

History of Banking

****Assignment 1: Write 2-4 paragraphs on the emergence of banking.**

Essentials of Bank Computerisation

Bank Computerisation

- The **Concept of Bank Computerisation** Practically stated after 1980-81 and more precisely gained pace in the year **1983-84**, after setting up a committee in the year **1983 under the chairmanship of the then Deputy Governor of RBI, Dr. C. Rangarajan**. This Committee was set up to study the possibilities and stages involved in bank computerization and to prepare guidelines for the same. The report submitted by the committee in the year 1984 was known as **First Rangarajan Committee Report on bank mechanization**.
- Another Committee was constituted in 1988 was known as the first Rangarajan Committee Report on bank mechanization.

Need for Computerisation

The four Major objectives of computerization in banking are to improve

- Customer Service
- Housekeeping
- Decision-making
- productivity and profitability

Stand-Alone Computer System

- Using the stand- Alone computer system is normally the initial stage of computerization at a bank. The single user-computer system is a small system, which as its name implies, is used by only one person at a time.

Multi-user System

- The Multi-user systems, as their names signify, are computers that several people can access at the same time. Minicomputers, Main Frame Computers, Micro-Computers, and the more powerful Super Computers all fall under this category.

Network Types: LAN, MAN, PAN, CAN, SAN, WAN

LAN

- A **Local Area Network (LAN)** is a group of computer and peripheral devices which are connected in a limited area such as school, laboratory, home, and office building. It is a widely useful network for sharing resources like files, printers, games, and other applications. The simplest type of LAN network is to connect computers and a printer in someone's home or office. In general, LAN will be used as one type of transmission medium.
- It is a network that consists of less than 5000 interconnected devices across several buildings.

Characteristics of LAN

Here are important characteristics of a LAN network:

- It is a private network, so an outside regulatory body never controls it.
- LAN operates at a relatively higher speed compared to other WAN systems.
- There are various kinds of media access control methods like token ring and ethernet.

Advantages of LAN

Here are pros/benefits of using LAN:

- Computer resources like hard-disks, DVD-ROM, and printers can share local area networks. This significantly reduces the cost of hardware purchases.
- You can use the same software over the network instead of purchasing the licensed software for each client in the network.
- Data of all network users can be stored on a single hard disk of the server computer.
- You can easily transfer data and messages over networked computers.
- It will be easy to manage data at only one place, which makes data more secure.
- Local Area Network offers the facility to share a single internet connection among all the LAN users.

Disadvantages of LAN

Here are the important cons/ drawbacks of LAN:

- LAN will indeed save cost because of shared computer resources, but the initial cost of installing Local Area Networks is quite high.
- The LAN admin can check the personal data files of every LAN user, so it does not offer good privacy.

- Unauthorized users can access critical data of an organization in case LAN admin is not able to secure centralized data repository.
- Local Area Network requires a constant LAN administration as there are issues related to software setup and hardware failures

Network Device

There are various network Devices used in a LAN, The basic network devices used in a LAN are

- NICs (Network Interface Cards)
 - Hubs
 - Switches
 - Bridges
 - Routers
 - Gateways
 - Firewalls
 - WAPs
 - Modems etc.
- ****Assignment 2: Write 4-5 sentences on each of the above.**

WAN (Wide Area Network):

- WAN (Wide Area Network) is another important computer network that is spread across a large geographical area. WAN network system could be a connection of a LAN which connects with other LAN's using telephone lines and radio waves. It is mostly limited to an enterprise or an organization.

Characteristics of LAN:

- The software files will be shared among all the users; therefore, all can access to the latest files.
- Any organization can form its global integrated network using WAN.

Advantages of WAN

Here are the benefits/ pros of using WAN:

- WAN helps you to cover a larger geographical area. Therefore, business offices situated at longer distances can easily communicate.
- Contains devices like mobile phones, laptop, tablet, computers, gaming consoles, etc.

- WLAN connections work using radio transmitters and receivers built into client devices.

Disadvantage of WAN

- The initial setup cost of investment is very high.
- It is difficult to maintain the WAN network. You need skilled technicians and network administrators.
- There are more errors and issues because of the wide coverage and the use of different technologies.
- It requires more time to resolve issues because of the involvement of multiple wired and wireless technologies.
- Offers lower security compared to other types of networks.

****Assignment 3: Write 4-5 sentences on each of the above.**

Uninterruptible power supply (UPS)

- An uninterruptible power supply (UPS) is a device that allows a computer to keep running for at least a short time when the primary power source is lost. UPS devices also provide protection from power surges.
- A UPS contains a battery that “kicks in” when the device senses a loss of power from the primary source. If an end user is working on the computer when the UPS notifies of the power loss, they have time to save any data they are working on and exit before the secondary power source (the battery) runs out. When all power runs out, any data in your computer’s random access memory (RAM) is erased. When power surges occur, a UPS intercepts the surge so that it does not damage the computer.

Core Banking System

What is the Core Banking System?

- **Core Banking solutions are vital to the day-to-day functioning of any bank.** It is an integral part of the banking technology which aims to serve **their clients and customer with the best services**. In simple words, core banking solutions are account-management back-end and front-end processes.
- Core is short for “Centralized Online Real-time Exchange.” As the name suggests, it is a centralized system or a network created by a bank and its branches. This allows the customers of the bank to access, manage and perform basic transactions from any branch of the bank they hold an account in. Thus, core banking software allows the banks to create a centralized data center.

Core banking solutions offer the following advantages to the bank:

- Improved operations which address customer demands and industry consolidation
- Errors due to multiple entries eradicated
- Easy ability to introduce new financial products and manage changes in existing products
- Seamless merging of back-office data and self-service operations.

Features of Core Banking Solution:

- Customer-On Boarding.
- Managing deposits and withdrawals.
- Transactions management
- Interest. Calculation and management.
- Payments processing (cash, cheques /checks, mandates, NEFT, RTGS etc.).
- Customer relationship management (CRM) activities.
- Designing new banking products.
- Loans disbursal and management.
- Accounts management
- Establishing criteria for minimum balances, interest rates, number of withdrawals allowed and so on.

Elements of core banking include:

- Making and servicing loans.
- Opening new accounts.
- Processing cash deposits and withdrawals.
- Processing payments and cheques.
- Calculating interest.
- Customer relationship management (CRM) activities.
- Managing customer accounts.
- Establishing criteria for minimum balances, interest rates, number of withdrawals allowed and so on.
- Establishing interest rates.
- Maintaining records for all the bank's transactions.

