

Use of Mobile Application in Public Libraries

Kumar Gaurav¹, Dr. Deepmala²

Department of Library and Information Science

Mangalayatan University, Beswan, Aligarh

Email: Kgaurav525@gmail.com; deepmala.library@mangalayatan.edu.in

ABSTRACT

The rapid growth of smartphones and mobile internet has transformed the way people access information and services. Public libraries, as centers of learning, information, and community development, have increasingly adopted mobile applications to improve user experience and expand service delivery. Mobile applications allow libraries to provide digital catalogs, e-book access, event notifications, membership management, online reservations, and virtual reference services directly to users' devices. This paper examines the role, benefits, challenges, and future prospects of mobile applications in public libraries. It also explores how mobile technology helps libraries remain relevant in the digital age by increasing accessibility, promoting user engagement, and supporting lifelong learning. The study concludes that mobile applications are becoming essential tools for modern public libraries, though successful implementation requires proper planning, funding, technical support, and user education.

Keywords: Mobile applications, Public libraries, Digital services, Library management, User engagement.

How to cite this article: Gaurav K, Deepmala. Use of Mobile Application in Public Libraries. *Int J Drug Deliv Technol.* 2026;16(53s): 101-107. DOI: 10.25258/ijddt.16.53s.10

Source of support: Nil.

Conflict of interest: None.

1. Introduction

The rapid growth of digital technology has transformed the way information is created, accessed, and shared. Among these developments, mobile applications have become an essential part of everyday life, providing quick and convenient access to services through smartphones and tablets. Libraries, especially public libraries, have also adopted these technological changes to improve their services and meet the evolving needs of users (Muduli, Rautaray & Nayak, 2025). Public libraries have traditionally served as important centers for education, information, and community engagement, and the integration of mobile applications has further strengthened their role in the digital age (Hassans, 2025) (Duragannavar, N. & HS, 2025).

Mobile applications in public libraries offer users easy access to library resources and services anytime and anywhere. Through these applications, users can search the library catalog, reserve or renew books, access e-books and digital journals, receive notifications about due dates, and participate in library events or programs (Singh & Madhusudhan, 2023). Mobile apps also help libraries communicate more effectively with their users by providing instant updates, announcements, and personalized recommendations. As smartphone usage continues to increase, mobile applications have become an effective tool for expanding library reach and enhancing user satisfaction. The use of mobile applications in public libraries is particularly significant because it supports convenience, accessibility, and user engagement (Ramachandragouda, Naik & M, 2025). People who may not be able to visit the library physically due to time, distance, or mobility constraints can

still benefit from library services through mobile platforms. In addition, these applications help libraries remain relevant in a highly digital society where users expect fast and seamless access to information.

However, the implementation of mobile applications in public libraries also presents challenges such as technical costs, maintenance, digital literacy barriers, and data privacy concerns. Therefore, it is important to study how mobile applications are being used, their benefits, limitations, and their impact on library services. This study focuses on the use of mobile applications in public libraries, examining how these tools improve service delivery, increase accessibility, and influence user experiences in the modern information environment.

2. Mobile Applications in Libraries

Mobile applications have become an important part of modern library services. With the increasing use of smartphones, tablets, and mobile internet, libraries are adopting mobile technology to provide faster, easier, and more user-friendly access to information and services (Dar & Madhusudhan, 2020). A mobile application is a software program designed to run on mobile devices, allowing users to connect with library resources anytime and anywhere. These applications have changed the traditional image of libraries from physical spaces with printed collections into digital service centers that support learning, research, and communication (Rahmanova, 2025).

Libraries of all types, including public libraries, academic libraries, school libraries, and special libraries, are using mobile applications to meet the changing expectations of users (Ramachandragouda, Naik & M, 2025). Today's users prefer instant access to information through

their mobile devices rather than depending only on in-person visits or desktop computers. Mobile applications help libraries respond to this demand by extending their services beyond library walls.

Library mobile applications provide a wide range of digital services that make library resources more accessible, convenient, and user-friendly. These services help users interact with the library anytime and anywhere through smartphones or tablets. Some common examples are given below:

➤ **Online Catalog Search**

Online Catalog Search is one of the most important services available through library mobile applications. It allows users to search the library's collection of books, journals, magazines, newspapers, e-books, audiovisual materials, and other resources directly from their smartphones or tablets (Chen, 2019). This feature replaces the traditional card catalog system and provides quick, accurate, and convenient access to library holdings.

