INFORMATION TECHNOLOGY IN BANKS, COMPUTERIZATION OF BANKING OPERATIONS- ROLE OF RBI

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TERMINOLOGIES

- **Anytime Banking**: With introduction of ATMs, Tele-Banking and internet banking, customers can conduct their business anytime of the day and night. The 'Banking Hours' is not a constraint for transacting banking business.

- **Anywhere Banking**: Refers to banking not only by ATMs, Tele-Banking and internet banking, but also to core banking solutions brought in by banks where customer can deposit his money, cheques and also withdraw money from any branch connected with the system. All major banks in India have brought in core banking in their operations to make banking truly anywhere banking.

- **ATM**: ATMs are Automatic Teller Machines, which do the job of a teller in a bank through Computer Network. ATMs are located on the branch premises or off branch premises. ATMs are useful to dispense cash, receive cash, accept cheques, give balances in the accounts and also give mini-statements to the customers.
• **Cheque Truncation**: Cheque truncation, truncates or stops the flow of cheques through the banking system. Generally truncation takes place at the collecting branch, which sends the electronic image of the cheques to the paying branch through the clearing house and stores the paper cheques with it.

• **Core Banking Solutions (CBS)**: Core Banking Solutions is a buzz word in Indian banking at present, where branches of the bank are connected to a central host and the customers of connected branches can do banking at any breach with core banking facility.
• **Debit Card**: A plastic card issued by banks to customers to withdraw money electronically from their accounts. When you purchase things on the basis of Debit Card the amount due is debited immediately to the account. Many banks issue Debit-Cum-ATM Cards.

• **Ebanking**: E-Banking or electronic banking is a form of
• **EFT** - (Electronic Fund Transfer) : EFT is a device to facilitate automatic transmission and processing of messages as well as funds from one bank branch to another bank branch and even from one branch of a bank to a branch of another bank. EFT allows transfer of funds electronically with debit and credit to relative accounts.

• **Mobile Banking** : With the help of M-Banking or mobile banking customer can check his bank balance, order a demand draft, stop payment of a cheque, request for a cheque book and have information about latest interest rates.
• **Real Time Gross Settlement (RTGS)**: It is defined as the continuous (real-time) settlement of funds transfers individually on an order by order basis (without netting). 'Real Time' means the processing of instructions at the time they are received rather than at some later time. 'Gross Settlement' means the settlement of funds transfer instructions occurs individually (on an instruction by instruction basis). Considering that the funds settlement takes place in the books of the Reserve Bank of India, the payments are final and irrevocable.

• **National Financial Switch**: A switch developed by IDBRT to connect all the ATM’s across the nation for easier use and convenience.
DEFINITION OF A BANK

- A Bank is an intermediate institution that accepts deposits from the public and lends this to borrowers for a profit.

- Banking has been defined under Section 5 (b) of the Banking Regulation Act 1949 as:

  "banking" means the accepting, for the purpose of lending or investment, of deposits of money from the public, repayable on demand or otherwise, and withdrawal by cheque, draft, order or otherwise;

- Banks have two kinds of functions namely:
  1. Primary functions which are accepting deposits and granting loans.
  2. Secondary functions which include functions like clearance of cheque, sale/Purchase of Shares/Bonds, transfer of money, to work as trustee/representative, to give/accept money and to provide letter of credit.
INFORMATION TECHNOLOGY IN BANKS

• Continuity-IT in banks critical for their sound functioning, ALM, Sustaining Competition, building capital, adequate financial resources, Risk Mitigation
• Profit- Competition, reducing costs, rationalisation/ Restructuring of HR, Efficiency in operations
• Govt regulations, Supervisory regulations.
Why IT in Banks

• Making banking transactions faster, cheaper and easier
• Enhances choices
• Creates new markets
• Improves productivity and efficiency
• Increased level of activity - Increased productivity.
• Catering to increasing clientele.
COMPUTERIZATION OF BANKING OPERATIONS

• Initial resistance by trade unions in public sector banks.

• IBA agreement between unions and management of Public Sector Banks in 1993 was a major breakthrough for computerization in the banking industry.

• Two Rangarajan committee reports had made recommendations on mechanization and computerization of banking industry during 1984 and 1989.
COMPUTERIZATION OF BANKING OPERATIONS - 2

- Major Recommendations of the Rangarajan Committee were:

1. The process of mechanization in the Banking Industry should encompass activities at the branch, regional, and head office levels, with emphasis varying from one level to another.
2. At the branch level, a system will have to be so designed to ensure generation of data as a by-product of the operations at the branch level.
3. Branch level mechanization should be implemented under either Model I or Model II mode of mechanization.

- Model I mode of mechanization deals with stand-alone electronic ledger posting machines whereas Model II is a single microprocessor-based system of large capacity

- Setting up of IDRBT in 1996 for the purpose of Research and Development in banking technology.
Setting up of Core Banking System in Banks to computerised branch banking operations.

Introduction of banking technologies like ATM’s and Smart Cards (credit and debit cards).

White label ATM’s introduced for the non-banking sector.

Adoption of payments and settlement systems like MICR, RTGS, NEFT, NECS, SWIFT etc.

The advent of online and mobile banking.
CBS

• Computerisation of branches
• Linking of branches
• Central data base
• Results-
  1. Large volumes of transactions, data and book-keeping
  2. Better delivery of basic banking operations.
  3. Increased Delivery Channels
Delivery Channels

• ATMS
• Net Banking
• Tele Banking
• Mobile Banking
• Innovative payment devices
• UIDAI No.
Role of RBI

• Enabling financial sector to leverage on IT for better:
  1. customer service
  2. improved housekeeping and
  3. overall systemic efficiency

• Enabling regulation and supervision of the banking sector by establishing security controls.

• Effecting electronic payment and settlement systems like RTGS, NEFT and NECS.

• Establishment of IDRBT to focus on:
  1. Financial Network and Application Architecture
  2. Payments System and Security Technology
  3. Multimedia, Internet Technologies and Web Based Learning
  4. Data Mining, Data Warehousing and Risk Management

• Facilitating use of Information technology to achieve Financial Inclusion.
Financial Inclusion

• Banking Correspondents
• Low-Cost ATM rollouts
• Revenue Sharing Models
• Service Management
Future ahead

• Data Warehouse- collaboration
• CRM- Customer Relationship Manager- Techno elasticity, Retaining customers
• Cyber Security
• Increased role of CERT-IN, Ministry of Comm and Tech, GOI, IDRBT. Computer Emergency Response Team
• Financial Inclusion- Large deposits with lower costs
• IT Governance
Future Ahead

- Cloud Computing
- Virtually Automate Branch
- Channel Innovation-Social Media
- Managing Risk- Credit Risk Management is the underlying case
- Collaboration
- Business Continuity management and Disaster Recovery
- Automated Data Flow
- Innovate or perish
QUESTIONS