UNIT -2

Section-A

1. **Marketing information system (MKIS).**

   The role of MKIS is to assess the marketing managers information needs then develop the framework for collecting information and distribute the information gathered to the end users in time. The marketing information system is generally carried out marketing need analysis, planning, and implementation and control functions of marketing managers.

   The needed information is developed through internal company records, marketing intelligence activities, marketing research and marketing decision support analysis.

Different parts of MKIS:

- accounting information system
- marketing , sales and customer services
  - sales force automation
  - saves company labours hours and telephone expenses
  - capture customer data
  - response time to customer inquiries

market research and intelligence information system

- customer research
- market research
- competitor intelligence
  - Competitor's products.
  - " Operating strengths and weaknesses.
  - " Customer service level and customer policies.
  - " New product line.

2. Manufacturing information system.

Manufacturing information system is a complete set of tool for managing the flow of manufacturing production data throughout the enterprise. This IS was designed to provide tools for both IT and operations personnel who would deliver services to anyone in the plant.

Manufacturing consists of many different disciplinary areas including product engineering, facility design and scheduling, fabrications, and quality control management. Each of them can be dramatically improved by using information systems.

A manufacturing system takes material, equipment, data management and information systems technology as the input and uses manufacturing and information processes to generate better final product as output. The manufacturing designed around the transaction process of raw materials into usable components or materials. These systems are value added processes such as materials processing or support systems such as scheduling.

3. Business information system.

Business information system in marketing, manufacturing, and human resources with a special emphasis on computer integrated manufacturing. It describes the most widely used types of accounting information systems as well as information needed for the effective financial management of a firm.

Functional Business information systems:

- Marketing
- Production/operations
- Accounting
- Finance
- Human resource management

4. Accounting information system.

Accounting information system is the part of organisations information system. The information system processes a mixture of quantitative and qualitative data but the accounting information system focuses almost entirely on processing quantitative data. The

accounting system and information system must work together in an effective and efficient way.

Accounting information system provide efficient delivery of information needed to perform necessary accounting work and to assist in delivery of accurate and informative data to users especially those who are not familiar with the accounting and financial reporting areas itself. A high value of data processing characterizes these applications. Data processing consists of 4 major tasks- data gathering, data manipulation, data storage, and document preparation.

Section-B

1. Transaction processing system.

Transaction processing system:

Transaction processing systems are information system that process data resulting from the occurrence of business transactions. Transactions are events that occur as part of doing business such as sales, purchase, deposits, withdrawals, refunds and payments.

For example:

The data generated whenever the business sells something to a customer on credit.

Data about the customer, product, salesperson, and store and so on must be captured and processed. This in turn causes additional transactions such as credit checks, customer billing, inventory changes, and increases in accounts receivable balances, which generate even more data. Thus, transaction processing activities are needed to capture and process such data, or the operations of a business world grind to a halt. Therefore, transaction processing systems play a vital role in supporting the operations of an organisation.

The Transaction processing cycle:

Transaction processing systems capture and process data describing business transactions. Transaction processing system has five stages of cycle. They are

- Data entry activities
- Transaction processing activities
- File and database processing

- Document and report generation
- Inquiry processing activities

The data entry process:

- The input activity in transaction processing systems involves a data process. In this process data is captured or collected by recording, coding and editing activities.
- Data may be converted to a form that can be entered into a computer system.
- It has always been a problem getting data into computers accurately and quickly enough to match their awesome processing speeds.
- These methods are more efficient and reliable and are known as source data automation.

Traditional data entry:

- Traditional methods of data entry typically rely on the end users of an information system to capture data on source document such as purchase order, payroll time sheets and sales order forms. The source documents are subjected to one of the following additional data entry activities.
- The data is converted into a machine – readable medium, such as magnetic tape or magnetic disks. Typically this means using such devices as key to tape machine and key to disk system.
- The data from source documents could alternatively be directly entered into a computer system using a direct input device without the use of machine readable media.

Source of data automation:

- The use of automated methods of data entry is known as source data automation several methods have been developed to accomplish this automation though very few completely automate the data entry process.

- They are all based on trying to reduce or eliminate many of the activities, people and data media required by traditional data entry methods.

Batch processing:

Transaction processing system process data two basic ways:

- Batch processing where transaction data is accumulated over a period of time and processed periodically.
- Real time processing where data is processed immediately after a transaction occurs.

Transactions processing systems still make heavy use to batch processing.

Batch processing activities:

In a batch processing system transaction data is accumulated over a period of time and processed periodically. Batch processing usually involves.

