VIRTUAL CLASSES ORGANISED BY BOS, ICAI INTERMEDIATE

PAPER-7A: ENTERPRISE INFORMATION SYSTEMS

Faculty: **CA ATUL KUMAR GUPTA, B.Com., FCA, DISA (ICAI)**

CHAPTER 5: CORE BANKING SYSTEM

CA. Atul Kumar Gupta

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- The presentation is to help students understand the nuances of the subject, get a better grip on it. Any example given is help gain proper perspective to the issue in hand and in no way intended to degrade, denounce any person or and technology being used.

- The presentation is based on study module.

- HAPPY LEARNING...

Disclaimer's and Disclosures

- All banking frauds to be discussed shall be from perspective to help listener / viewer understand the issue of system / internal control / faults in system / scope of improvements.

- **No** where the discussion is directed towards individuals involved or implicate anyone concerned.

- Any discussion is **not** intended to give verdict on any person / organisation, any reference is only for understanding purpose.

A request at the start

- Please ask questions during the session's,

- It adds to learning curve .....

- Thanks

LEARNING OUTCOMES

- Understand components and architecture of CBS and impact of related risks and controls.

- Appreciate the functioning of core modules of banking and business process flow and impact of related risks and controls.

- Comprehend regulatory and compliance requirements applicable to CBS such as Banking Regulations Act, RBI regulations, Prevention of Money Laundering Act and Information Technology Act.

CHAPTER OVERVIEW

- DIAGRAM FROM MODULE : PAGE 5.2

Chapter Outline

- **Main Topic I:** OVERVIEW OF BANKING SERVICES AND RELATED IT RISK AND CONTROLS

- **Main Topic II :** COMPONENT AND ARCHITECTURE OF CBS

- **Main Topic III:** CBS RISKS, SECURITY AND CONTROLS

- **Main Topic IV:** REPORTING SYSTEMS AND MIS, DATA ANALYTICS AND BUSINESS INTELLIGENCE

- **Main Topic V:** APPLICABLE REGULATORY AND COMPLIANCE REQUIREMENTS

MT I: OVERVIEW OF BANKING SERVICES AND RELATED IT RISK AND CONTROLS

- Topic 1: Introduction

- Topic 2: Overview of Banking Services

- Topic 3: Overview of Core Banking System (CBS)

- Topic 4: Core Features of CBS

MT II: COMPONENT AND ARCHITECTURE OF CBS

- Topic 1: Technology Components of CBS

- Topic 2: CBS IT Environment

- Topic 3: Functional Architecture of CBS

- Topic 4: Internet Banking Process

- Topic 5: E-Commerce Transaction Processing

- Topic 6: Case Study on Deployment

- Topic 7: Implementation of CBS

MT III: CBS RISKS, SECURITY AND CONTROLS

- Topic 1: Risks Associated with CBS

- Topic 2: Security Policy

- Topic 3: Internal Control Systems in Banks

MT IV: REPORTING SYSTEMS AND MIS, DATA ANALYTICS AND BUSINESS INTELLIGENCE

- Topic 1: Risk Prediction for Basel III, based on Artificial Intelligence

MT V: APPLICABLE REGULATORY AND COMPLIANCE REQUIREMENTS

- Topic 1: Impact of Technology in Banking

- Topic 2: Money Laundering

- Topic 3: Cyber Crimes

- Topic 4: Banking Regulation Acts

The way we shall proceed

- Chapter has
- Main Topics
  - *Topics*
    - Sub-Topics
      - *Parts of Sub Topics*
        - Points to parts of Sub –Topics
          - *…..*

What we talked till now

- Main Topics and there Topics

- We need to keep track of all of this

- We shall use legends to remember

MT I: OVERVIEW OF BANKING SERVICES AND RELATED IT RISK AND CONTROLS

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MT I: Topic 1: Introduction

■ Information Technology (IT) is an integral aspect of functioning of enterprises and professionals in this digital age. In case of banking which deals with money, has now increasingly become digital and IT plays a very critical role.

■ Banking is the engine of economic growth specifically in a rapidly developing country like India with its diverse background, practices, cultures and large geographic dispersion of citizens.

■ Banking operations have changed fundamentally over last 25 years.

MT I: OVERVIEW OF BANKING SERVICES AND RELATED IT RISK AND CONTROLS

- Topic 1: Introduction

- Topic 2: Overview of Banking Services

- Topic 3: Overview of Core Banking System (CBS)

- Topic 4: Core Features of CBS

MT I: Topic 2:
Overview of Banking Services

- ## ST I: Acceptance of Deposits
- ST II: Granting of Advances
- ST III: Remittances
- ST IV: Collections
- ST V: Clearing
- ST VI: Letters of Credit and Guarantees
- ST VII: Credit Cards
- ST VIII: Debit Cards
- ST IX: Other Banking Services

MT I: Topic 2: ST 1: Acceptance of Deposits

- Deposits involve deposits by customers in various schemes for pre-defined periods.