➤ **Book Reservation and Hold Requests**

Book Reservation and Hold Requests is an important service offered through library mobile applications. It allows users to reserve books and other library materials that are currently unavailable or already borrowed by another user (C. & H., 2022). Through this feature, users can place a request using their smartphones or tablets and receive the item when it becomes available.

➤ **Renewal of Borrowed Materials**

Renewal of Borrowed Materials is a useful service provided through library mobile applications that allows users to extend the loan period of borrowed books or other library items without visiting the library in person. Through the mobile app, users can log in to their account, view currently borrowed materials, and renew eligible items with a few simple steps. This service is especially convenient for users who need more time to complete reading or research work (T., 2016). It helps avoid overdue fines by allowing timely renewal before the due date, provided the item is not reserved by another user.

➤ **Access to E-resources**

Access to E-resources is one of the most valuable services provided through library mobile applications. It enables users to access digital information resources such as e-books, e-journals, online databases, newspapers, magazines, theses, dissertations, and multimedia content through smartphones or tablets (BM, 2019). Users can log in with their library membership credentials and use these resources anytime and anywhere without physically visiting the library. This service is especially beneficial for students, researchers, and distance learners who require quick and continuous access to academic and informational materials.

➤ **Reminders and Notifications**

Reminders and Notifications are an essential service offered through library mobile applications

that help users stay informed about their library activities and services (Somwanshi, & et al., 2024). Through this feature, users receive alerts regarding due dates for borrowed materials, overdue items, fines, reserved books ready for collection, membership renewal dates, and upcoming library events or programs. Notifications may also inform users about new arrivals, holiday closures, schedule changes, and important announcements.

➤ **Ask a Librarian Service**

Ask a Librarian Service is an important feature available through library mobile applications that allows users to seek help and guidance directly from library staff through chat, email, messaging, or online inquiry forms (Agrawal, Kumar & Kumar, 2025) (Nataraju, 2024). This service assists users in finding books, accessing databases, locating information, using library resources, and answering reference or research-related questions. It is especially useful for students, researchers, and general users who need quick support without visiting the library physically.

➤ **Event and Program notifications**

Event and Program Notifications are valuable services provided through library mobile applications that help users stay informed about upcoming library activities and events (Kumar & Naik, 2023). Through this feature, libraries can promote workshops, story sessions, book clubs, lectures, exhibitions, reading programs, training sessions, and community events directly to users through alerts and notifications. Users can view event details such as date, time, venue, and program description, and many applications also allow online registration through the app.

➤ **Study Room Booking**

Study Room Booking is a useful service offered through library mobile applications that allows users to reserve study rooms, discussion spaces, meeting rooms, or computer workstations in advance through their smartphones or tablets (Das & Choudhury, 2017). Users can check room availability, select preferred dates and time slots, and confirm bookings without visiting the library in person. This service is especially beneficial for students, researchers, and group learners who require quiet or collaborative spaces for study and academic work.

➤ **New Arrivals and Recommendations**

New Arrivals and Recommendations are valuable services provided through library mobile applications that help users discover recently added materials and relevant reading suggestions (Dar, 2019). Through this feature, libraries can display new books, journals, magazines, e-books, audiobooks, and other resources added to the collection. The application may also recommend materials based on users' reading interests, borrowing history, popular titles, or subject preferences.

➤ **Personalized Reading Lists**

Personalized Reading Lists are an important service offered through library mobile applications that allow users to create and manage their own customized lists of books, journals, e-books, and other resources based on their interests and reading needs (Mohideen, Sheikh & Kaur, 2021). Users can save favorite titles, organize materials by subject or priority, and plan future reading activities through the mobile app.

3. Need for Mobile Applications in Public Libraries

Mobile applications have become increasingly important in public libraries due to the rapid growth of smartphone usage and the changing information needs of society. Modern library users expect quick, convenient, and remote access to services through mobile devices. To meet these expectations and remain relevant in the digital age, public libraries need mobile applications to improve service delivery, communication, and accessibility (Margam & Pandey, 2025).

