

1.Explain conceptual and physical view of MIS.

- ▶ Management information systems gather and store data from various sources, such as sales figures, stock levels, financial statements, and employee records.
- ▶ MIS serves as a repository of information, ensuring all relevant data is accessible to decision-makers.
- ▶ An MIS is a system that provides managers with the necessary information to make decisions about an organization's operations.
- ▶ The initial concept of MIS was to process data from the organization and present it in the form of reports at regular intervals.
- ▶ The system was largely capable of handling the data from collection to processing.
- ▶ This concept was further modified when a distinction was made between data and information.
- ▶ The information is a product of an analysis of data. This concept is similar to a raw material and the finished product.
- ▶ What is needed is an information and not a mass of data

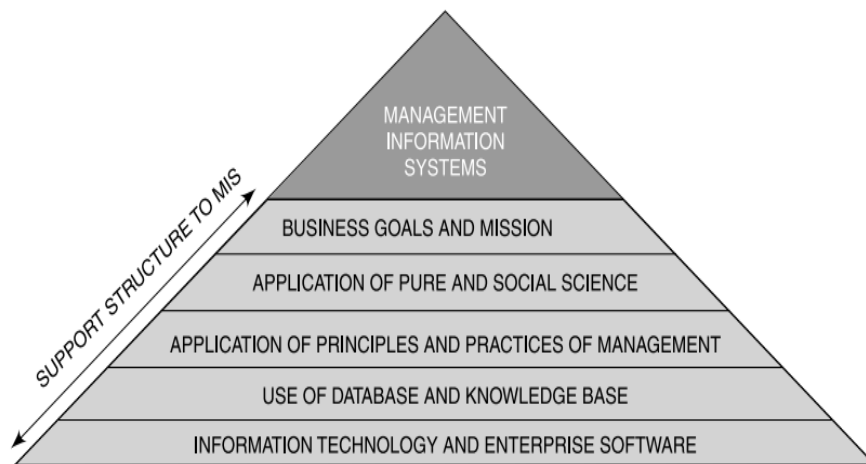


Fig. 1.1 *Conceptual View of MIS*

- ▶ The physical view of the MIS can be seen as an assembly of several subsystems based on the databases in the organisation.
- ▶ These subsystems range from data collection, transaction processing and validating, processing, analyzing and storing the information in databases.
- ▶ The subsystems could be at a functional level or a corporate level.
- ▶ The information is evolved through them for a functional or a departmental management and it provides the information for the management of business at the corporate level.

