

Lesson:-05

MANAGERIAL DECISION MAKING

Types of Managerial Decisions

Chapter overview: types of managerial decisions, steps in decision-making process

Today, students, we are going to discuss a managerial function that encompasses all the other functions of management, that is, making decisions.

- ❖ A decision is a choice made from available alternatives.
- ❖ Decision-making is the process of identifying problems and opportunities and selecting a course of action to deal with a specific problem or take advantage of an opportunity.
- ❖ Managers often are referred to as decision makers
- ❖ Managerial decision-making differs from personal decision making in the systematic, specialized attention that managers give to decision-making.
- ❖ Decision-making is not easy. It must be done amid ever-changing factors, unclear information, and conflicting points of view.
- ❖ Good decision-making is a vital part of good management, because decisions determine how the organization solves its problems, allocates resources, and accomplishes its goals.
- ❖ Although many of their important decisions are strategic, managers also make decisions about every other aspect of an organization, including structure, control systems, responses to the environment, and human resources.
- ❖ Plans and strategies are arrived at through decision making; the better the decision making, the better the strategic planning.
- ❖ Managers scout for problems and opportunities, make decisions for solving or taking advantage of them, and monitor the consequences to see whether additional decisions are required.
- ❖ Decision-making deals with problems. A problem arises when an actual state of affairs differs from a desired state of affairs. Examples of problem situations are:
 - A deviation from past experience.
 - A deviation from a set plan.
 - Other people's problems or decisions.
 - The performance of competitors.

In many cases, a problem maybe an opportunity in disguise.

It is not always clear whether a situation faced by a manager presents a problem or an opportunity. David B. Gleicher, a management consultant, defines a problem as something that endangers the organization's ability to reach its objectives, and an opportunity as something that offers the chance to exceed objectives.

❖ According to Peter Drucker, opportunities rather than problems are the key to organizational and managerial success. Drucker observes that solving a problem merely restores normality, whereas the exploitation of opportunities leads to progress.

Types of Managerial Decisions

- ❖ The first classification of personal and organizational decisions was suggested by Chester Barnard in his classic book: “The functions of the Executive”.

In his opinion, the basic difference between the two decisions is that “personal decisions cannot ordinarily be delegated to others, whereas organizational decisions can often, if not always, be delegated”.

Thus, a manager makes organizational decisions that attempt to achieve organizational goals and personal decisions that attempt to achieve personal goals.

Personal decisions can affect the organization, as in the case of a senior manager deciding to resign.

Another common way of classifying types of decisions is according to whether they are basic or routine

Basic decisions are those which are unique, one-time decisions involving long-range commitments of relative permanence or duration, or those involving large investments. Examples of basic decisions in a business firm include plant location, organization structure, wage negotiations, product line, etc. Most top management policy decisions can be considered as basic decisions.

Routine decisions are the everyday, highly repetitive management decisions which by themselves have little impact on the overall organization. However, taken together, routine decisions play a tremendously important role in the success of an organization.

Examples of routine decisions

include an accounting entry decision and a salesperson’s decision on what territory to cover.

Finally, most management decisions typically fall into one of two categories: programmed and nonprogrammed.

Programmed decisions involve situations that have occurred often enough to enable decision rules to be developed and applied in the future.

Programmed decisions are used for dealing with recurring organizational problems, whether complex or uncomplicated.

If a problem occurs repetitively and routinely, and a specific approach can be worked out for handling it, then it may be a candidate for programmed decision making.

Unpredicted, and analyzed, a manager does not need to go to the trouble and expense of working up an involved decision process.

- ❖ Programmed decision making is relatively simple and tends to rely heavily on previous solutions.
- ❖ Programmed decisions limit freedom because managers have less latitude in deciding what to do.
- ❖ However, programmed decisions save time and cost less (since discretion consumes time and money), allowing managers to devote attention to other, more important activities.
- ❖ Lower-level managers essentially confront familiar and repetitive problems; therefore they most typically rely on programmed decisions such as policies, standard operating procedures, and rules.
- ❖ Examples of programmed decisions are inventory of a given product to be maintained, salary range of a newly hired employee, and handling of customer complaints. poorly defined and largely unstructured, and have important

consequences for the organization. ! Nonprogrammed decisions deal with unusual or exceptional problems.