- Commercial banks accept deposits in various forms such as term deposits, savings bank deposits, current account deposits, recurring deposit, saving-cum-term deposit and **various others innovative products.**

MT I: Topic 2:
Overview of Banking Services

- ST I: Acceptance of Deposits

ST II: Granting of Advances

- ST III: Remittances

- ST IV: Collections

- ST V: Clearing

- ST VI: Letters of Credit and Guarantees

- ST VII: Credit Cards

- ST VIII: Debit Cards

- ST IX: Other Banking Services

MT I: Topic 2: ST 2: Granting of Advances

- The type of advances granted by commercial banks take various forms such as :
  - Cash Credit,
  - Overdrafts,
  - Purchase/ discounting of bills,
  - Term loans,
  - Commercial papers,
  - ECB (External Commercial Borrowing)
  - **KCC, Mudra Yozana**

MT I: Topic 2:
Overview of Banking Services

- ST I: Acceptance of Deposits

- ST II: Granting of Advances

ST III: Remittances

- ST IV: Collections

- ST V: Clearing

- ST VI: Letters of Credit and Guarantees

- ST VII: Credit Cards

- ST VIII: Debit Cards

- ST IX: Other Banking Services

MT I: Topic 2: ST 3: Remittances

- Remittances involve transfer of funds from one place to another. Modes of remittance of funds are;
  - OLD modes
    - Demand drafts and
    - Telegraphic/ Mail Transfers (TT/ MT).
  - NEW MODES: **EFT**
    - **RTGS**
    - **NEFT**
    - **IMPS**

MCQ: Which is the fastest mode of money transfer?

- A. RTGS
- B. NEFT
- C. IMPS
- D. TT

- Answer: C

MCQ: Which mode of transfer is available even on a bank holiday?

- A. RTGS

- B. NEFT

- C. IMPS

- D. TT

- Answer: C

MT I: Topic 2:
Overview of Banking Services

- ST I: Acceptance of Deposits

- ST II: Granting of Advances

- ST III: Remittances

ST IV: Collections

- ST V: Clearing

- ST VI: Letters of Credit and Guarantees

- ST VII: Credit Cards

- ST VIII: Debit Cards

- ST IX: Other Banking Services

MT I: Topic 2: ST 4: Collections

■ Collections involve collecting proceeds on behalf of the customer. Customers can lodge various instruments such as ;

 – cheques, drafts, pay orders, travellers' cheques, dividend and interest warrants, tax refund orders.

 – Banks also collect instruments issued by post offices, like national savings certificates, postal orders.

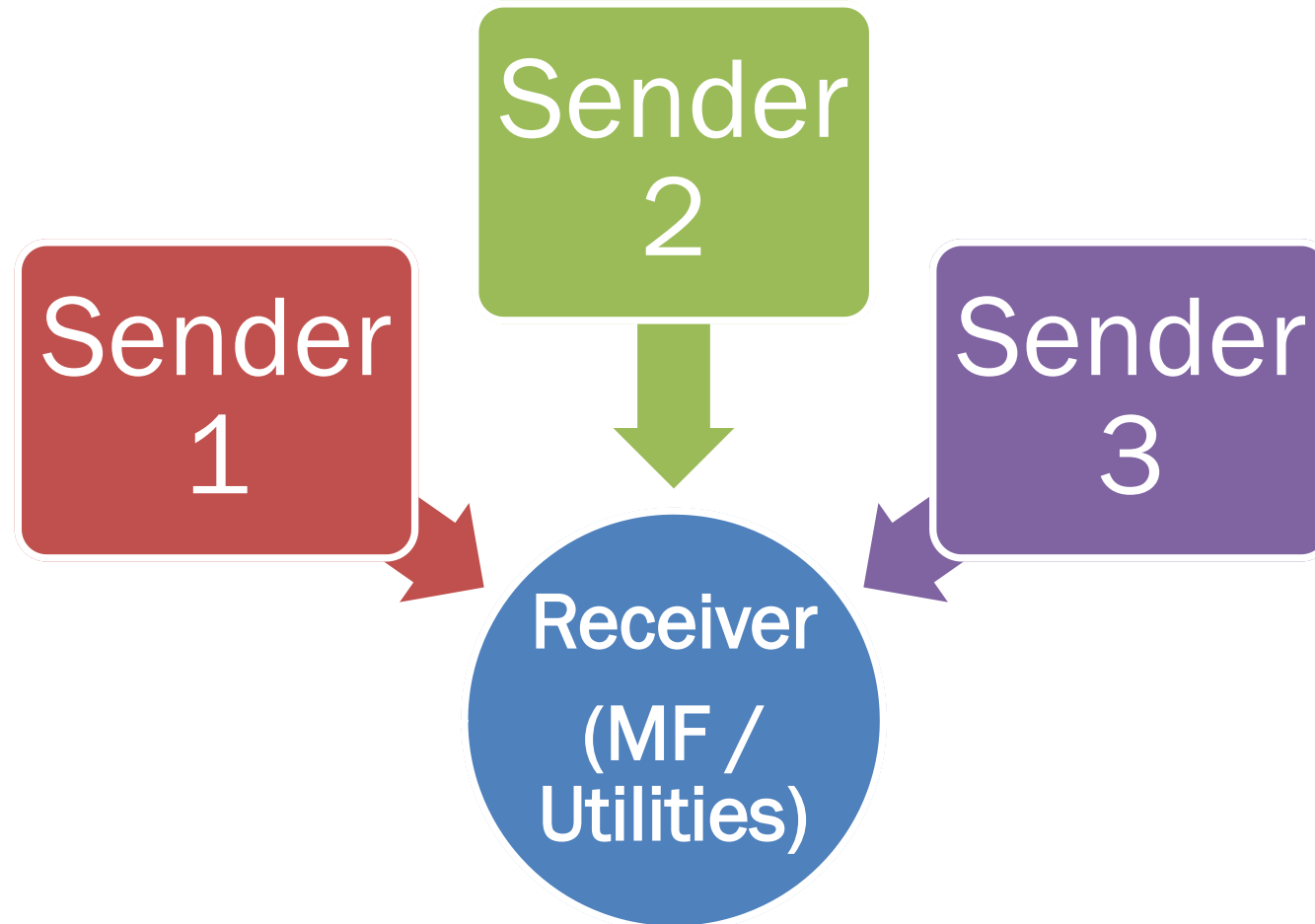 – **Cash Collections Services, Cheque Collection Services**