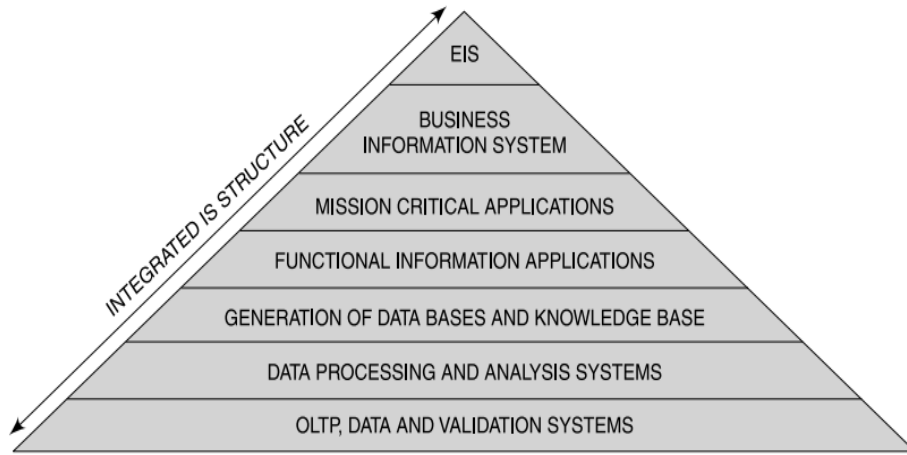


Fig.1.2 *Physical View of MIS*

2. Define MIS . Explain role and impact of MIS.

- ▶ The Management Information System (MIS) is a concept of the last decade or two. It has been understood and described in a number of ways.
- ▶ It is also popularly known as the Information System, the Information and Decision System, the Computer-based Information System.
- ▶ 1. The MIS is defined as a system which provides information support for decision making in the organisation.
- ▶ 2. The MIS is defined as an integrated system of man and machine for providing the information to support the operations, the management and the decision-making function in the organisation.
- ▶ 3. The MIS is defined as a system based on the database of the organisation evolved for the purpose of providing information to the people in the organisation.
- ▶ 4. The MIS is defined as a Computer-based Information System.

Role:

- ▶ The role of the MIS in an organisation can be compared to the role of heart in the body.
- ▶ The information is the blood and MIS is the heart.
- ▶ In the body the heart plays the role of supplying pure blood to all the elements of the body including the brain.
- ▶ The heart works faster and supplies more blood when needed. It regulates and controls the incoming impure blood, processes it and sends it to the destination in the quantity needed.
- ▶ It fulfills the needs of blood supply to human body in normal course and also in crisis.
- ▶ The MIS plays exactly the same role in the organisation.
- ▶ The system ensures that an appropriate data is collected from the various sources, processed, and sent further to all the needy destinations.

- ▶ The system is expected to fulfill the information needs of an individual, a group of individuals, the management functionaries: the managers and the top management.
- ▶ The MIS satisfies the diverse needs through a variety of systems such as Query Systems, Analysis Systems, Modelling Systems and Decision Support Systems.
- ▶ The MIS helps in Strategic Planning, Management Control, Operational Control and Transaction Processing.
- ▶ The MIS helps the clerical personnel in the transaction processing and answers their queries on the data pertaining to the transaction, the status of a particular record and reference on a variety of documents.
- ▶ The MIS plays the role of information generation, communication, problem identification and helps in the process of decision-making.
- ▶ The MIS plays a vital role in the management, administration and operations of an organisation.

Impact:

- ▶ The impact of MIS on the functions is in its management. With a good MIS support, the management of marketing, finance, production and personnel becomes more efficient
- ▶ The tracking and monitoring of the functional targets becomes easy.
- ▶ The functional managers are informed about the progress, achievements and shortfalls in the activity and the targets.
- ▶ The manager is kept alert by providing certain information indicating and probable trends in the various aspects of business.
- ▶ This helps in forecasting and long-term perspective planning. The manager's attention is brought to a situation which is exceptional in nature, inducing him to take an action or a decision in the matter
- ▶ The MIS creates another impact in the organisation which relates to the understanding of the business itself.
- ▶ The MIS begins with the definition of a data entity and its attributes.
- ▶ It uses a dictionary of data, entity and attributes, respectively, designed for information generation in the organisation.

Since all the information systems use the dictionary, there is common understanding of terms and terminology in the organisation bringing clarity in the communication and a similar understanding of an event in the organisation.

- ▶ The MIS calls for a systemisation of the business operations for an effective system design.
- ▶ This leads to streamlining of the operations which complicates the system design.
- ▶ It improves the administration of the business by bringing a discipline in its operations as everybody is required to follow and use systems and procedures.

- This process brings a high degree of professionalism in the business operations.

3.Explain management as a control system with diagram.

- Planning, organising, staffing, coordinating, directing and controlling are the various steps in a management process.
- All the steps prior to a control are necessary but are not necessarily self-assuring the results unless it is followed by a strong control mechanism.
- The management experts have viewed these steps as 'Management Control System.'
- They postulate the hypothesis that unless a control is exercised on the process, the goals will not be achieved. They advocate a system of effective control to ensure the achievement of the business objective.
- The control system is essential to meet the environmental changes, to meet the complexity of today's business, to correct the mistakes made by the people, and to effectively monitor the delegation process.
- A reliable and effective control system has the following features.

