

Mobile Banking Systems - Development, Security and Advantages

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Abstract

The rapid development of mobile banking systems is a rich result of technological advancements and changing user capabilities. Mobile banking systems provide users with the ability to manage finances, conduct transactions, and easily oversee financial processes through their mobile devices. The speed of development in mobile banking systems, coupled with user trust, has led to significant progress in independent financial processes. Traditional banks or digital banks offering mobile applications form the foundation of mobile banking. Security is essential in mobile banking, and measures like biometric authentication (such as passwords and facial recognition) and robust encryption are applied to safeguard user information and transactions.

Keywords: Mobile banking, password security, SSL encryption, interactive, biometric authentication

Mobile banking systems represent a technological advancement in the banking sector, enabling users to manage finances, conduct financial transactions, and oversee various processes related to their accounts through their mobile devices. This thesis will analyze the history of mobile banking system development, security aspects, and how it provides a more convenient and effective banking experience for users.

History of mobile banking system development: Mobile banking systems first emerged in the late 1990s, but this initial period was limited to offering only a few services. Users could primarily check their account balances and receive limited information about certain transactions. The initial mobile banking services were characterized by a simple interface and limited functionalities. However, this was just the beginning, and with the proliferation of phones and smartphones, the mobile banking experience became more interactive and comprehensive.

With this technological development, mobile banking systems evolved to provide solutions for a wide range of financial operations performed by users. Users can now easily execute various financial transactions, from checking account balances to transferring funds, paying bills, and even investing, all through their mobile devices. These changes have transformed the financial sector, making mobile banking an integral part of the industry's landscape. Today, mobile banking systems play a significant role in banking and are widely adopted by many individuals.

Security issues in mobile banking systems: Mobile banking systems allow users to connect to and manage their bank accounts and financial transactions through mobile devices. However, ensuring the security of financial information and user accounts is a critical concern.

Users, banks, and security providers must monitor security issues and numerous potential risks. Users must establish strong and secure passwords, use security applications, and take precautions to protect their phones and devices. Banks should implement security measures and provide customers with information about potential risks. Mobile banking applications and websites must be secured with SSL encryption, and remote locking capabilities should be provided in case of device loss. Users should also be vigilant against potential phishing and malware threats, only downloading official applications.

Advantages of using mobile banking systems: The impact of mobile banking systems on bank customers is extensive. The advantages of using mobile banking systems include:

1. **Convenience and Accessibility:** Mobile banking applications enable users to perform transactions from anywhere and at any time, eliminating the need to visit bank branches or ATMs, saving time and reducing additional expenses.
2. **Management of Accounts and Transactions:** Mobile banking applications allow users to efficiently manage their accounts and transactions, simplifying tasks such as making payments, transferring funds, and monitoring balances.

3. Mobile Notifications: Customers can receive real-time updates about their accounts through mobile banking applications, providing control and oversight of financial operations.
4. Security and Privacy: Mobile banking systems provide robust security measures, including password protection, biometric authentication, encryption, and user activity logs, to protect financial information.
5. Time Savings: Mobile banking systems enable customers to carry out banking operations on their terms, saving time and avoiding the need to wait in lines at bank branches.
6. Transparency in Operations: Mobile banking applications offer transparency regarding account and transaction details, helping users manage their finances securely and effectively.

Conclusion

Mobile banking enables users to manage their financial transactions anywhere and anytime, enabling faster business processes for these organizations as well.

With the development of mobile banking systems, security issues have become even more important. Security measures such as password security, biometric authentication, encryption and user usage history are implemented to protect user data. These security measures are important factors in protecting users' financial information and accounts.

In the future, mobile banking systems will become more advanced and more people will use mobile banking. Security measures will help protect users' financial information even more. Mobile banking has revolutionized the financial sector and will continue to do so.

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