

Principles of computers

First stage

Lecture

INTRODUCTION TO E-COMMERCE AND ELECTRONIC BANKING

By

Asst. lecturer Mohammed Qasim Obayes

mohammed.qasim.obayes@uomus.edu.iq

2024-2025

E-Commerce Impact:

- E-commerce has revolutionized the way financial transactions are conducted.
- Increasing reliance on digital solutions for everyday transactions.
- Definition:
- Electronic banking encompasses various digital channels for managing finances, transferring funds, and conducting transactions online.



UNDERSTANDING ELECTRONIC BANKING

Definition:

- A range of services enabling financial transactions via electronic channels, providing consumers and businesses with efficient ways to manage their finances.

Significance:

- Enhances convenience and accessibility.
- Reduces the need for physical bank visits.

ONLINE BANKING

Core Services:

- Online banking platforms are integral to modern banking, offering users a comprehensive suite of services.

Expanded Features of Online Banking:

- Account Aggregation: Link accounts from multiple banks for a single view of finances.
- Budgeting Tools: Tools to track spending, categorize expenses, and set budgets.
- Financial Planning: Access to financial advisors and planning tools for goals and retirement.
- Personalized Offers: Tailored promotions based on spending habits.

BENEFITS OF ONLINE BANKING

Convenience:

- Perform transactions from anywhere at any time without visiting a physical bank branch.

Reduced Costs:

- Lower operational costs for banks can translate to lower fees for customers.

Eco-Friendly:

- Reduces the need for paper statements and receipts, contributing to environmental sustainability.



SECURITY CONSIDERATIONS IN ONLINE BANKING

Encryption:

- Advanced encryption methods protect sensitive customer information transmitted over the internet.

Two-Factor Authentication (2FA):

- Many banks require an additional verification step (such as a text message code) for enhanced security.

Fraud Monitoring:

- Sophisticated algorithms monitor account activity for suspicious transactions, alerting customers of anomalies



ATM AND DEBIT CARD SERVICES

Integration into Daily Banking:

- The integration of ATMs and debit cards into everyday banking enhances user convenience



ENHANCED ATM SERVICES

Multi-Currency Transactions:

- ATMs in tourist areas allow withdrawals in multiple currencies, facilitating international travel.

Cardless Withdrawals:

- Some ATMs enable customers to withdraw cash without a card by using a mobile app for authentication.

Deposit Automation:

- Advanced ATMs can automate the entire deposit process, including check scanning and cash counting.

BENEFITS OF DEBIT CARD SERVICES

Budget Control:

- Debit cards allow users to spend only what they have in their accounts, helping avoid debt.

Wide Acceptance:

- Debit cards are accepted globally for online and in-store purchases, making them versatile.

Loyalty Programs:

- Many banks offer rewards or cashback programs linked to debit card usage, incentivizing regular use.

SECURITY CONSIDERATIONS FOR DEBIT CARDS

Chip Technology:

- EMV chips on debit cards provide enhanced security compared to magnetic stripes, reducing skimming risks.

Card Lock Features:

- Many banks allow users to lock or unlock their debit cards via their mobile app, providing immediate control.

Fraud Alerts:

- Banks monitor transactions for unusual activity and notify customers if suspicious transactions are detected



PHONE BANKING

Importance:

- Phone banking remains a crucial service, especially for customers who prefer personal interaction or do not have internet access.



EXPANDED FEATURES OF PHONE BANKING

Interactive Voice Response (IVR):

- Automated systems guide users through transactions via voice prompts, allowing efficient service.

Real-Time Support:

- Customers can speak to bank representatives for assistance with account issues, fraud reports, or inquiries.

Transaction History:

- Users can request recent transactions, account balances, and mini-statements via phone.

BENEFITS OF PHONE BANKING

Accessibility:

- Phone banking is available 24/7, allowing customers to access services without needing internet connectivity.

Personalized Service:

- Customers can receive tailored assistance based on their individual banking needs.

Support for Elderly and Technologically Challenged Customers:

- Phone banking serves those who may struggle with online banking technology.

SECURITY CONSIDERATIONS IN PHONE BANKING

Voice Recognition Technology:

- Some banks use voice biometrics for authentication, adding an extra layer of security.