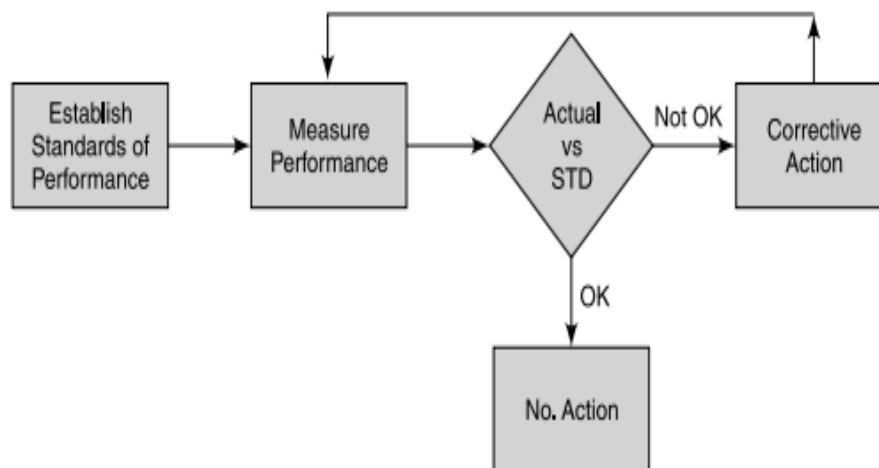


Fig. 1.3 *Process Flow of Control System*

3.Explain steps involved in decision in Management and MIS support to management system.

MIS Support:

- The management process is executed through a variety of decisions taken at each step of planning, organising, staffing, directing, coordinating and control. As discussed earlier, the MIS aids decision-making.

- If the management is able to spell out the decisions required to be taken, the MIS can be designed suitably.

Steps in management	Decision
Planning	A selection from various alternatives—strategies, resources, methods, etc.
Organisation	A selection of a combination out of several combinations of the goals, people, resources, method, and authority.
Staffing	Providing a proper manpower complement.
Directing	Choosing a method from the various methods of directing the efforts in the organisation.
Coordinating	Choice of the tools and the techniques for coordinating the efforts for optimum results.
Controlling	A selection of the exceptional conditions and providing the decision guidance to deal with them.

- The objective of the MIS is to provide information for a decision support in the process of management.
- It should help in such a way that the business goals are achieved in the most efficient manner.

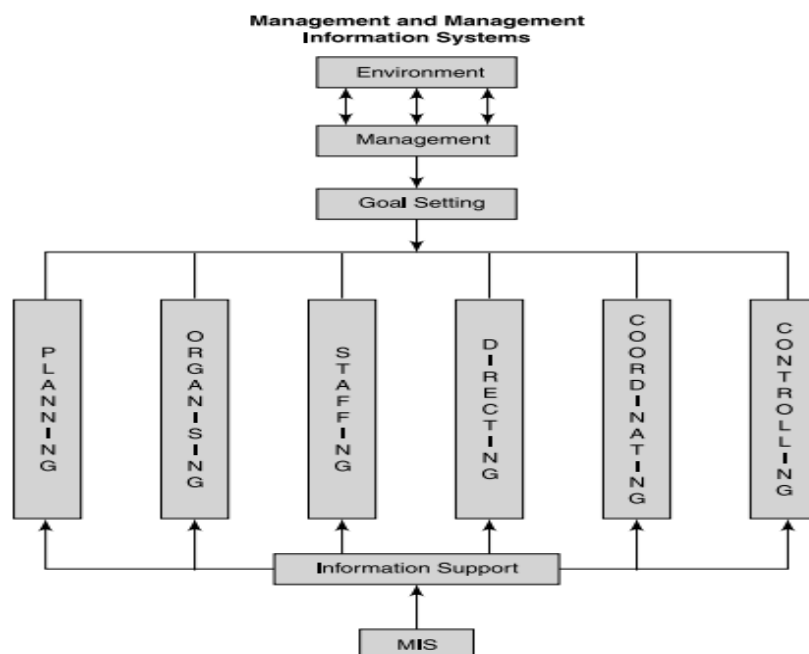


Fig. 1.4 MIS Support to Management Process

5.Explain Negandhi Estafen Model for analysis of Management Effectiveness.

