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## MOBILE TECHNOLOGY AND ITS APPLICATIONS IN ACADEMIC LIBRARIES

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### Abstract:

*There is an increase in new technology, and mobile technology is one of them. However, it has several benefits when using a mobile device and is widely used in all sectors. Academic libraries stand out from other libraries because they serve as a resource for future generations to acquire the required knowledge and information. Similarly, all academic libraries must make attractive and efficient use of this benefit. This makes it easier to provide people with the services they need quickly. These services have already been introduced in a few academic libraries, and patrons are using them. To meet the expectations of their users, academic libraries have time to review and adapt their services in light of recent technological advancements. All academic libraries include innovative services and technologies for their patrons. This paper implied that academic libraries would find mobile technology the perfect tool for persuading users to visit the library, mainly out of convenience, and offered the steps. The usage of mobile applications in libraries and mobile technologies are both topics covered in this paper. The use of mobile technologies and mobile applications in libraries is wrapped in this paper.*

**Keywords:** Mobile Technology, Mobile Applications, Library Services, Mobile Services. MOPAC

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### Introduction:

This paper provides how the library adopts mobile technology and services in the digital era. Today, mobile technology is very effective in giving services to users. Without the cell phone, it may not be possible for humans to survive. Mobile technology plays a massive part in how users seek information for teaching, learning, and research to meet user needs. Mobile access is not new, but Android mobile users have gathered and stored, organized, accessed, retrieved, and consumed their data. The users are using

their mobile phones as search tools. Tablets, smartphones, and iPhones are frequently the first places users look for information. The time has come for libraries to benefit from mobile technologies. In this era, mobile technology and mobile application service are very prominent in today's technologies in libraries.

The use of mobile technology has permeated every aspect of students' and staff members' life today. We are growing more accustomed to living in a world where digital information is smoothly

transferred from screen to screen as we go about our daily lives due to this technology's maturation. Academic librarians are faced with risks and opportunities due to this evolution. The use of mobile devices in academic libraries has increased. It is normal to observe through analytics that portable gaming consoles, cell phones, tablets, e-readers, and even laptops connect to online library services. Academic librarians may reach more students and staff outside of the library by utilizing the possibilities of cell phones, tablets, and even wearable technology. Additionally, by comprehending how users' behavior is changed by mobile technology, we can learn more about their requirements and enhance our current services and facilities to better support faculty research and student learning.

### **Mobile Technology:**

Mobile technology denotes portable technology; it refers to any equipment you carry around with you and uses to do a wide range of "tasks." Thanks to technology, these duties may now be carried out using a mobile phone, an eBook reader, a tablet computer, a laptop, etc. Distance learning is made more accessible when access is restricted or stopped owing to a person's physical location, a post-conflict or post-disaster environment, or other factors.

### **M-OPAC (Mobile Online Public Access Catalogue):**

Today's users demand rapid, simple access to information about materials in the library via their mobile devices. Additionally, they desire mobile access to library systems. To address these demands, M-OPAC has created mobile innovations especially tailored to the

specific requirements of users, students, and libraries. M-OPAC is a book search app for smartphones that provides all libraries worldwide with an affordable cloud-based platform to share book data. Every library user globally receives a simple-to-use App for free book searching.

### **Futures of M-OPAC:**

Through a native, secure Smartphone application, the new mobile features enable users to manage and take action on essential operations. Students will be able to use these tools on their mobile devices to

- The M-OPAC mobile app constantly requests registration, which is completed once and gives access to more M-OPAC features. Additionally, M-OPAC is used by guest users.
- The title, author, publisher, subject, and keywords are all searchable by users.
- A patron can find a rare book available across registered colleges
- A customer can ask the librarian for a book and track the progress of their request.
- In the library, users can conduct quick searches to save time.
- Investing in a server, high-speed internet, or networking is no need.

### **Mobile Technology and Its Applications in Academic Libraries:**

Nowadays, everyone has a mobile phone because of mobile technology. We cannot see humans without mobile phones; they will communicate and access information at the right time. In this digital era, libraries provide the necessary information to users at the right time. Mobile phone technology has now come up with the libraries in hand trend. The users can quickly access the data through a mobile device from a remote source. In

these digital days, many college and university libraries have a digital collection, and it is accessed through networking. Mobile phones can be a good alternative for accessing digital libraries. These days most of the students and faculties have their mobile phones and laptop, so libraries have the opportunity to produce new services. Some of the mobile applications discussed below:

**a. QR Code (Quick Response):**

The QR code is a matrix barcode readable smartphone with cameras. In the recent era, QR codes are top-rated and easy to use through mobile. These codes can be linked to the website, audio, video, or bank account for money transactions. The libraries can use this code for library guides about library facilities, events, magazines, or journal areas to point out online electronic holdings of print materials. These digital days have so much software to generate the QR code.

