



**Subject: MIS**

**Semester: VII**

## **Managers and Decision Making**

Management is a process by which an organization achieves its goals through the use of resources (people, money, materials, and information). These resources are considered to be inputs. Achieving the organization's goals is the output of the process. Managers oversee this process in an attempt to optimize it. A manager's success often is measured by the ratio between the inputs and outputs for which he or she is responsible. This ratio is an indication of the organization's productivity.

The Manager's Job and Decision Making To appreciate how information systems support managers, you first must understand the manager's job.

Managers do many things, depending on their position in the organization, the type and size of the organization, the organization's policies and culture, and the personalities of the managers themselves.

Despite these variations, however, all managers perform three basic roles (Mintzberg, 1973):

1. Interpersonal roles: figurehead, leader, liaison
  2. Informational roles: monitor, disseminator, spokesperson, analyzer
  3. Decisional roles: entrepreneur, disturbance handler, resource allocator, negotiator
- Early information systems primarily supported the informational roles. In recent years, information systems have been developed that support all three roles. In this chapter, you will focus on the support that IT can provide for decisional roles

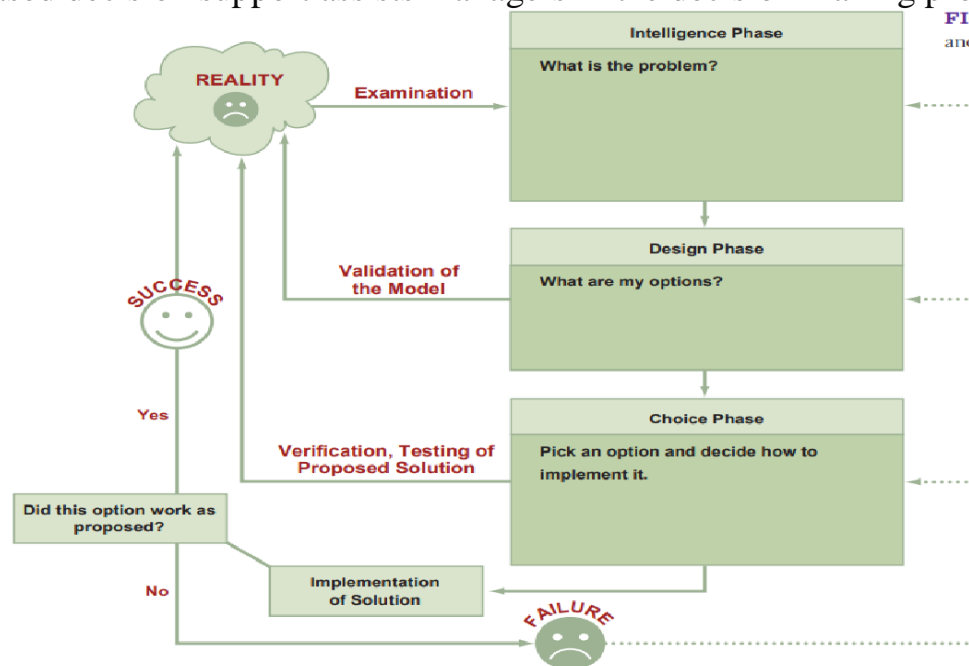
A decision refers to a choice among two or more alternatives that individuals and groups make. Decisions are diverse and are made continuously. Decision making is a systematic process. Economist Herbert Simon (1977) described decision making as composed of three major phases: intelligence, design, and choice. Once the choice is made, the decision is implemented.

- The decision-making process starts with the intelligence phase, in which managers examine a situation and identify and define the problem or opportunity.
- In the design phase, decision makers construct a model for the situation. They do this by making assumptions that simplify reality and by expressing the relationships among all the relevant variables. Managers then validate the model by using test data. Finally, decision makers set criteria for evaluating all of the potential solutions that are proposed. The choice phase involves selecting a solution or course of action that seems best suited to resolve the problem. This solution (the decision) is then implemented. Implementation is successful if the proposed solution solves the problem or seizes the opportunity.
- If the solution fails, then the process returns to the previous phases. Computer-

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based decision support assists managers in the decision making process.



**FIGURE 12.1** The process and phases in decision making.

### Why Managers Need IT Support

- each phase and activity in the decision-making process. Even when information is available, however, decision making is difficult due to the following trends:
- The number of alternatives is constantly increasing, due to innovations in technology, improved communications, the development of global markets, and the use of the Internet and e-business. A key to good decision making is to explore and compare many relevant alternatives. The greater the number of alternatives, the more a decision maker needs computer-assisted searches and comparisons.
- Most decisions must be made under time pressure. It often is not possible to manually process information fast enough to be effective.
- Due to increased uncertainty in the decision environment, decisions are becoming more complex. It is usually necessary to conduct a sophisticated analysis in order to make a good decision.
- It often is necessary to rapidly access remote information, consult with experts, or conduct a group decision-making session, all without incurring large expenses. Decision makers, as well as the information, can be situated in different locations. Bringing everything together quickly and inexpensively can be a major challenge.



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**What Information Technologies Are Available to Support Managers?**

- In addition to discovery, communication, and collaboration tools that indirectly support decision making, several other information technologies have been successfully used to support managers. As you saw earlier, these technologies are collectively referred to as business intelligence (BI). BI is closely linked to data warehousing, which provides the data needed for BI.