- ▶ ‘Negandhi Estafen’ provides a good model for the analysis of management effectiveness, which generates an enterprise effectiveness in achieving the goals and objectives.
- ▶ The models puts a lot of emphasis on the management philosophy and the environment factors on which the effectiveness is dependent.
- ▶ The environment factors provide the opportunities to survive and grow with certain constraints, while the management philosophy sets the guidelines for deciding the management practices of run the enterprise.

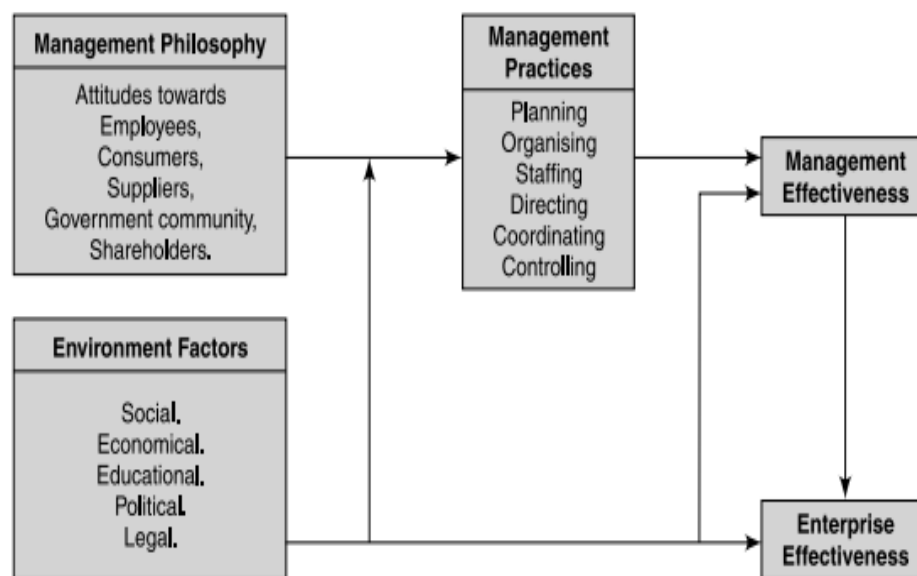


Fig. 1.5 *Negandhi Estafen Model for Analysis of Management Effectiveness*

- ▶ The management practices, therefore, emerge out of the managements philosophy and the environment, in which it operates.
- ▶ The management effectiveness, would largely depend on both these factors.
- ▶ The MIS design would, therefore, be different depending upon the management practices followed by several organisations in the same industry.
- ▶ Such design improves the management effectiveness leading to an improvement in the enterprise effectiveness.

6. Define GOALS, objectives and targets.

- ▶ The process of management begins with setting of goals, objectives and targets.
- ▶ The goals are long-term aims to be achieved by the organisation;
- ▶ objectives are relatively short-term milestones to be accomplished.
- ▶ The targets generally refer to physical achievements in the organisation's business.

	<i>Manufacturing organisation</i>	<i>Hospital</i>	<i>State transport organisation</i>
GOALS	Be a leader in the household consumer goods industry, with modern amenities.	Be a hospital providing total service to the patients.	Connect all villages of population 5000 and above by S.T. service.
OBJECTIVES	Provide complete product range in Processing.	Establish 300-bed hospital in five years.	Manage state transport expense in three years at the rate of ₹ 5 per kilometre travel.
TARGETS	20 per cent growth per annum in turnover.	Achieve ₹ 800 per bed per day earnings.	Achieve 90 per cent average seat occupancy every day.