MT I: Topic 2: Overview of Banking Services

- ST I: Acceptance of Deposits

- ST II: Granting of Advances

- ST III: Remittances

- ST IV: Collections

- ## ST V: Clearing

- ST VI: Letters of Credit and Guarantees

- ST VII: Credit Cards

- ST VIII: Debit Cards
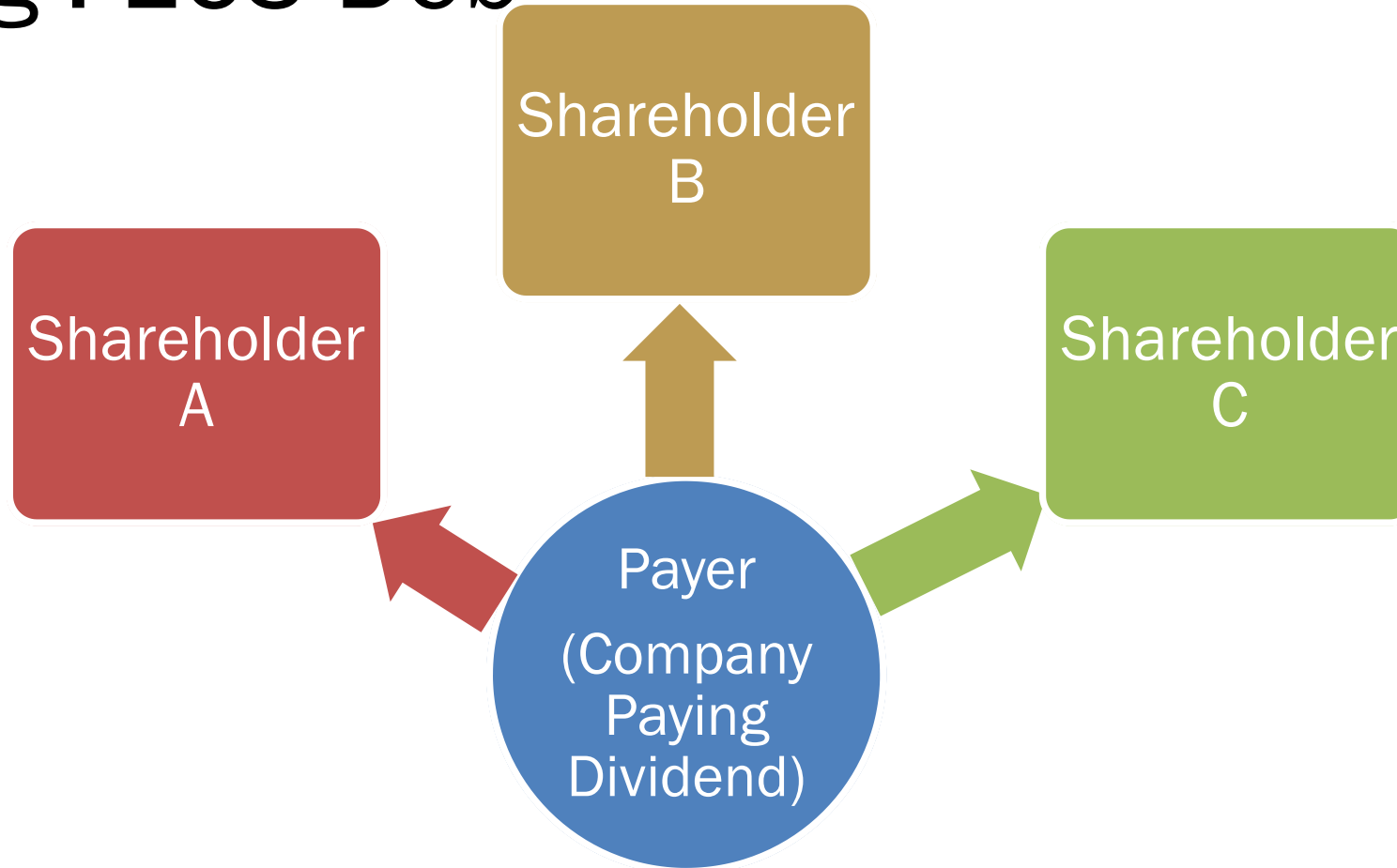
- ST IX: Other Banking Services

MT I: Topic 2: ST 5: Clearing

- Clearing involves collecting instruments on behalf of customers of bank.

