



Concepts of Electronic Banking Services

Electronic banking services refer to the use of **digital technologies and modern communication systems** to provide financial and banking services to customers through various electronic channels such as the internet, mobile applications, and ATMs. They represent a strategic shift from traditional branch-based banking to a fully integrated digital banking model.

1. Electronic Access

The ability for customers to remotely access their bank accounts and financial transactions via online platforms (websites, mobile applications, or phone banking). This ensures convenience and flexibility.

2. Multi-Channel Banking

Electronic services are not limited to the internet only, but also include:

- Online Banking.
- Mobile Banking.
- Phone Banking.
- Smart ATMs. This diversity meets the different preferences of customers.

3. Cybersecurity in Banking

The application of advanced protection mechanisms such as:

- Encryption.
- Two-Factor Authentication.
- Fraud Detection Systems. This enhances customer trust and ensures secure transactions.

4. Automation in Banking

The use of smart systems to automate operations such as:

- Automatic transfers.
- Scheduled bill payments.
- Payroll management. This reduces human intervention and increases efficiency.

5. Financial Integration

Linking electronic banking systems with governmental and commercial platforms (such as tax systems and e-commerce payments), creating a comprehensive financial ecosystem.

6. Availability 24/7

Electronic banking services are available anytime and anywhere without time restrictions, which enhances competitiveness and customer satisfaction.

7. Digital Financial Inclusion

Aimed at providing banking access to underserved populations, such as rural communities and low-income groups, through digital solutions like e-wallets and mobile payments.

8. Financial Innovation

The introduction of modern technologies such as:

- Artificial Intelligence (AI) for customer data analysis.
- Blockchain for secure transfers.
- Chatbots for instant customer service.



ATM vs ITM – Definitions and Differences

Definitions

1. Automated Teller Machine (ATM)

Definition: An ATM is an electronic banking device that allows customers to perform basic financial transactions without the need for a human teller.

Explanation: ATMs are primarily used for cash withdrawals, deposits, balance inquiries, and PIN changes. They are designed for quick, simple, and self-service transactions, operating 24/7. However, they are limited to predefined functions and cannot replace full customer service.

2. Interactive Teller Machine (ITM)

Definition: An ITM is an advanced banking machine that combines the functionalities of a traditional ATM with live, two-way video interaction with a remote bank teller.

Explanation: Through ITMs, customers can perform all ATM transactions and also access extended services such as opening new accounts, requesting checkbooks, or resolving account-related issues while communicating directly with a teller via video. ITMs provide a hybrid experience between digital convenience and personalized customer support.

Comparison Table :

Feature	ATM (Automated Teller Machine)	ITM (Interactive Teller Machine)
Definition	Electronic device for basic banking transactions	Advanced device with video connection to a live teller
Main Services	Withdrawals, deposits, balance inquiry, PIN changes	All ATM services + account opening, check requests, customer support
Customer Interaction	No human interaction	Real-time video communication with a teller
Service Scope	Limited to predefined basic functions	Broader range, including complex transactions
Availability	24/7 self-service	24/7 with extended teller support
Cost for Banks	Lower installation and operation costs	Higher cost due to technology and staffing
Use Case	Quick, simple transactions	More advanced and personalized banking needs

Types of E-Commerce

E-commerce can be categorized into several types based on the parties involved in the transactions, including:

1. Business to Business (B2B) :

- Involves the exchange of goods and services between businesses.
- Example:* A software company selling enterprise resource management systems to other companies.

2. Business to Consumer (B2C):

- Refers to selling products or services directly to individual customers.
- Example:* Consumers purchasing electronic devices from Amazon or Noon.

3. Consumer to Consumer (C2C) :

- Takes place between individuals through platforms that enable users to buy and sell products.
- Example:* Selling used items on platforms such as eBay, OLX, or Facebook Marketplace.

4. Consumer to Business (C2B) :

- Occurs when individuals provide goods or services to companies.

•*Example:* Freelance photographers selling their photos to websites like Shutterstock.



The Future of E-Commerce

E-commerce is not a temporary phenomenon but rather the future of global business, rapidly evolving due to technological progress and continuous innovation. With the increasing reliance on the Internet and mobile devices, companies must adapt to new trends that are reshaping how commerce is conducted. The following are the key trends defining the future of e-commerce:

1. Artificial Intelligence (AI) AI is a fundamental driver of modern e-commerce. It enhances personalization, improves decision-making, and automates processes.

•**Customer Data Analysis:** Helps businesses understand consumer behavior and predict future needs.

•**Smart Chatbots:** Provide 24/7 customer service with instant responses.

•**Dynamic Pricing:** Automatically adjusts prices based on market conditions. *Example:* Amazon recommends products based on browsing history.

2. Mobile Commerce (M-Commerce) With the increasing use of smartphones, mobile commerce has become one of the most significant modern trends in e-commerce.

•**Shift from Websites to Mobile Apps:** Many retailers now rely on mobile apps instead of websites, offering smoother and faster user experiences. *Example:* Platforms like AliExpress and Noon provide seamless shopping through their apps.

•**Mobile Payments:** Digital wallets such as Apple Pay, Google Pay, and PayPal are increasingly popular, making transactions more secure and convenient.

•**Mobile Marketing:** Companies rely on targeted ads within social media apps like Instagram, TikTok, and Facebook to reach customers.

3. Augmented Reality (AR) and Virtual Reality (VR) AR and VR transform online shopping by allowing customers to visualize products before purchasing. *Example:* IKEA uses AR apps to let customers preview furniture in their homes.

4. Blockchain Technology Blockchain ensures secure and transparent transactions, reducing fraud and increasing customer trust. *Example:* Some e-commerce platforms are exploring blockchain-based payment systems.

5. Digital and Mobile Payments Mobile wallets and digital currencies make payments faster, safer, and more convenient. *Example:* Services like Apple Pay, Google Pay, and PayPal are widely integrated into e-commerce platforms.

6. Sustainable E-Commerce Consumers are increasingly valuing eco-friendly practices. Companies adopting green packaging and sustainable supply chains are gaining a competitive edge. *Example:* Brands promoting carbon-neutral shipping options.

Chapter three

Troubleshooting Computer

Troubleshooting: Definition and Importance

What is troubleshooting?

Definition: Troubleshooting is a systematic process used to identify the cause of a problem—especially in technical systems such as computers—and then find a solution to fix it. It is a fundamental skill in our increasingly digital world, where we rely heavily on technology in our daily lives.

Importance of Troubleshooting:

- Saves Time and Effort:** Instead of wasting time searching randomly for solutions, troubleshooting helps quickly pinpoint the problem and resolve it efficiently.
- Increases Productivity:** Knowing how to handle common technical issues reduces downtime and enhances overall productivity.
- Reduces Costs:** Sometimes, you can fix problems yourself without paying for a technician.
- Enhances Confidence and Independence:** This skill empowers individuals to handle technical challenges independently, boosting self-confidence.
- Protects Your Data:** Troubleshooting can prevent data loss that might occur due to technical problems.

Types of Common Computer Problems: Computer problems generally fall into two main categories:

- 1.**Hardware Issues:** Related to the physical components of a computer, such as the monitor, keyboard, or hard drive.
- 2.**Software Issues:** Related to operating systems (e.g., Windows) or applications (e.g., Google Chrome, Microsoft Word).

Examples of Common Problems:

- Failure to boot the computer.
- Blue screen with error messages.
- Slow computer performance.
- Programs becoming unresponsive.
- Internet connectivity issues.
- Printing problems.