library card for remote access.
- Integration with platforms like NCERT, IGNOU, or ePathshala for educational resources.
- Offline access mode for digital resources, considering Delhi's occasional connectivity issues.

Business Impact: High (extends access beyond physical visits).

Cost to Build: Medium (app enhancements, API integrations).

Priority: P1

Prioritized Features (P1):

1. Multilingual Resource Access System
2. Innovative Physical Spaces
3. Digital Integration
4. Resource Management Tools

Resource Management Tools

- Centralized dashboard for managing multilingual inventory, loans, and reservations.
- AI analytics to predict demand (e.g., for competitive exam books) and suggest acquisitions.
- Mobile app access for real-time patron assistance (e.g., locating a book in Hindi).

Business Impact: High (streamlines operations in a high-traffic library).

Cost to Build: Medium (software development).

Priority: P1

Tradeoffs



Multilingual Support vs. Complexity

Supporting Hindi, English, and regional languages increases development costs but ensures inclusivity in Delhi.



Physical vs. Digital Investment

High-cost physical spaces may compete with digital scalability, but Delhi's community-driven culture favors a hybrid model.



Specialized Resources vs. Broad Appeal

Focusing on exam prep and local content may limit general offerings, but it aligns with Delhi's educational priorities.

Success Metrics

Key Metrics

- **Patron Visits:** Number of physical visits and app logins (DAU/WAU/MAU).
- **Resource Usage:** Books checked out, e-books downloaded, and database queries (especially exam materials).
- **Event Attendance:** Participation in cultural and educational programs.
- **Customer Satisfaction:** NPS/CSAT scores from patron feedback.

Indicative Metrics

Patrons:

- Multilingual resource usage (e.g., Hindi vs. English searches).
- App engagement (searches, reservations).
- Accessibility feature usage (e.g., kiosks, ramps).

Librarians:

- Efficiency in managing loans and reservations.
- Accuracy of demand predictions for high-demand resources.

Summary

- The library for the future in Delhi is a hybrid space blending a physical hub with digital tools to serve a diverse community of students, professionals, families, and older adults.
- It offers a multilingual catalog and mobile app for seamless resource access, modular spaces for study and cultural events, and AI-driven tools for librarians to manage high demand.
- Accessibility is prioritized with ramps, sensory-friendly zones, and multilingual support, while innovations like AR/VR hubs enhance engagement.
- By focusing on P1 use cases—multilingual resource access, physical spaces, digital integration, and management tools—we create a robust foundation.
- Success will be measured by patron engagement, resource usage, and satisfaction, positioning this library as a dynamic, inclusive knowledge center for Delhi's future.