Decision support system

Technology, Computer

A decision Support System (DSS) defines a specified category of computerized information system which supports organization and business decision-making activities. A suitably computed Decision Support System (DSS) is an interactive software-based system planned to assist decision makers accumulate important information from raw data, personal knowledge documents, or business ideas to recognize and solutions to problems and decision making.

Characteristic information which a decision support system might collect ad present include; projected income figures based on sales estimation of new products. Decision Support Systems (DSS) serve the operations, management, and planning levels within an organization and assist decision making in rapidly varying and unpredictable situation. The main components of a Decision Support System (DSS) include database, or the knowledge base, the user interface and the decision environment and user criteria. Users are important components of Decision Support System.

Management Information Systems (MIS) provide business managers with reports on earlier period and current business performance, therefore facilitating the monitoring of actual organizational performance and assisting the prediction of future ones. Management Information Systems (MIS)is defined as addressing the needs f those managers interested in annual, monthly and weekly results as compared to day today results. On the other hand DSS is a logical computer-based system technology utilized by managers as an aid in decision making in partly structured farm activities.

Whereas Decision Support Systems (DSS) shares the similar ideologies with Management Information Systems, MIS produces regular reports while DSS

employs complicated data processing and analysis tools for the aim of resolving quasi-structured problems. In addition, where MIS is used by a limited group of professionals Decisions Support Systems are used by individuals, groups and managers across different levels. DSS is distinguished by adaptability whereas MIS is characterized by semi-inflexible nature.

Sources of data for DSS are more diverse ranging from accounting, inventory and production and uses more sophisticated analytical tools as compared to MIS which uses internal organization sources. An example of Decision Support System (DSS) is the Canadian National Rail system that examines the equipment on standard basis. A problem occurring by the railroad such as defective or worn-out rail that can lead t derailment can be detected in advance. With a DSS Canadian Railway as managed to reduce incidences of derailment with other companies increasingly adopting the system (Keen 1978).