**b. Formal Education and E-learning**

Mobile Technology is the best for formal education and e-learning. The libraries can quickly provide e-resources through mobile technology to the users.

**c. Database and E-resources with Mobile Interfaces**

The library spends a massive amount on subscribing the valuable e-resources and databases. The users are now quickly searching and downloading the required data from the library database. There is no need to go somewhere and search the data because the users have mobile technology by hand. The librarian can Use e-resources like e-books, e-Journals, Web databases, articles,

dissertations, etc., through mobile technology.

**d. Overdue notification service**

The users can get SMS for book transactions, and This service reminds the user about overdue items. It will help the users to remind the due date.

**e. Mobile On-line Public Access Catalogue (MOPAC)**

A Mobile Online Public Access Catalogue or MOPAC is a mobile version of a library's Online Public Access Catalogue that provides the same information as the OPAC. The MOPAC offers a mobile-friendly interface for accessing the library catalog using a smartphone.

**f. Library News, Events, and Blogs**

The library can send information on job openings, events, lectures on particular topics, current news, library conducting programs, and library blogs.

**g. List of New Arrivals**

Once the library has processed the new book, the staff can send the image and content page through the mobile to the users. It can send the list of new books to the link also.

**h. Mobile library instruction and mobile learning**

Significant changes have occurred in how people obtain information digitally, utilizing mobile technology (Li, 2013). Academic libraries have used different platforms to provide services to their patrons (Cisse, 2016). Due to the students' advanced technological knowledge, academic libraries must implement mobile applications to supply services.

**i. Mobile instructions and mobile tours of the library**

Every year, new students begin their academic journeys and are introduced to the education services offered by the academic library. Information literacy and library orientation are two services libraries provide through mobile devices.

**j. Text Reference Services**

Assume the library gets a tall volume of requests that require quick reactions, such as word reference definitions, truths, or benefit data. In that case, Curators can give moment answers and joins to articles/references in real-time.

**k. They were quickly Contacting the library staff for help**

The users can contact the library staff for help at any ware anytime through their mobile. They can ask query-related libraries, and the library staff is ready to serve the user query as early as possible.

**l. SMS Notification Services**

The users can get an alert on events, current news, latest arrivals, books due date, renewal, outstanding fines, issue return notifications, notice, and valuable information related to the libraries through SMS, MMS, WhatsApp, or other chat facilities.

**m. Mobile App**

Libraries can set up groups on messaging apps like WhatsApp to offer reference services to users, making it simpler and faster to respond to users' questions while seated at home. As a result, this platform might be used for current awareness services and the selective broadcast of information.

**n. Over Due Fine Collecting**

The overdue fine for users' late submission of book collecting is quite challenging, especially accepting cash or having retail issues. With QR codes, libraries may now be easily collected via mobile apps. It is effortless to use.

**Advantages of Mobile Technology-Based Academic Library:**

Users are becoming more interested in using library services over their mobile devices, and mobile technology is prompting libraries to modify how they provide services to reach as many users as possible. Mobile technology benefits all age groups and has more advantages for the user in the digital era. Those advantages are:

- Mobile Technology is a user friendly
- Greater access to modern apps and services
- Quality of service you offer your users
- Save the time of users
- Customized Services
- SMS can be utilized to communicate information to professors and students more swiftly and efficiently than phone calls or emails.
- Easy to access information
- Decrease in training cost
- Support distance learning
- Accessible communication between librarians and users
- Effective use of library resources
- Creating awareness of library
- Location awareness
- Easy to reach information
- Limitless access
- Learn different methods and in other formats

**Disadvantages of Mobile Technology:**

The benefits of mobile technology outweigh the drawbacks. These negative aspects are listed below.

- New technologies and devices are costly to purchase
- Workplace distractions.
- Losing important data due to discharged batteries necessitates frequent charging.
- The library staff may require instructions and training in using new technology.
- Increasing demand for IT security
- Performing some professional work is quite tricky.
- Limited memory of mobile devices
- Connectivity problems of mobile network signals
- It can strain the eyes of the learners if they keep looking at their screens for a more expanded period.
- Lack of appropriate mobile-friendly academic content to meet learners' needs.
- The utilization of remote gadgets is expanding quickly. However, there is a concern within the logical community that this innovation might have unfavorable side impacts.

**Conclusion:**

The academic library is implementing innovative technology and developments for users from the latest generation. Mobile Technology and its application are not new things to the library. Most of the libraries already use SMS notification services for users. These days of versatile innovation incorporate an exceptionally vital portion of our lives.

There are developing impacts of mobile technology in libraries. Versatile innovation has a primary stream of significantly encouraging the instructing, learning, and inquiry about preparation. Numerous devices and strategies through libraries can effectively give administrations through portable innovation. Mobile technology is growing effectively because of usage of mobile is rapidly increasing. It is the opportunity for the library and librarian to remodel their existing services and adopt the new services.

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