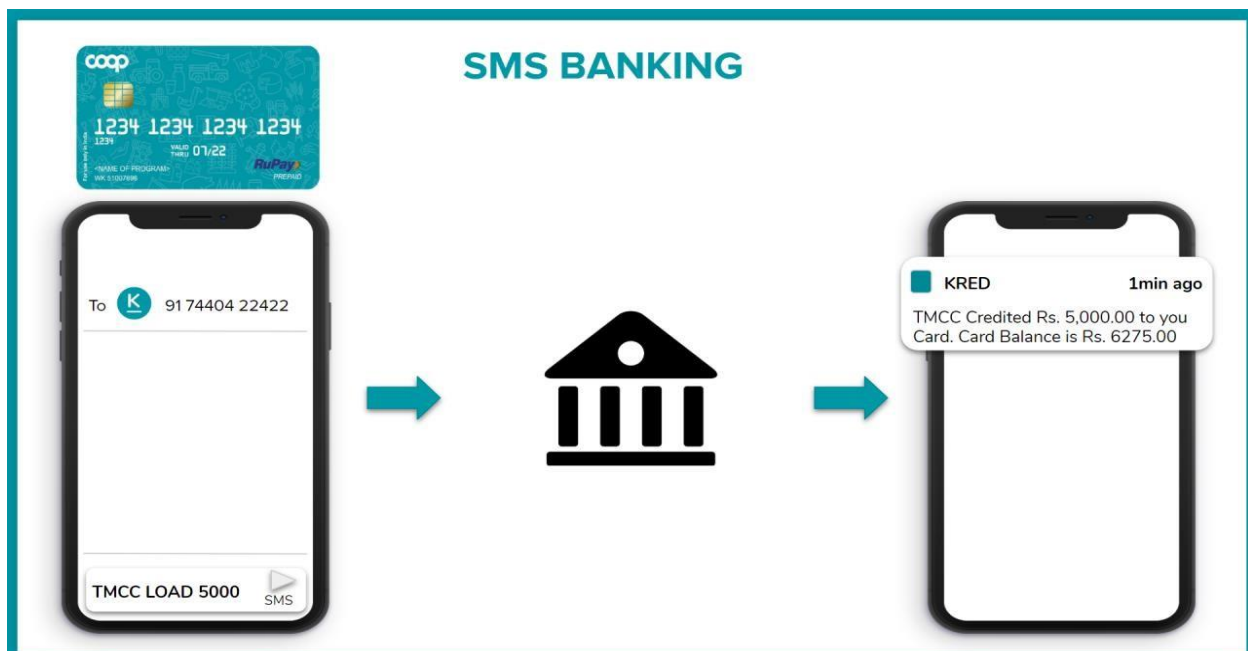
Call Monitoring:

- Banks monitor calls for quality assurance and fraud detection, ensuring customer safety.

SMS BANKING

Utility:

- SMS banking is particularly useful in areas with limited internet access, providing essential banking



EXPANDED FEATURES OF SMS BANKING

Custom Alerts:

- Users can customize alerts for specific account activities, such as deposits, withdrawals, or low balance notifications.

Transaction Initiation:

- Some banks allow users to initiate transfers or payments through SMS commands.

Location Alerts:

- Notifications can be sent if transactions are attempted from locations outside of the user's usual patterns.

BENEFITS OF SMS BANKING

Real-Time Updates:

- Users receive immediate notifications regarding their account activities.

Simplicity:

- SMS banking is straightforward, requiring only basic mobile phone capabilities.

Cost-Effective:

- SMS banking often incurs lower fees than mobile data usage, making it accessible for all users.

SECURITY CONSIDERATIONS FOR SMS BANKING

Secure Messaging:

- While SMS is generally secure, banks encourage users to be cautious about sharing personal information via text.