➤ **Easy Access to Library Services**

Mobile applications allow users to access library services such as online catalog search, book reservation, renewal of borrowed materials, and account management anytime and anywhere through smartphones or tablets. Users can easily check the availability of books, reserve required materials, renew issued items, and monitor their library accounts without visiting the library physically.

➤ **Growing Use of Smartphones**

The growing use of smartphones has created a strong need for mobile applications in public libraries. Today, smartphones are widely used by people of different age groups for communication, education, entertainment, and information access. Since users spend a significant amount of time on mobile devices, libraries can effectively reach them through mobile applications. Smartphone technology allows users to access library services conveniently from any location at any time.

➤ **24/7 Availability of Services**

Public libraries often have fixed working hours, but mobile applications enable users to access digital services and information resources at any time, including evenings, weekends, and holidays. Through mobile applications, users can search library catalogs, renew borrowed books, reserve materials, access e-books and online databases, and manage their library accounts whenever needed. This continuous availability increases convenience for students, researchers, working professionals, and other users who may not be able to visit the library during regular hours.

➤ **Better Communication with Users**

Mobile applications help public libraries maintain better communication with their users by providing direct and instant updates through notifications and

alerts. Libraries can send reminders about due dates, overdue materials, new arrivals, upcoming events, workshops, reading programs, and important announcements directly to users through the mobile app.

➤ **Access to Digital Resources**

Mobile applications help users access digital resources such as e-books, e-journals, online databases, audiobooks, newspapers, and online learning materials remotely through smartphones and tablets. Users can use these resources anytime and anywhere without physically visiting the library. This feature is especially beneficial for students, researchers, distance learners, and working professionals who require continuous access to information for study and research purposes.

➤ **Increased User Engagement**

Mobile applications increase user engagement by providing interactive and user-friendly features that encourage active participation in library services. Features such as reading recommendations, personalized reading lists, event registration, book reviews, and feedback options help users interact more closely with library resources and activities. Users can discover new materials based on their interests, participate in workshops and programs, and share suggestions or opinions easily through the application.

➤ **Support for Remote and Underserved Users**

Mobile applications provide important support for remote and underserved users by making library services accessible without the need for physical visits. People living far from the library, senior citizens, persons with disabilities, and busy working individuals can access library resources and services conveniently through their smartphones or tablets. They can search catalogs, read e-books, access online databases, renew borrowed materials, and receive library updates from any location.

➤ **Promotion of Library Programs**

Mobile applications help public libraries promote various educational, cultural, and community activities effectively through notifications and online registration tools. Libraries can inform users about story sessions, literacy campaigns, book clubs, workshops, exhibitions, reading competitions, and other community programs directly through the mobile app. Users can view program details and register easily without visiting the library physically.

➤ **Modernization of Public Libraries**

In a technology-driven society, public libraries need mobile applications to modernize traditional services and meet the changing expectations of users. Mobile applications transform libraries from purely physical information centers into digital service platforms that provide fast, convenient, and

remote access to resources. Through these applications, libraries can offer modern services such as online catalog access, e-resources, digital notifications, virtual assistance, and online event registration.

4. Benefits of Mobile Applications in Public Libraries

➤ Improved Accessibility

Mobile apps make library services available to users regardless of time or location. This is especially beneficial for elderly users, working professionals, and persons with disabilities.

➤ Greater Convenience

Users can manage their library accounts, renew borrowed books, reserve materials, and search for information resources directly from their homes, schools, workplaces, or any other location using mobile applications.

➤ Increased User Engagement

Notifications, personalized recommendations, and event updates provided through mobile applications encourage users to interact regularly with library services and activities.

➤ Promotion of Reading Culture

Easy access to e-books and audiobooks through mobile applications encourages reading habits among younger users and busy adults by allowing them to read or listen to materials anytime and anywhere.

➤ Time Saving

Users can check the availability status of books and other library materials through mobile applications before visiting the library, which helps reduce unnecessary travel and saves time.

➤ Cost Effectiveness

Though the development and maintenance of mobile applications may require an initial financial investment, they help public libraries reduce long-term printing, paper, postage, and administrative costs through digital communication and automated services.

➤ Data Collection and Service Improvement

Mobile applications provide valuable usage statistics and analytical data that help libraries understand user behavior, preferences, and service needs more effectively.