- Electronic Clearing Services (ECS) is widely used.
  - ECS Credit.
  - ECS Debit.

MT I: Topic 2: ST 5: Clearing : ECS Credit

MT I: Topic 2: ST 5: Clearing : ECS Debit

Shareholder A

Shareholder B

Shareholder C

Payer
(Company Paying Dividend)

MT I: Topic 2:
Overview of Banking Services

- ST I: Acceptance of Deposits
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- ST III: Remittances
- ST IV: Collections
- ST V: Clearing
- ## ST VI: Letters of Credit and Guarantees
- ST VII: Credit Cards
- ST VIII: Debit Cards
- ST IX: Other Banking Services

MT I: Topic 2: ST 6: Letters of Credit and Guarantees

■ Issuing letters of credit and guarantees are two important services rendered by banks to customers engaged in business, industrial and commercial activities.

MT I: Topic 2: Overview of Banking Services

- ST I: Acceptance of Deposits

- ST II: Granting of Advances

- ST III: Remittances

- ST IV: Collections

- ST V: Clearing

- ST VI: Letters of Credit and Guarantees

■ ST VII: Credit Cards

- ST VIII: Debit Cards

- ST IX: Other Banking Services

MT I: Topic 2: ST 7: Credit Cards

■ The processing of applications for issuance of credit cards is usually entrusted to a separate division at the central office of a bank. Card issuers;

- – VISA,

- – Master,

- – Amex or

- – India's own RuPay.

MT I: Topic 2: Overview of Banking Services

- ST I: Acceptance of Deposits

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- ST IV: Collections

- ST V: Clearing

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- ST VII: Credit Cards

ST VIII: Debit Cards

- ST IX: Other Banking Services

MT I: Topic 2: ST 8
Debit Cards

- Debit Cards are issued by the bank where customer is having their account. Debit cards are generally issued by the central office of the bank.

MT I: Topic 2:
Overview of Banking Services

- ST I: Acceptance of Deposits

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- ST III: Remittances

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- ST VI: Letters of Credit and Guarantees

- ST VII: Credit Cards

- ST VIII: Debit Cards

■ ST IX: Other Banking Services

MT I: Topic 2: ST 9
Other Banking Services ...Slide 1

- Back operations:

- Retail Banking:

- High Net-worth Individuals (HNI) Account Management:

- Risk Management

MT I: Topic 2: ST 9
Other Banking Services ...Slide 2

■ Specialized Services: Banks also perform other services such as;

– Insurance broking,

– Claims,

– Underwriting,

– Life insurance,

– Non-life insurance, etc.

MT I: OVERVIEW OF BANKING SERVICES AND RELATED IT RISK AND CONTROLS

- Topic 1: Introduction

- Topic 2: Overview of Banking Services

- ## Topic 3: Overview of Core Banking System (CBS)

- Topic 4: Core Features of CBS

MT III: Topic: Overview of Core Banking System (CBS)

- Sub Topic 1: Characteristics

- Sub Topic 2: Vendors

- Sub Topic 3: Key Modules

MT III: Topic 1: ST 3
Key Modules..Slide 1

- Diagram from Module: Page 5.12

MT III: Topic 1: ST 3
Key modules...Slide 2

- Back Office

- Data Warehouse

- Credit-Card System

- Automated Teller Machines (ATM)

- Central Server

- Internet Banking

- Mobile Banking

MT III: Topic 1: ST 3
Key modules...Slide 3

■ Phone Banking

■ <u>Branch Banking:</u>

- – Creating manual documents capturing data required for input into software;

- – Internal authorization.

- – Initiating Beginning-Of-Day (BOD) operations;

- – End-Of-Day (EOD) operations; and

- – Reviewing reports for control and error correction.

MT I: OVERVIEW OF BANKING SERVICES AND RELATED IT RISK AND CONTROLS

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MT IV:
Core Features of CBS: Slide...1

- On-line real-time processing.

- Transactions are posted immediately.

- All databases updated simultaneously.

- Centralized Operations (All transactions are stored in one common database/server).

- Separate hierarchy for business and operations.

- Business and Services are productized.

- Remote interaction with customers.

- Reliance on transaction balancing.

MT IV:
Core Features of CBS: Slide...2

- Highly dependent system-based controls.

- Authorizations occur within the application.

- Increased access by staff at various levels based on authorization.

- Daily, half yearly and annual closing,

- Automatic processing of standing instructions,

- Centralized interest applications for all accounts and account types.

- Anytime, anywhere access to customers and vendors.

