A Design of User Oriented Information Output for Managerial Decision Making

*** Dr. R. Kuselar, Ph.D.**

* Professor in Management Studies, V.R.S. College of Engineering & Technology, Arasur, Villupuram District, Tamilnadu, India - 607 107

Abstract

The modern management needs to compete with their counterpart. This necessitates the acquisition of necessary information for framing policies, operational strategies, marketing etc. The information is essential for any managerial decision making for planning, organizing and controlling the business. In this context, the various organizations need different types of information and relevant information. Hence, a designing of user oriented information output is the need of the hour.

Keywords: *Modern management, framing policies, Acquisition, Information, Operational Strategies*

Introduction

Information system is defined as the combination of men, machine and procedures for collecting pertinent information from the internal and external source of an organization and processing this information for facilitating the process of decision-making. (James A. 6'Brien)

Purpose of Information System

The main purpose of an information system is to produce information to meet the needs of the management and operations of an organization. Substantial amount of time and money are spent on devices they perform data processing operations more efficiently. The information system must be capable of carrying out basic data processing functions; obtaining meaningful information output is the primary reason why management spent money on information systems. Modern data processing technology has enhanced traditional techniques for producing information outputs and provided new methods for satisfying the information needs of users. Information system presents a variety of concepts and techniques, which help to make information outputs more meaningful.

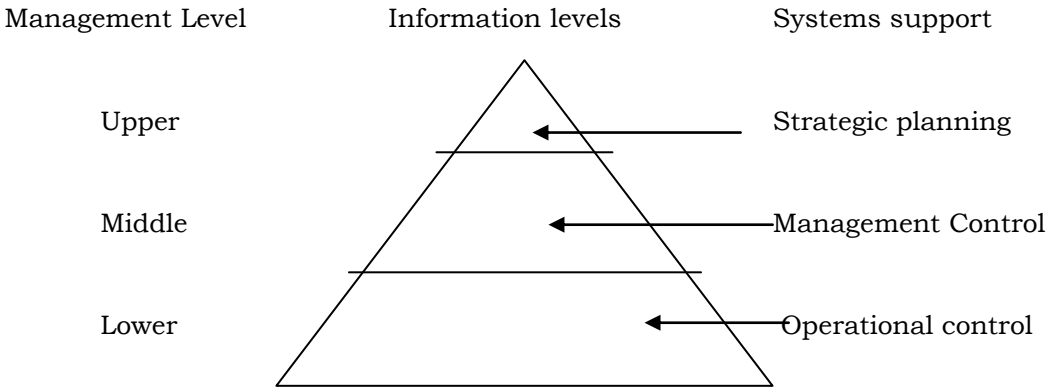
The Objectives of Information System

1. To explain how filtering data can provide information.
2. To show how information can be used to highlight key performance activities and identify potential opportunities.
3. To identify and describe the major ways the monitoring method can be implemented
4. To introduce the use of logic-mathematical models as a method for providing information to decision makers
5. To illustrate, based on the interrogative method, how information is provided
6. To develop awareness for the use of information reflecting events and activities external to the organization, and the application of the strategic decision centre method

Information Needs of Management

The design of the MIS must take into account the information needs of various management levels.
(i) Top Level: At the top management level, basic goals and overall policies are laid down. This level is concerned mainly with strategic planning such as the strategic planning activities of top management primarily involve future interaction between the organization and its external environment. Therefore, strategic information such as a population growth, market analyses, technological developments, Government policies etc. is required at the top level. This information should not be overly detailed but should be sufficiently broad in scope to indicate trends. Information sources for strategic planning lies decision support system (DSS).

(ii) Middle Level: At the middle management level, information is required for management control. Middle level managers such as departmental heads are concerned with the current and future performance of their units. Therefore, they need aggregate (summarized) information on the sales, profits, etc. of their units. Such information is available from, both within the organization as well as from sources outside the organization. For example, financial data for budgets and ratio analysis are available from the company's records. However, market data can be collected through special surveys and reports from outside the organization. Top-level managers also require management control information. However, this information must be more detailed, narrower in scope and more accurate than the information required for strategic planning. It should also be generated at internals that are more frequent because the time horizon of decision is shorter.
(iii) Supervisory level: At the supervisory level of management, operational control is exercised. Production scheduling, cost and credit control etc. are examples of operational control. Therefore, detailed information on a daily and weekly basis is required. Inventory reports, operating costs, production rates, etc. are examples of such information. Such information is available from within the organization. Figure shows the type of information required and the systems support, used at different levels of management.