5. Use of Mobile Applications by Different User Groups

➤ Students

Students use library mobile applications to access e-books, digital study materials, research articles, exam preparation resources, online journals, and internet databases conveniently through their smartphones or tablets. These applications support academic learning by providing quick and remote access to educational resources anytime and anywhere, helping students in study, research, assignments, and competitive exam preparation.

➤ Working Professionals

Professionals benefit from library mobile applications through remote access to digital resources such as e-books, research databases, journals, and online reference materials that support their work and continuous learning needs. Mobile apps also allow quick renewal of borrowed materials and easy account management, saving time and providing convenient access to library services despite busy work schedules.

➤ Senior Citizens

Audiobooks, large text settings, and remote home access provided through library mobile applications greatly support elderly users by making library resources easier to read, listen to, and access comfortably. These features improve accessibility for senior citizens who may have vision difficulties, mobility limitations, or challenges in visiting the library physically, allowing them to continue reading and learning conveniently from home..

➤ Children and Parents

Parents can use library mobile applications to register their children for storytelling sessions, reading programs, workshops, and other educational activities offered by the library. They can also access educational content such as children's e-books, learning materials, audiobooks, and interactive resources that support the learning and development of children at home..

➤ Persons with Disabilities

Features such as screen readers, voice search, adjustable text sizes, and accessible mobile application design make public library services more inclusive and user-friendly for persons with disabilities. These accessibility tools help users with visual, hearing, physical, or learning difficulties access information resources, digital content, and library services independently and conveniently through their mobile devices.

6. Challenges in Using Mobile Applications in Public Libraries

Despite many advantages, libraries face several challenges:

➤ Limited Budget

Developing and maintaining high-quality mobile applications requires significant financial investment for software development, updates, technical support, security, and system maintenance. Public libraries with limited budgets may face difficulties in adopting advanced mobile technologies and ensuring continuous improvement of application services.

➤ Technical Issues

Library mobile applications require regular updates, bug fixes, security improvements, and compatibility support for different mobile devices and operating systems.

➤ Digital Divide

Not all users own smartphones or have reliable internet access, which can limit their ability to use mobile library applications and digital services.

➤ **Lack of Digital Skills**

Some users, especially older adults and individuals with limited technical knowledge, may require training and guidance to use library mobile applications effectively.

➤ **Privacy and Security Concerns**

User accounts, personal information, and borrowing history must be protected through secure systems and privacy measures to prevent unauthorized access and data misuse.

➤ **Staff Training Needs**

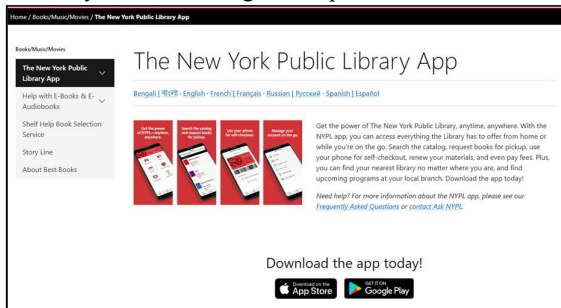
Library staff require proper training and technical skills to effectively manage mobile applications, digital services, and assist users in accessing and using library resources.

7. Case studies of Mobile Applications in Public Libraries

The use of mobile applications in public libraries has increased worldwide as libraries adopt digital technologies to improve user services and accessibility. Many public libraries have successfully implemented mobile applications to provide online catalogs, e-resources, notifications, event registration, and other digital services. The following case studies highlight how public libraries are using mobile applications effectively.

➤ **New York Public Library App**

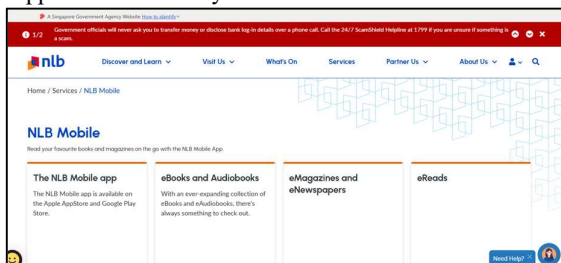
The New York Public Library developed a mobile application to provide users with convenient access to library services through smartphones and tablets.