- Banking across multiple channels

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- **Main Topic I:** OVERVIEW OF BANKING SERVICES AND RELATED IT RISK AND CONTROLS

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- **Main Topic V:** APPLICABLE REGULATORY AND COMPLIANCE REQUIREMENTS

MT II: COMPONENT AND ARCHITECTURE OF CBS

- Topic 1: Technology Components of CBS

- Topic 2: CBS IT Environment

- Topic 3: Functional Architecture of CBS

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- Topic 5: E-Commerce Transaction Processing

- Topic 6: Case Study on Deployment

- Topic 7: Implementation of CBS

MT II: Topic 1
Technology Components of CBS..1

- The software resides in a centralized application server which is in the Central Office Data Centre.

MT II: Topic 1
Technology Components of CBS..2

■ The key technology components of CBS are as follows:

■ Database Environment, Application Environment, Web Environment, Security Solution, Connectivity to the Corporate Network and the Internet, Data Centre and Disaster Recovery Centre, Network Solution architecture to provide total connectivity, Enterprise Security architecture, Branch and Delivery channel, Online Transaction monitoring for fraud risk management

MT II: Topic 1
Technology Components of CBS..3

■ Key aspects in-built into architecture of a CBS are as follows::

– Information flow:

– Customer centric:

– Regulatory compliance:

– Resource optimization:

MT II: COMPONENT AND ARCHITECTURE OF CBS

- Topic 1: Technology Components of CBS

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MT II: Topic 2
CBS IT Environment

■ Servers: Application, Database, Automated Teller Machine channel, Internet Banking Channel, Internet Banking Application, Web, Proxy, Anti-Virus Software

■ Other ..need based deployments.

MT II : Topic 2:
CBS IT Environment: Diagram

Client

- Teller
- Customer

Channel Server

- Branch Server
- ATM / POS Switch
- IVR Server
- WAP or SMS Server
- Web Server

Application Server

- Business Intelligence
- TP Monitors
- Host Connect

Host Database Server

- Oracle DBMS
- Execution Logic

MT II: COMPONENT AND ARCHITECTURE OF CBS

■ Topic 1: Technology Components of CBS

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■ Topic 7: Implementation of CBS

MT II : Topic 3:
Functional Architecture of CBS

- Diagram from module page 5.22

MT II: Topic 3:
Functional Architecture of CBS

■ A Core Banking Solution is the enterprise resource planning software of a bank. It covers all aspects of banking operations from a macro to micro perspective and covers the entire gamut of banking services ranging from front office to back office operations, transactions at counters to online transactions up to general ledger and reporting as required.

■ CBS is modular in nature and is generally implemented for all functions or for core functions as decided by the bank.

MT II: COMPONENT AND ARCHITECTURE OF CBS

■ Topic 1: Technology Components of CBS

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■ Topic 6: Case Study on Deployment

■ Topic 7: Implementation of CBS

MT II: COMPONENT AND ARCHITECTURE OF CBS

- Topic 1: Technology Components of CBS

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- ## Topic 5: E-Commerce Transaction Processing

- Topic 6: Case Study on Deployment

- Topic 7: Implementation of CBS

MT II : Topic 5
e-Commerce Transaction Process

■ Most of the e-Commerce transactions involve advance payment either through a credit or debit card issued by a bank. Here, the user logs in on the e-commerce web site, places an order and selects option of payment – Cards, or Internet Banking.

■ Already covered in detail in Chapter 4

MT II: COMPONENT AND ARCHITECTURE OF CBS

■ Topic 1: Technology Components of CBS

■ Topic 2: CBS IT Environment

■ Topic 3: Functional Architecture of CBS

■ Topic 4: Internet Banking Process

■ Topic 5: E-Commerce Transaction Processing

■ Topic 6: Case Study on Deployment

■ Topic 7: Implementation of CBS

MT II : Topic 6
Case Study on Deployment

- One from Module: Please go through

- A live with Implementation Steps

MT II: COMPONENT AND ARCHITECTURE OF CBS

- Topic 1: Technology Components of CBS

- Topic 2: CBS IT Environment

- Topic 3: Functional Architecture of CBS

- Topic 4: Internet Banking Process

- Topic 5: E-Commerce Transaction Processing

- Topic 6: Case Study on Deployment

▪ Topic 7: Implementation of CBS

MT II : Topic 7
Implementation of CBS

- Introduction

- Steps to Implementation

MT II : Topic 7: Implementation of CBS Steps to Implementation..1

- Planning:

- Approval:

- Selection:

- Design and develop or procured

- Testing

- Implementation

MT II : Topic 7: Implementation of CBS Steps to Implementation..2

- Maintenance

- Support

- Updation

- Audit

Chapter Outline

■ **Main Topic I:** OVERVIEW OF BANKING SERVICES AND RELATED IT RISK AND CONTROLS

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Main Topic III: CBS RISKS, SECURITY AND CONTROLS

■ Topic 1: Risks associated with CBS

■ Topic 2: Security Policy

■ Topic 3: Internal Control System in Banks

Main Topic III:
Topic 1: Risks associated with CBS

- Operational Risk: *Transaction processing risk, information security risk, legal risks, compliance risks, people risks*

- Credit Risk

- Market Risk:

- Strategic Risk

- IT Risk: In Detail

Main Topic III:
Topic 1: Risks associated with CBS

- IT Risk..1

- Once the complete business is captured by technology and processes are automated in CBS; the Data Centre (DC) of the bank, customers, management and staff are completely dependent on the DC.