Information and system support according to management level.

Information Requirements by Decision Category and Management Level

Characteristics of Information	Operational Control (First Line)	Management Control (Middle Level)	Strategic Planning (Top Level)
Source	Largely internal	⟷	Largely external
Scope	Well-defined, narrow	⟷	Very wide
Level of aggregation	Detailed	⟷	Aggregate
Time horizon	Historical	⟷	Future
Current	Highly current	⟷	Fairly old
Required accuracy	High	⟷	Low
Frequency of use	Very frequent	⟷	Infrequent

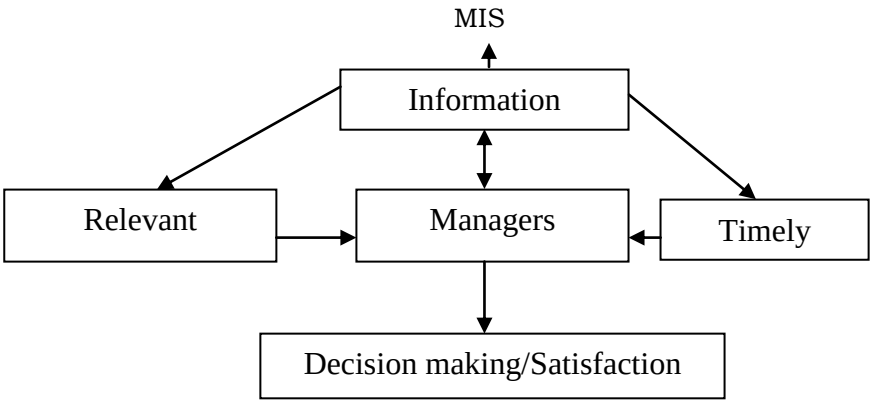
Source: .G.A. Carry and M.S.S. Morton, "A Frame work for Management Information Systems", Sloan Management Review, Vol. 13, No.1

It shows the information needs of management vary according to the category of decisions made at various levels of authority.

Design of User Oriented Information System

The following measures will help in making an MIS successful:

User orientation: The MIS must be user oriented in both design and implementation. If the system's output fails to meet the users' needs. User-friendly model is given below:



Model for user oriented information system for managerial decision making.

This model elaborate, that the information system should help decision making by providing relevant quantum of information's at the right time and proper place. This system also takes care of taking decisions under risk and uncertainty. The decision under certainty assumes perfect information as to probability of each outcome but not which outcome will occur in any given case and uncertainty assumes knowledge of possible outcomes but no information as to possible.

The design the above user-friendly model the following are the requisite.

i. Information from various sources: books, periodicals, internet etc.
ii. Participation of managers in demand the relevant information
iii. The details of plans and product design of the organization
iv. The information on competitive organization
v. The market and economic scenario of the organization product / services

Conclusion:

The information technology made extensive data available for make use of. However, the data available should be user friendly that provides relevant information at the right time, right place and with easy access. Then only the managers can make appropriate decision in the competitive global scenario.

References:

1. Burch, John "EDI: The Demise of paper: Information Executive, Winter 1989.
2. Houdeshel, George, and Hugh Watson. "The Management Information and Decision Support System at Lockheed-Georgia, "MIS Quarterly, March 1987.
3. Lehman, John, "Business Graphics. A Taxonomy for Information Systems Managers" Data Base, Fall 1986.
4. Main, Jeremy, "At Last, Software CEOs can U se, "Fortune, March 13, 1989.
5. Mintzberg. Henry. The Nature of Managerial work, New York: Harper and Row, 1983
6. James A.Brien Management Information Systems A Managerial End User Perspective. Galgotia Publications (P) Ltd. – 1991