COURSE.   : **III B. COM (CA)**

SEMESTER.   : 5

SUBJECT.   : MANAGEMENT INFORMATION SYSTEM

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UNIT.   : 3

SYLLABUS.   : Information system in Business and management - Transaction Processing System - Information Repeating and executive information system.

INFORMATION SYSTYMS IN BUSINESS AND MANAGEMENT:

Transaction Processing System.

Information Repeating system.

Executive Information system.

Decision support system.

Office automation 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.

It represents the automation of the fundamental, routine process used to support business operations. It does not provide any information to the user for his/her decision making. Previously Transaction processing system was known as MIS. Prior to computers, data processing was performed manually or with simple machines.

(INPUT) DATA--------→PROCESSING--------→DATA (OUTPUT)

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

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 process 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.

Management information system:

MIS is an information system which process data and converts it into information. A MIS uses TPS for its data inputs. The information generated by the information system may be used for control of operations, strategic and long range planning, short range planning, management control and other managerial problem solving.

It has some functional business areas. They are

Marketing

Production

Human resources

Finance

Accounting etc...

TPS------→DATA------→INPUT------→PROCESSING-------→OUTPUT--------→INFORMATION

Executive support system:

Executive support system (ESS) is an extension of the management information system which is a special kind of DSS. An ESS is specially tailored for the use of chief executive of an organisation to support his decision making.

An ESS is designed to cater to the information needs of a chief executive keeping in view not only his requirements but also taking into account his personality and style of functioning etc.,

Decision support system:

The Decision support system (DSS) is an information system application that assist decision making. Decision support systems tend to be designed primarily to serve management control level and strategic planning level managers.

The data in the database typically is a combination of master files (internal corporate data) and from external sources.

Office automation system:

Office automation refers to the application of computer and communication technology to office functions. Office automation systems are meant to improve the productivity of managers at various level of management by providing secretarial assistance and better communication facilities. Office automation systems are the combination of hardware, software and people in information systems, that process office transactions and support office activities at all levels of the organisation.

These systems include a wide range of support facilities, which include word processing, electronic filing, electronic mail, message switching, data storage, data and voice communication etc...

In the first category, the following is a list of activities.

Typing

Mailing

Scheduling of meetings and conferences

Calendar keeping and

Retrieving documents

BOOK REFFERED : MANAGEMENT INFORMATION SYSTEM - I BY AMAN JINDAL, MANAGEMENT INFORMATION SYSTEM - II BY DR. S. P. RAJAGOPALAN