- Some of the common IT risks related to CBS are as follows:
  - Ownership of Data/ process
  - Authorization process
  - Authentication procedures

Main Topic III:
Topic 1: Risks associated with CBS

- **IT Risk: Some of the common IT risks related to CBS are as follows..2**

- Several software interfaces across diverse networks...next slide

- Maintaining response time:

- User Identity Management

- Access Controls

- Incident handling procedures

- Change Management

Main Topic III: CBS RISKS, SECURITY AND CONTROLS

■ Topic 1: Risks associated with CBS

■ Topic 2: Security Policy

■ Topic 3: Internal Control System in Banks

Main Topic III:
Topic 2: Security Policy

■ Large corporations like banks, financial institutions need to have a laid down framework for security with properly defined organizational structure.

■ Security policy creation is a top management job.

Main Topic III:
Topic 2: Security Policy

■ Information Security Policy as per ISO 27001

- *Information Security Policies, Procedures, and practices*

- *User Security Administration:*

- *Application Security*

- *Database Security*

- *Network Security*

- *Physical Security*

- *Operating System Security*

- *Network Security*

- *Physical Security*

Main Topic III:
Topic 2: Security Policy.. Table 1

- FROM MODULE : Page 5.31

Main Topic III: CBS RISKS, SECURITY AND CONTROLS

■ Topic 1: Risks associated with CBS

■ Topic 2: Security Policy

■ Topic 3: Internal Control System in Banks

Main Topic III:
Topic 3: Internal Controls System in Bank

- Internal Controls in Banks

- IT Controls in Banks

- Application Software - Configuration, Masters, Transactions and Reports

- CBS: Core Business Processes - Relevant Risks and Controls

Main Topic III:
Topic 3: Internal Controls System in Bank

- **Internal Controls in Banks..Slide 1**

- Work of one staff member is invariably supervised/ checked by another staff member, irrespective of the nature of work (Maker-Checker process).

- A system of job rotation among staff exists.

- Financial and administrative powers of each official/ position is fixed and communicated to all persons concerned.

- Details of lost security forms are immediately advised to controlling so that they can exercise caution.

Main Topic III:
Topic 3: Internal Controls System in Bank

- **Internal Controls in Banks..Slide 2**

- Branch managers must send periodic confirmation to their controlling authority on compliance of the laid down systems and procedures.

- All books are to be balanced periodically. Balancing is to be confirmed by an authorized official.

- Fraud prone items like currency, valuables, draft forms, term deposit receipts, traveller's cheques and other such security forms are in the custody of at least two officials of the branch.

- Effective internal audit should be carried out.

Main Topic III:
Topic 3: Internal Controls System in Bank

- IT Controls in Bank

- IT risks need to be mitigated by implementing the right type and level of controls in the automated environment. This is done by integrating controls into IT. Sample list of IT related controls are:

- Sample list of IT related controls: From Module

Main Topic III:
Topic 3: Internal Controls System in Bank

- Internal Controls in Banks

- IT Controls in Banks

- Application Software - Configuration, Masters, Transactions and Reports

- CBS: Core Business Processes - Relevant Risks and Controls

Main Topic III:
Topic 3: Internal Controls System in Bank

■ Application Software - Configuration, Masters, Transactions and Reports.

■ Application Software whether it is a high-end CBS software, ERP software or a simple accounting software, have primarily **four gateways** through which enterprise can control functioning, access and use the various menus and functions of the software. These are **Configuration, Masters, Transactions** and **Reports**.

Main Topic III:
Topic 3: Internal Controls System in Bank

- **Configuration**: Some examples of configuration in the context of CBS software are given here:
  - Defining access rules from various devices/terminals.
  - Creation of User Types
  - Creation of Customer Type, Deposit Type, year-end process
  - User Access & privileges - Configuration & its management
  - Password Management

Main Topic III:
Topic 3: Internal Controls System in Bank

- **Masters:** Some examples of masters in context of CBS Software are as follows:

  - **Customer Master:** Customer type, details, address, PAN details,

  - **Employee Master:** Employee Name, Id, designation, level, joining details, salary, leave, etc.

  - **Income Tax Master:** Tax rates applicable, Slabs, frequency of TDS, etc.

Main Topic III:
Topic 3: Internal Controls System in Bank

■ **Transactions:** Some examples of transactions in the context of CBS software are given here:

- Deposit transactions:

- Advances transactions:

- ECS transactions:

- General Ledger:

Main Topic III:
Topic 3: Internal Controls System in Bank

■ **Reports:** Users at different levels use information in different form of reports - standard or adhoc reports, which are periodically generated or on demand.