7. Explain Leavitt's model with diagram.

- ▶ H. J. Leavitt identified task, technology and structure as additional three elements of the organisation system.
- ▶ He says that the task, technology and people structure are dependent on each other and their significance cannot be ignored as elements of the system.
- ▶ The arrangement of task in terms of process and work design is dependent on the people.
- ▶ The choice of technology of handling the task is dependent on the people.
- ▶ You may choose the best technology and well designed tasks, but they have to be suited for the people.
- ▶ Over and above, these are to be arranged in proper structure. Further, a fourth element has been added as culture.
- ▶ According to Leavitt an organisation should be viewed as a socio-technical system consisting of people, tasks, technology, culture and structure. The modified Leavitt's model is shown in Fig.

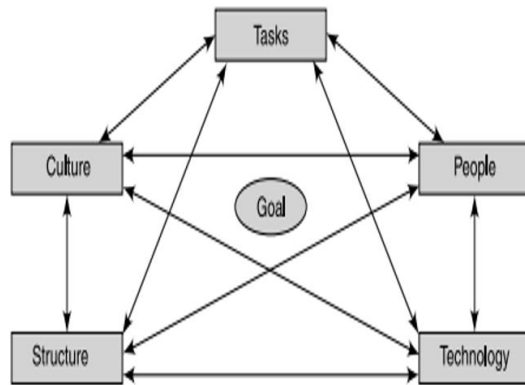


Fig. 1.6 *Modified Model of the Organisation System*

- ▶
- ▶ In view of the nature of the task, the organisation is supposed to carry out, it has to be designed as an open system capable of adjusting itself to the changing environment.
- ▶ The organisation continuously exchanges the information with the environment and is influenced by the changes in it.
- ▶ The organisation, therefore, has to be built in such a fashion that it adjusts with the changes in the environment and that the goals and objectives are achieved.

8.Explain Sigmoid S-Curve.

- ▶ The system and their goals are not stable.
- ▶ The goals change in response to the changes in the business focus, the environment and in the people in the organisation.
- ▶ A significant change calls for change in the organisation structure.
- ▶ A goal displacement is said to have occurred when the system goals replace the organisation system goals. When a goal displacement occurs, it affects the organisation's goals significantly.
- ▶ Another reason for goals change is due to the natural process of growth and decline. This phenomenon is best described by a sigmoid or S curve .
- ▶ All organisations and their business go through the different phases of growth cycle in stages as, introduction, growth, maturity and decline.
- ▶ Each phase generates new goals to be served. If the changed or displaced goals are not reflected in the organisation as a system, the organisation is bound to suffer from decay.

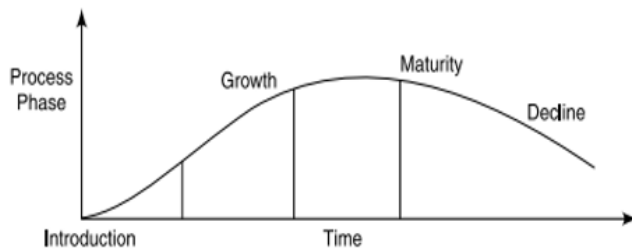


Fig.1.7 Sigmoid or S-curve

9.What is goal displacement? Why does it occur? How does the organization handle goal displacement ? What would happen to MIS as GOALS are displaced ?

