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UNIT-4 ADVANCED MIS

Q.1. What is advanced MIS?

Ans:- Advanced MISs are noted for their ability to store, process, manipulate, and accurately communicate vast amounts of data. New structural forms are emerging as the physical presence of an organization's member is no longer mandatory (compulsory). Electronic messaging, bulletin boards, fax, decision, expert group and co-operative work systems, and computer networking allow rapid, yet distant transference of information and interaction of the organization's members.

Q.2. What is the need of advanced MIS?

Ans:- (i) Advanced MIS create a great expanded organizational information base and can provide for the consistency of the information.

(ii) Advanced MIS can provide the criteria and linkages required for the conclusions that are necessary to obtain the required data from the same source of information.

(iii) Advanced MIS can operate according to algorithms that will lead all users in a series of steps, to an identical conclusion or result, based on the same ~~not~~ information.

(iv) Advanced MIS can help in the justification of new ideas, concepts, and/or behaviours proposed for the organisation.

- (v) Advanced MIS can create value for the organization and its members.

Q.3. Problems in achieving advanced MIS.

Ans:- The major problems in achieving MIS are as follows:-

- (i) Any major change that changes the functioning of departments drastically is likely to be challenged or resisted by the department members as it changes their way of working.
- (ii) Some organizations does not have a culture of information based decision-making. Implementation of MIS in such organizations are always a challenge, as the employees have to be trained to appreciate the importance of information.
- (iii) Scaling MIS — Very large MIS infrastructures can handle varying organizational sizes relatively easily, since the difference between a very large business and an extremely large one is relatively minimal, all things considered. At the other end of the extreme, systems that run on a single computer for a very small business can also serve those organizations well with tools that are easy to use. The challenges come in the middle, where an organization is changing in size and scope and might outgrow its MIS software.
- (iv) Integrating MIS — The power of management information systems also carries the challenge of getting an organization's workers to buy

into them. The customer relationship management programs that many companies use to help manage their sales forces are an excellent example of this. CRM software allows companies to maintain extensive databases of information on every customer and prospect. However, to take advantage of them, customer service and sales representatives must report their activities within the software, and managers must be able to use that data.

- (V) Staffing — For MIS to work, they need skilled staff. At the high level, MIS requires business professionals who understand how to use technology to drive business goals. Keeping the system running and safe from intruders takes server administrators, network engineers, security experts and help desk personnel.

* DSS (Decision Support System)

DSS are interactive software-based systems intended to help managers in decision-making by accessing large volumes of information generated from various related information systems involved in organizational business processes, such as office automation system, transaction processing system etc.

A decision support system helps in decision-making but does not necessarily give a decision itself. The decision makers compile useful information from raw data, documents, personal knowledge, and/or business models to identify and solve problems

and make decisions.

* Attributes of a DSS

- (i) Adaptability and flexibility
- (ii) High level of interactivity
- (iii) Ease of use
- (iv) Efficiency and effectiveness
- (v) Complete control by decision-makers
- (vi) Ease of development
- (vii) Extendibility
- (viii) Support for modeling and analysis
- (ix) Support for data access
- (x) Standalone, integrated and web-based.

* Characteristics of DSS

- (i) Support for decision-makers in semi-structured and unstructured problems.
- (ii) Support for managers at various managerial levels, ranging from top executive to line managers.
- (iii) Support for interdependent or sequential decisions.
- (iv) Support for intelligence, design, choice and implementation.
- (v) Support for variety of decision processes and styles.
- (vi) DSSs are adaptive over time.
- (vii) Improves efficiency and speed of decision-making activities.

- (VIII) Increases the control, competitiveness and capability of futuristic decision-making of the organization.
- (ix) Facilitates interpersonal communication.
- (x) Encourages learning or training.
- (xi) Since it is mostly used in non-programmed decisions, it reveals new approaches and sets up new evidences for an unusual decision.
- (xii) Helps automate managerial processes.

* Components of DSS

Following are the components of the decision Support System :-

- (i) DBMS — To solve a problem the necessary data may come from internal or external database. In an organization, internal data are generated by a system such as TPS and MIS. External data come from a variety of sources such as newspapers, online data services, databases (financial, marketing, human resources).
- (ii) Model Management System — It stores and accesses models that managers use to make decisions. Such models are used for designing manufacturing facility, analyzing the financial health of an organization, forecasting demand of a product or service, etc.
- Supporting tools like online help; pull down menus, user interfaces,

graphical analysis, error correction mechanism, facilitates the user interactions with the system.

* Classification of DSS

There are several ways to classify DSS :-

- (i) Text Oriented DSS — It contains textually represented information that could have a bearing on decision. It allows documents to be electronically created, revised and viewed as needed.
- (ii) Database Oriented DSS — Database plays a major role here; it contains organized and highly structured data.
- (iii) Spreadsheet Oriented DSS — It contains information in spreadsheets that allows to create, view, modify procedural knowledge and also instructs the system to execute self-contained instructions. The most popular tool is Excel & LOTUS 1-2-3.
- (iv) Solver Oriented DSS — It is based on a solver, which is an algorithm or procedure written for performing certain calculations and particular program type.
- (v) Rules Oriented DSS — It follows certain procedures adopted as rules. Expert System is the example.