- – Summary of transactions of day
- – Daily General Ledger (GL) of day
- – Activity Logging and reviewing
- – MIS report for each product or service
- – Reports covering performance/compliance;
- – Reports of exceptions, etc.

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Main Topic III: Topic 3: Internal Controls System in Bank. **Risks wrt Application Controls**

- Table from Module: Page 5.35

Main Topic III:
Topic 3: Internal Controls System in Bank

- Internal Controls in Banks

- IT Controls in Banks

- Application Software - Configuration, Masters, Transactions and Reports

- CBS: Core Business Processes - Relevant Risks and Controls

Main Topic III: CBS RISKS, SECURITY AND CONTROLS : Security Policy

- Table 5.3.1 from Module Page 5.31-5.32

Main Topic III:
Topic 3: Internal Controls System in Bank

- CBS: Core Business Processes - Relevant Risks and Controls

- Banks carry out variety of functions across the broad spectrum of products offered by them. Some of the key products that are provided by most commercial banks are Current and Savings Accounts (CASA), Credit Cards, Loans and Advances, Treasury and Mortgages.

- Business process flows from next slide..

Main Topic III: Topic 3: Internal Controls System in Bank: Core Business Processes

■ Topic 1: BUSINESS PROCESS FLOW

■ Topic 2: RISKS

MT III : Topic 1: Business Process Flow
ST 1 : Business Process Flow of CASA facility

- Process Flow of CASA facility

- Risk & Controls around the CASA Process

Main Topic III: Topic 3: Internal Controls System in Bank: Core Business Processes

■ **Business Process Flow of Current Account and Savings Account (CASA) facility**

■ Business Process flow of Credit Cards

■ Business Process Flow of Mortgages

■ Treasury Process

■ Loans and Trade Finance Process

Main Topic III: Topic 3: Internal Controls System in Bank: Core Business Processes

- **Process Flow of CASA facility**

- Application from customer

- Documentation collected from customer

- Handing of document to credit Team / risk Team

- Verification of documents

- Account opened

- Customer can use account for numerous functions.

- **Risk and controls matrix: Module PAGE 5.39**

Main Topic III: Topic 3: Internal Controls System in Bank: Core Business Processes

- Business Process Flow of Current Account and Savings Account (CASA) facility

- ## Business Process flow of Credit Cards

- Business Process Flow of Mortgages

- Treasury Process

- Loans and Trade Finance Process

Main Topic III: Topic 3: Internal Controls System in Bank: Core Business Processes: CC

- Process Flow of Issuance of Credit Card Facility

- Process Flow of Sale - Authorization process of Credit Card Facility

- Process Flow of Clearing & Settlement process of Credit Card Facility

- Risks and Controls around the Credit Card Process: Table 5.3.4 at page 5.42-5.43

Main Topic III: Topic 3: Internal Controls System in Bank: Core Business Processes

- Business Process Flow of Current Account and Savings Account (CASA) facility

- Business Process flow of Credit Cards

- ## Business Process Flow of Mortgages

- Treasury Process

- Loans and Trade Finance Process

Main Topic III: Topic 3: Internal Controls System in Bank: Core Business Processes: Mortgages

- Types of Mortgage Loan

- Process Description

- Risk & Controls around the Mortgage Process

MT III : Topic 1: Topic 3: Internal Controls System in Bank: Core Business Processes: Mortgages

- Types of Mortgage Loan

- Home Loan:

- Top Up Loan:

- Loans for Under Construction Property:

- Rate of interest can be fixed / fluctuating.

MT III : Topic 3: Internal Controls System in Bank: Core Business Processes: Mortgages

- Process description for mortgage loan

- Risk & Controls around the Mortgage Process: Table 5.3.5 Page 5.47

Main Topic III: Topic 3: Internal Controls System in Bank: Core Business Processes

- Business Process Flow of Current Account and Savings Account (CASA) facility

- Business Process flow of Credit Cards

- Business Process Flow of Mortgages

- ## Treasury Process

- Loans and Trade Finance Process

MT III : Topic 3: Internal Controls System in Bank: Core Business Processes: Treasury

■ Introduction

■ Core areas of Treasury Operations

■ Process flow for Bank Treasury Operations

■ Risk & Controls around the Treasury Process

MT III : Topic 3: Internal Controls System in Bank: Core Business Processes: Treasury

■ Introduction

■ Investments Category are Government Securities (Gsec), shares, other investments, such as, Commercial Papers, Certificate of Deposits, Security Receipts, Pass Through Certificates, Units of Mutual Funds, Venture Capital Funds and Real Estate Funds Debentures and Bonds.

MT III : Topic 3: Internal Controls System in Bank: Core Business Processes: Treasury

- Core areas of Treasury Operations

- Dealing Room Operations (Front office operations);

- Middle Office (Market Risk department / Product Control Group); and

- Back office.