Source: <https://www.nypl.org/books-music-movies/nypl-app>

➤ **Singapore National Library App**

The Singapore National Library Board introduced a highly advanced mobile library application that supports smart library services.

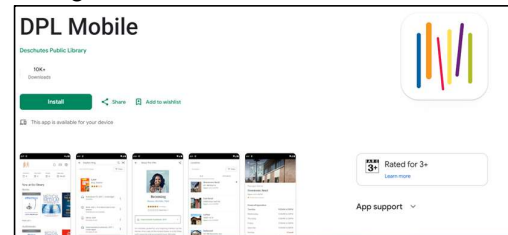


Source:

<https://www.nlb.gov.sg/main/services/faqs/NLB-Mobile>

➤ **Delhi Public Library Digital Services**

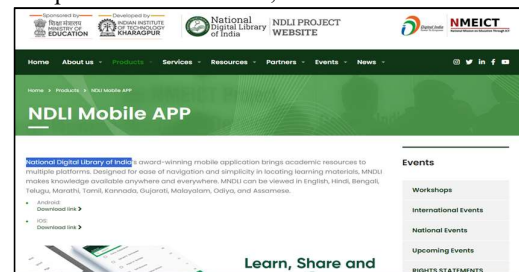
Delhi Public Library adopted digital and mobile-friendly services to improve public access to information resources. Indian libraries are gradually adopting mobile-friendly platforms for catalog access and announcements.



Source: <https://dpl.gov.in/>

➤ **National Digital Library of India Mobile Access Services**

The NDLI mobile application allows users to access millions of digital learning resources through smartphones and tablets. The app provides materials in different formats and subjects, supporting school education, higher education, competitive examinations, and research activities.



Source: <https://project.ndl.gov.in/products/ndli-mobile-app/>

8. Role of Mobile Applications During Emergencies

Mobile applications proved highly useful during situations such as the COVID-19 pandemic when physical libraries were closed.

Libraries used apps to:

- Provide access to digital books and journals
- Conduct online reading programs
- Share health information and updates
- Communicate reopening schedules
- Continue educational support remotely

This demonstrated that mobile technology can help libraries remain functional during crises.

9. Conclusion

Mobile applications have become an important part of modern public library services by improving access to information, communication, and user convenience. Through mobile apps, users can search library catalogs, renew books, reserve materials, access e-books and digital databases, receive notifications, and participate in library programs anytime and anywhere. These applications help public libraries meet the changing needs of digital society and provide faster, more flexible, and user-friendly services to diverse groups of users, including students, professionals, senior citizens, and persons with disabilities. Despite challenges such as financial costs, technical maintenance, digital literacy issues, and internet accessibility limitations, mobile applications offer significant benefits to public libraries and their communities. They support lifelong learning, increase user engagement, improve operational efficiency, and expand access to educational and informational resources beyond physical library spaces. As technology continues to develop, the use of mobile applications will play an even greater role in strengthening public library services and ensuring that libraries remain relevant and accessible in the digital age..