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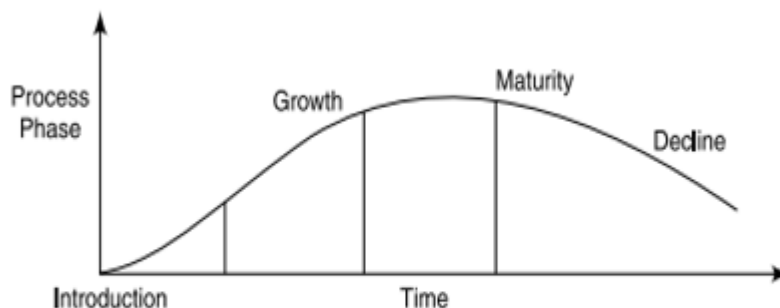


Fig.1.7 Sigmoid or S-curve



10. Explain with neat diagram organizational behaviour and management information system?

- The design of the MIS, in isolation from organisational factors, is destined to fail as it just does not fit into the structure.

- Since organisation system in the same business differ for various reasons such as the leadership style, the management style, culture and group of people as a body and so on.
- It is difficult to evolve a standard model of the MIS for a business and/ or an industry.
- MIS plays a very important role in creating organisation behaviour which in turn sets the goals for achievement.
- Technology and people decide the organisation structure and style of the management.

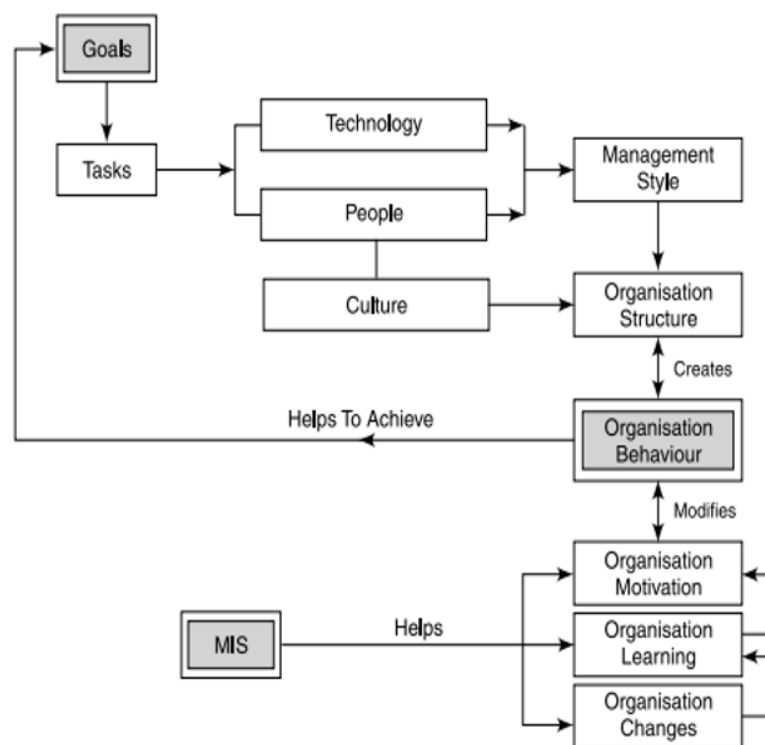


Fig. 1.8 Organisational Behaviour and Management Information System

11. Write a short note on (with diagram)

a. Model of MIS for a digital firm focus on Business Strategy.

- The term 'E- Business enterprise' was coined to convey the use of Internet and IT in key resource management processes and to transact the business with customers, suppliers and business partners.
- ERP, SCM, CRM, PLM and home grown legacy systems are the main applications in the business.
- The application of Internet and information technology is in key core areas of business.

- ▶ These technologies are used for computing, collaboration, communication, storage information in all kinds of format.
- ▶ These applications however did not integrate entire cycle of business starting ‘from Customer to finishing at Customer: Customer Ordering to Delivery to Customer Service’.
- ▶ With the advancement of Internet, Web communication, network and Information technology, business process management crossed the boundaries of the organisation and embraced every aspect of the business making all its operations ‘Digital’.
- ▶ That is capturing the data or event, validating, processing, decision making, storing, and delivering.
- ▶ The extent of use of these technologies is so much across the boundaries of the organisation that E- Business enterprise has become completely digitalised all its operations, and hence is now called as a “Digital Firm.
- ▶ Conventional design of MIS designed to throw information on ‘Where, What, When’ in standard report format is totally ineffective and useless is the IS structure of conventional MIS.