- Process flow

- Risks and controls: Table 5.3.6 at page 5.50

Main Topic III: Topic 3: Internal Controls System in Bank: Core Business Processes

- Business Process Flow of Current Account and Savings Account (CASA) facility

- Business Process flow of Credit Cards

- Business Process Flow of Mortgages

- Treasury Process

- Loans and Trade Finance Process

Main Topic III: Topic 3: Internal Controls System in Bank: Core Business Processes: Loan and Trade Finance

- Classification of Credit Facilities

- Process flow for Fund based loans

- Process flow for Non-fund based loans

- Risk and Controls in the Loans and Advances Process

MT III : Topic 3: Internal Controls System in Bank: Core Business Processes: Loan and Trade Finance

Classification of Credit Facilities

- Fund Based Credit Facilities:
    - Cash Credits / Overdrafts
    - Demand Loans / Term loans
    - Bill Discounting
- Non Fund Based Credit Facilities
    - Letter of Credit
    - Letter of Guarantee

MT III : Topic 3: Internal Controls System in Bank: Core Business Processes: Loan and Trade Finance

- Process flow, is overall same for all types of loan.

- Customer Master Creation in Loan Disbursement System

- Loan Disbursal / Facility Utilization and Income Accounting

- Risks and controls: Table 5.3.7 (Page 5.53) and Table 5.3.8 (Page 5.56)

Chapter Outline

- **Main Topic I:** OVERVIEW OF BANKING SERVICES AND RELATED IT RISK AND CONTROLS

- **Main Topic II :** COMPONENT AND ARCHITECTURE OF CBS

- **Main Topic III:** CBS RISKS, SECURITY AND CONTROLS

- **Main Topic IV:** REPORTING SYSTEMS AND MIS, DATA ANALYTICS AND BUSINESS INTELLIGENCE

- **Main Topic V:** APPLICABLE REGULATORY AND COMPLIANCE REQUIREMENTS

MT IV : REPORTING SYSTEMS AND MIS, DATA ANALYTICS AND BUSINESS INTELLIGENCE ..Slide 1

- Basel III is a comprehensive set of reform measures, developed by the Basel Committee on Banking Supervision, to strengthen the regulation, supervision and risk management of the banking sector.

- These measures aim to improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source and to improve risk management and governance.

- One of the dimensions of Basel III is determining capital adequacy based on risk assessment.

Chapter Outline

- **Main Topic I:** OVERVIEW OF BANKING SERVICES AND RELATED IT RISK AND CONTROLS

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- **Main Topic V:** APPLICABLE REGULATORY AND COMPLIANCE REQUIREMENTS

MT V : APPLICABLE REGULATORY AND COMPLIANCE REQUIREMENTS

- Impact of Technology in Banking

- Money Laundering: In Detail

- Cyber Crimes

- Banking Regulation Acts

MT V : APPLICABLE REGULATORY AND COMPLIANCE REQUIREMENTS: MONEY LAUNDERING

- Stages of Money Laundering
  - *Placement*
  - *Layering*
  - *Integration*

- Anti-Money Laundering (AML) using Technology

- Financing of Terrorism

MT V : APPLICABLE REGULATORY AND COMPLIANCE REQUIREMENTS

■ Impact of Technology in Banking

■ Money Laundering

■ Cyber Crimes

■ Banking Regulation Acts

MT V : APPLICABLE REGULATORY AND COMPLIANCE REQUIREMENTS

■ Cyber Crimes: Cybercrime also known as computer crime is a crime that involves use of a computer and a network. The computer may have been used in committing a crime, or it may be the target. Cybercrimes is defined as: 'Offences that are committed against individuals or groups of individuals with a criminal motive to intentionally harm the reputation of the victim or cause physical or mental harm, or loss, to the victim directly or indirectly, using modern telecommunication networks such as Internet (Chat rooms, emails, notice boards and groups) and mobile phones.

MT V : APPLICABLE REGULATORY AND COMPLIANCE REQUIREMENTS

■ Impact of Technology in Banking

■ Money Laundering

■ Cyber Crimes

■ Banking Regulation Acts

Banking Regulation Acts : APPLICABLE REGULATORY AND COMPLIANCE REQUIREMENTS

- Negotiable Instruments Act-1881: Module

- Reserve Bank of India Act, 1934

- Prevention of Money Laundering Act,

- Information Technology Laws

  – *Information technology Act, 2000 (As amended 2008)*

  – *Sensitive Personal Data Information (SPDI)*

  – *Privacy Policy*

Banking Regulation Acts : APPLICABLE REGULATORY AND COMPLIANCE REQUIREMENTS

- Reserve Bank of India

  - *Monetary Authority*

  - *Regulator and Supervisor of financial system*

  - *Issuer of currency*

Banking Regulation Acts : APPLICABLE REGULATORY AND COMPLIANCE REQUIREMENTS

- PMLA
  - *Chapter II Section 3*
  - *Chapter IV Section 12, 13*
  - *Chapter X Section 63, 70*

Banking Regulation Acts : APPLICABLE REGULATORY AND COMPLIANCE REQUIREMENTS

■ Information Technology Act

- *Definitions moved to Chapter 1*

Banking Regulation Acts : APPLICABLE REGULATORY AND COMPLIANCE REQUIREMENTS

- Information Technology Act
  - *Section 43A: SPDI*
  - *Privacy Policy*

THANK YOU

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