References

- ALA (American Library Association). Digital Library Services Reports. <https://www.ala.org/support/digital-and-online-services-libraries> (accessed on 08-05-2026)
- IFLA Guidelines for Public Libraries. (n. d.) <https://www.ifla.org/wp-content/uploads/2019/05/assets/hq/publications/archive/the-public-library-service/publ97.pdf>
- Muduli, PK., Rautaray, B. & Nayak, S. (2025). From Shelves to Screens: the Evolution of Library Services in Response to User Needs. Proceedings of the International Conference on Marching Beyond the Libraries (ICMBL): Leadership, Creativity, and Innovation (ICMBL 2024), Advances in Economics, Business and Management Research 326. https://doi.org/10.2991/978-94-6463-712-0_14
- Hassans, A. (2025). The Future of Libraries: Evolving Roles in the Digital Age. Eurasian Experiment Journal of Arts and Management (EEJAM), 7(3), pp. 72-75. https://www.eejournals.org/public/uploads/1741599978_8d3240db99239ccc1780.pdf
- Duragannavar, G. F, N, Meeramani & HS, Arunkumar. (2025). Empowering Rural Karnataka, India: The Integral Role of Public Libraries in Community Development. Journal of Information & Systems Management, 15(2), pp. 56-65. <https://doi.org/10.6025/jism/2025/15/2/56-65>
- Singh, B. P. & Madhusudhan, M. (2023). Mobile apps-based applications in libraries and information centers: A systematic review of the literature and future research agendas. International Journal of Librarianship, 8(3), 83-102. <https://doi.org/10.23974/ijol.2023.vol8.3.294>
- Ramachandragouda, S., Naik, Umesha & M, Purushothmagowda (2025). Revolutionizing Library Services through Mobile App Integration. International Journal of Advance Research in Multidisciplinary, 3(3), pp. 192-197. <https://multiresearchjournal.theviews.in/uploads/articles/3-3-68.1.pdf>
- Dar, S. A. & Madhusudhan, M. (2020). Enhancement of Library Services into Mobile-based Library Services in Select University Libraries in Delhi (India): users' perspective. *World Digital Libraries: An International Journal (WDL)*, 13(1). <https://doi.org/10.18329/09757597/2020/13102>
- Rahmanova, A. (2025). Evolution of Libraries in the Digital Era: Redefining Access, Education, and Cultural Preservation. *Library, Archive and Museum Research Journal*, 6(1), 23-38. <https://dx.doi.org/10.59116/lamre.1540033>
- Chen, Shih-Chuan (2019). Undergraduate students use of mobile apps to search library catalogs. *Library Hi Tech*, 37 (4), pp. 721-734. <https://doi.org/10.1108/LHT-12-2018-0198>
- C., Vysakh, & H., Rajendra Babu (2022). Library Services Through Mobile Apps-Development and use by Indian Libraries. *Journal of Information Management*, 9 (2), pp. 125-133. <https://doi.org/10.5958/2348-1773.2020.00013.3>
- T., Manjula (2016). Library Mobile Apps: For Effective Services of Library. *Journal of Library & Information Communication Technology*, 5 (2), pp. 17-31. https://www.researchgate.net/publication/337415745_LIBRARY_MOBILE_APPS_FOR_EFFECTIVE_SERVICES_OF_LIBRARY
- BM, Puneeth. (2019). Effectiveness of Using E-resources in Academic Libraries: A Study. *International Journal of Library and Information Studies*, 9(4), pp. 74-81. <https://www.ijlis.org/articles/effectiveness-of-using-eresources-in-academic-libraries-a-study.pdf>

- Somwanshi, S., Sutar, S., Patil, Y. & et al. (2024). The Overdue Reminder: Smart Library Notification. 10th National Conference on Emerging Trends in Engineering and Technology.
https://www.researchgate.net/publication/386148442_THE_OVERDUE_REMINDE_R_SMART_LIBRARY_NOTIFICATION
- Agrawal, S., Kumar, MS., & Kumar, S. (2025). Enhancing Library Reference Services through Mobile and Online Platforms. *International Journal of Novel Research and Development*, 10(3), c104-c110.
<https://doi.org/10.5281/zenodo.15165645>
- Nataraju, V.B. (2024). The concept of 'Ask a Librarian' to WhatsApp and Telegram Application in Respect of Library and Information Services. *International Journal of Research in Library Science*, 10(2), pp. 112-115.
<https://doi.org/10.26761/IJRLS.10.2.2024.1764>
- Kumar, S.K. & Naik, L. (2023). Enhancing Library Access and Services through Mobile Applications. *South Indian Journal of Library and Information Science*, 9(3).
https://www.researchgate.net/publication/395129849_Enhancing_Library_Access_and_Services_through_Mobile_Applications
- Das, S. & Choudhary, N. R. (2017). A Library in Your Palm: Library Service through Mobile Technologies. IASLIC Conference Raipur.
<https://doi.org/10.13140/RG.2.2.32380.33923>
- Mohideen, Z. A., Sheikh, A. & Kaur, K. (2021). Developing an open source mobile app in library services: the case of a national university in Malaysia. *Digital Library Perspectives*, 38(3).
<https://doi.org/10.1108/DLP-08-2021-0064>
- Margam M, Pandey P (2025). Exploring the landscape of libraries on smart devices: a systematic literature review using PRISMA. *Global Knowledge, Memory and Communication*, Vol. ahead-of-print No. ahead-of-print.
<https://doi.org/10.1108/GKMC-12-2023-0489>