- Gathering source documents originated by business transactions such a sales orders and invoices into groups called batches.
- Recording transactions data on an input medium such as magnetic disk or magnetic tape.
- Sorting the transactions in a transaction file in the same sequence as the records in a sequential master file.
- Processing transaction data and creating an updated master file and a variety of documents and reports.

Real time processing:

- It processes transaction data immediately after they are generated and can provide immediate output to end users.
- Data is fed directly into the computer system from online terminals without being stores and it is always stored online in direct access files.
- Files and database are always upto date since they are updated whenever date is originated regardless of its frequency.

- Real time processing depends as telecommunications networks of online terminals and computers.

Conclusion:

Transaction processing systems are operations information systems that process data resulting from business transactions. They involve the basic activities of data entry, transaction processing, file and database etc.

2. Financial information system.

Financial information system is a sub system of organisational management information system. This sub system supports the decision making process of financial functions at the level of an organisation.

A brief description of each of the financial decisions that a financial manager has to take is given below.

- Capital budgeting decision----in this decision funds are allocated to long term asset which would yield benefits in the future. Example: funds allocated for land, building, machinery, etc...
- Financial decision----the financial manager has to decide about the proportion of equity and debt capital.
- Dividend decision this decision relates to the dividend policy of the organisation.
  A decision whether the organisation should distribute all profits or retain them or distribute a portion and retain the balance has to be taken by the financial managers.
- Current asset management-----in order to safeguard the org against liquidity or insolvency current assets of the organisation are also required to be efficiently managed.

3. Human resources information system.

This functional information system supports the functions of human resource management of an organisation. The function involves:

Manpower planning:

It is about deciding the present and future needs of manpower in the organisation.

Staffing:

This function includes recruitment, selection and placement of employees. Recruitment refers to attracting qualified and competent people for different jobs.

Training and development:

The need to train and develop the employees is felt due to

- A gap between the job requirements and competence of the employee.
- The need to develop lower level managers to assume higher level responsibility when required.

Performance evaluation:

This task is concerned with evaluating employee performance at work in terms of pre determined standards and norms. Evaluation or performance appraisal includes the formulation of performance appraisal plans, development of appraisal techniques and programmes etc...

Separation activities:

The employee employer relations may come to an end due to the resignation of an employee, layoff, death or retirement. HRM besides the above mentioned functions is also responsible for the wages and salary administration, sustaining and maintaining the work force in the organisation and maintaining of healthy and peaceful labour management relations. It contains 3 function flow of human resource information system.

- Transaction data-----is a basis for various types of output information or analysis. The data includes employee number, name, qualification, experience, joining data etc... Categories and grades of posting and daily performance etc...
- Environmental data----includes data about the availability of personnel, trends in the labour force, competition, market offering to the employees, government and labour laws etc...
- Organisational plans------also provide an important input in human resource information system, on the basis of which future planning for recruitment, job assignment, etc...

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Accounting information system provide efficient delivery of information needed to perform necessary accounting work and to assist in delivery of accurate and informative data to users especially those who are not familiar with the accounting and financial reporting areas itself. A high value of data processing characterizes these applications. Data processing consists of 4 major tasks- data gathering, data manipulation, data storage, and document preparation.

Characteristics of accounting information system:

- Performs necessary task
- Adheres to relatively standardized procedures
- Handles detailed data
- Has a primarily historical focus
- Provides minimal problem solving information

Sources of accounting information system:

- Procedures manual
- Management accounts / balance sheets
- Financial data
- Accounting policies
- Tax details
- Working capital

Types of accounting information system:

- **General ledger system**: this module helps organisations leverage the GL processing speeds available streamline accounting processes and reduce the period end close cycle.

- **Asset management:** this module help streamline tracking, depreciation and maintenance scheduling of asset improve productivity with easier access to critical information derive maximum tax benefits and minimize risk of loss or damage to capital assets. It maintains an inventory of the company's long term assets.

- **Order entry system:** it captures and manages different kinds of data relating to a transaction such as number of units sold customer billing.

- **Account receivable and payable system:** this module helps organisations bill customers automatically from any sales channel, streamline accounts receivables processing and automate the invoicing process.

- **Inventory control system:** it captures processes and manages all issues related to the company's inventory such as items in inventory, inventory cost, lost items and damages items.

- **Payroll system: it captures** and processes data related to salaries including taxes, other deductions, benefits, overtime and other related data.

- **Cash management:** this module helps organisations forecast cash flows in any currency and in multiple time periods, streamline the reconciliation process, monitor exceptions and fraud and manage the cash cycle efficiently with control.