

UNIT - 3

Methodology and Tools/Techniques for systematic Identification, Evaluation and Modification of MIS :-

Organizations use MIS to make decisions in all spheres and phases of the business. Using a management information system, the organization is able to procure, analyze and document facts and figures on all of its business functions. Once an analysis is done, the company's top management then bases its decisions on the reports generated by an MIS. Whenever there are problems in the functioning, the management is able to take corrective action immediately.

There are several MIS tools. An organization could use one of them in isolation or a number of them at the same time at a given point of time.

(i) Transaction Processing System (TPS) —

TPS are used to record day-to-day business transactions of the organization. They are used by users at the operational management level. The main objective of a TPS is to answer routine questions such as:

- How printers were sold today?
- How much inventory do we have at hand?
- What is the outstanding due for John? etc.

Using this, the organization is able to record and document all of its recurring and routine business transactions. For example, if an organisation finds that there are more customer orders in some months, it can infer that there is more demand during these months. The company is then able to take

- steps to handle that demand by employing and deploying more manpower and resources during those months. Other examples are:-
- Point of Sale systems - records daily sales.
 - Payroll Systems - processing employees salary, loans management, etc.
 - Stock Control Systems - keeping track of inventory levels.
 - Airline booking systems - flights booking management.

(ii) Operation Information System (OIS) —

Operations information systems are tools used to plan and schedule production and assembly functions. Using these tools, a manager is able to decide what levels of inventory and raw materials to hold, and how to sequence production functions. What component is to be produced after which and how the final product will be assembled is the essence of operations information management. The operations manager also sees the employment of manpower for production purposes.

The tools & techniques basically used are :-
Flowchart, DFDs (Data Flow Diagram),
Data Dictionary, Structured English,
Decision Table, Decision tree etc.

With effective processes in place, the company never faces a situation of downtimes or running out of stock.

(iii) Decision Support Systems (DSS) —

DSS are used by top management for managerial decision-making. This tool extensively makes use of computers, computing tools, mathematical and scientific models for its analysis.

With the DSS, the company can analyze, scrutinize and evaluate all the methods it could deploy for use in departments such as production, sales, marketing and finance.

The company is then able to choose the option that saves the most on costs, time and both human and material efforts while reaping the maximum benefits.

Different tools used are :-

Spreadsheets & databases, Statistical Software, SWOT (Strengths, Weakness, Opportunities, Threats), Product life cycle, Cost/Benefit/Risk Analysis, Critical Path Analysis (CPA, CPM), PERT (Programme Evaluation and Review Technique), Charts, Decision Trees, Flow charts, Histograms, Bar charts, Materials Requirements Planning (MRP) etc.