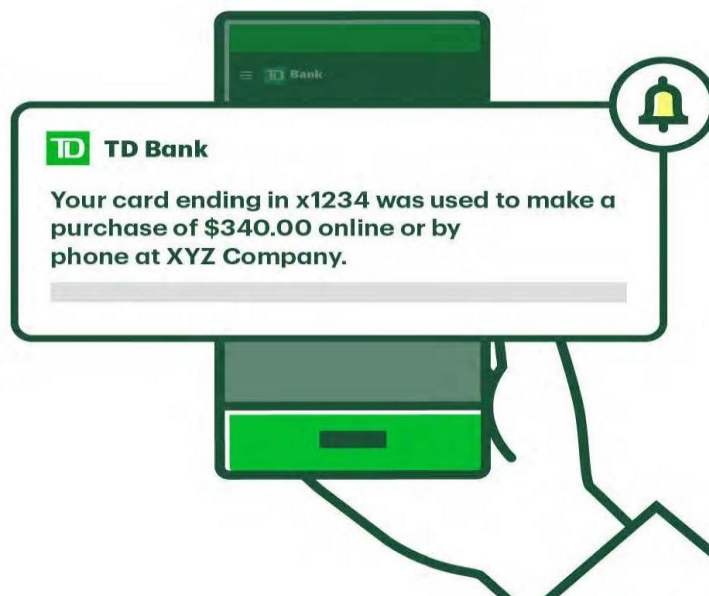
Alert Customization:

- Users are advised to set alerts that are specific enough to reduce false alarms but comprehensive enough to catch fraudulent activities.

ELECTRONIC ALERTS

Role in Banking:

- Electronic alerts have become an integral part of customer communication, enhancing user engagement and security.



EXPANDED TYPES OF ELECTRONIC ALERTS

Credit Score Alerts:

- Notifications about changes in a user's credit score, providing insights for financial management.

Payment Confirmations:

- Alerts confirming successful payments or transactions, assuring customers that their requests have been processed.

Promotional Offers:

- Banks can send personalized offers based on a user's account history or spending patterns.

BENEFITS OF ELECTRONIC ALERTS

Increased Awareness:

- Customers can stay informed about their account activity, helping identify unauthorized transactions quickly.

Financial Management:

- Alerts can help users manage their finances more effectively by providing timely reminders for payments and account balances.

Enhanced Security:

- Immediate notifications about suspicious activity empower users to take swift action if they detect fraud

MOBILE BANKING

Evolution:

- Mobile banking applications have rapidly evolved, incorporating advanced technologies to enhance user experience.



ENHANCED FEATURES OF MOBILE BANKING

Personal Finance Management:

- Many mobile banking apps include budgeting tools, expense tracking, and financial goal setting.

Mobile Wallet Integration:

- Users can link their bank accounts to mobile wallets like Apple Pay or Google Pay for contactless transactions.

Push Notifications:

- Apps can send real-time notifications for transactions, promotional offers, and security alerts.

Video Banking:

- Some banks offer video consultations with representatives, allowing for face-to-face interactions from anywhere.

BENEFITS OF MOBILE BANKING

On-the-Go Access:

- Users can manage their finances from anywhere, making it convenient for busy lifestyles.

Instant Updates:

- Mobile banking allows for immediate access to account updates and transaction alerts.

User-Centric Design:

- Modern apps focus on user experience, often providing a more intuitive interface than traditional online banking.

SECURITY CONSIDERATIONS IN MOBILE BANKING

Multi-Layered Security:

- Mobile banking apps often use multiple layers of security, including biometric authentication, password protection, and encryption.

Regular Updates:

- Banks frequently update their apps to address security vulnerabilities and enhance features.

User Education:

- Banks educate customers about safe practices, such as not accessing banking apps over public Wi-Fi networks to mitigate security risks.

FUTURE TRENDS IN ELECTRONIC BANKING

Artificial Intelligence (AI) and Machine Learning:

- Banks are increasingly using AI to enhance customer service through chatbots, predictive analytics, and fraud detection.

Blockchain Technology:

- Adoption of blockchain for secure and transparent transactions, particularly for cross-border payments.

Open Banking:

- Regulatory changes push banks to share customer data with third-party providers for innovative financial products through APIs.

Digital-Only Banks:

- The rise of neobanks, which focus exclusively on digital services, catering to tech-savvy consumers.

Enhanced Cybersecurity Measures:

- Ongoing investment in advanced cybersecurity measures to protect against rising threats.

Thank You!