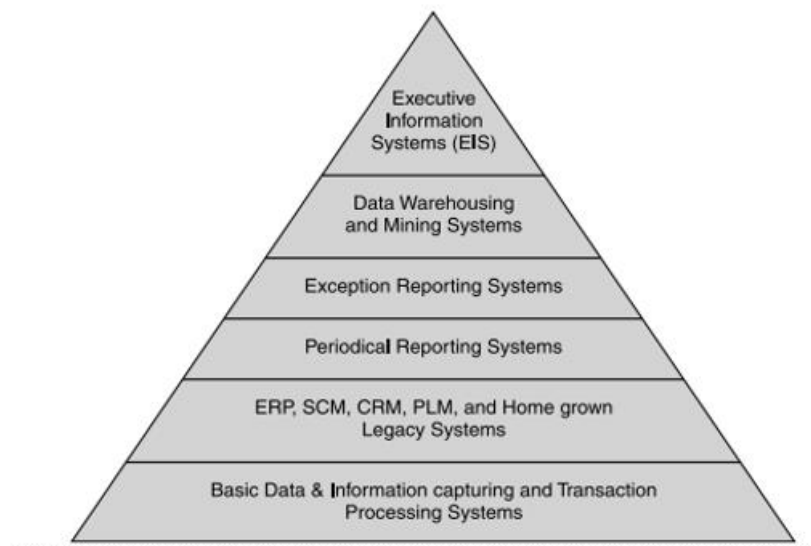


Fig. 1.9 IS Structure of Conventional Design of MIS

b.MIS model of a digital firm focusing on strategy.

- ▶ The MIS design for a digital firm has to focus on business strategy, key result areas, critical success factors, monitoring key performance indicators (KPIs) & key business measures.

- ▶ The focus of MIS in a digital firm needs to shift from just in time information to just in time actionable information.
- ▶ The just in time actionable information is a result of analytical processing of the business results and the strategy behind it.
- ▶ This is best handled by introducing an information systems designed to produce Balance Score Card, Score card and Dash Board.
- ▶ The MIS in a digital firm is a Strategic Design of the MIS.

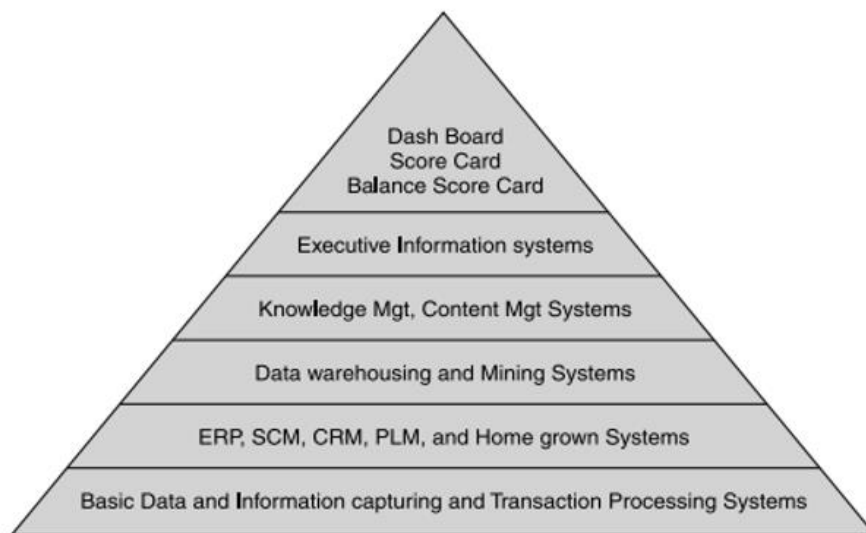


Fig. 1.10 *MIS Model of a Digital Firm Focusing on Strategy*