- ❖ If a problem has not come up often enough to be covered by a policy or is so important that it deserves special treatment, it must be handled as a nonprogrammed decision.
- ❖ Also, when a manager confronts an ill-structured problem, a custom-made, nonprogrammed response is required.
- ❖ Most of the problems that top managers of an organization confront are nonrecurring and illstructured. Hence, as a manager moves up the organizational hierarchy, the ability to make nonprogrammed decisions becomes important.
- ❖ Deciding whether to acquire another organization or to sell off an unprofitable division, deciding which markets offer the most potential, or deciding how to allocate an organization's resources are examples of nonprogrammed decisions.
- ❖ Another classification of decisions relates to:
 - Complexity of the problem in terms of the number of factors associated with it.
 - The extent of certainty that can be placed with the outcome of a decision.
 - Based on these two dimensions, four kinds of decision modes can be identified: Mechanistic, Analytical, Judgmental, and Adaptive.

	Low Problem	High Complexity
High Outcome Uncertainty	Judgmental Decisions (e.g., marketing, investment, and personal problems)	Adaptive Decisions (e.g., research & development and long-term corporate planning)
	Mechanistic Decisions (e.g., daily routines and	Analytical Decisions (e.g., complex production and

- ❖ ! A mechanistic decision is one that is routine and repetitive in nature.
- ❖ ! It usually occurs in a situation involving a limited number of decision variables where the outcomes of each alternative are known.
- Most mechanistic decision problems are solved by habitual responses, standard operating procedures, or clerical routines.
 - ❖ In order to further simplify these mechanistic decisions, managers often develop charts, lists, matrices, decision trees etc.
 - ❖ An analytical decision involves a problem with a larger number of decision variables , where the outcomes of each decision variable can be computed.
 - ❖ Management science and operations research provide a variety of computational techniques like linear programming and statistical analysis that can be used to find optimal solutions.

- ❖ Many production and engineering problems are complex, but solutions can be found.
- ❖ A judgmental decision involves a problem with a limited number of decision variables, but the outcomes of decision alternatives are unknown.
- ❖ Many marketing, investment, and resource allocation problems come under this category.
- ❖ Good judgment is needed to increase the possibility of desired outcomes and minimize the possibility of undesired outcomes.
- ❖ An adaptive decision involves a problem with a large number of decision variables, where outcomes are not predictable.
- ❖ Because of the complexity and uncertainty of such problems, decision makers are not able to agree on the nature or on decision strategies.
- ❖ Such ill-structured problems usually require the contributions of many people with diverse technical backgrounds.
- ❖ In such a case, decision and implementation strategies have to be frequently modified to accommodate new developments in technology and the environment.
- ❖ Decision making under different states of nature:
- ❖ Every decision situation can be organized on a scale according to the availability of information and the possibility of failure.
- ❖ The four positions on the scale are certainty, risk, uncertainty, and ambiguity.

- ❖ ! Decision making under certainty occurs when a manager knows the precise outcome associated with each possible alternative or course of action.
- ❖ In such situations, there is perfect knowledge about alternatives and their consequences.
- ❖ The probability of specific outcomes is assumed to be equal to one.
- ❖ A manager is simply faced with identifying the consequences of available alternatives and selecting the outcome with the highest benefit or payoff.
- ❖ Decision making under risk is when a single action may result in more than one potential outcome, but the relative probability of each outcome is unknown.
- ❖ Decisions under conditions of risk are perhaps the most common.
- ❖ In such situations, alternatives are recognized, but their resulting consequences are probabilistic and doubtful.
- ❖ In practice, managers assess the likelihood of various outcomes occurring based on past experience, research, and other information.
- ❖ Decision making under uncertainty happens when a single action may result in more than one potential outcome, but the relative probability of each outcome is unknown.
- ❖ In such situations a manager has no knowledge whatsoever on which to estimate the likely occurrence of various alternatives.

- ❖ Decisions under uncertainty generally occur in cases where no historical data are available from which to infer probabilities or in instances which are so novel and complex that it is impossible to make comparative judgments.
- ❖ Managers may have to make assumptions from which to forge the decision.
- ❖ Managers may have to come up with creative approaches to alternatives and use personal judgment to determine which alternative is best.
- ❖ Selection of a new advertising program is an example of such a decision.
- ❖ Decision making under ambiguity means that the goals to be achieved or the problem to be solved is unclear, alternatives are difficult to define, and information about outcomes is unclear.
- ❖ Such problems, referred to as “wicked” decision problems are associated with managerial conflicts over goals and decision alternatives, rapidly changing circumstances, fuzzy information, and unclear linkages among decision elements.
- ❖ In such cases managers must conjure up goals and develop reasonable scenarios for decision alternatives in the absence of information.

After studying the basic concepts of decision-making and the environments in which the decisions are made, we will now discuss how decisions should be and are made in practice.

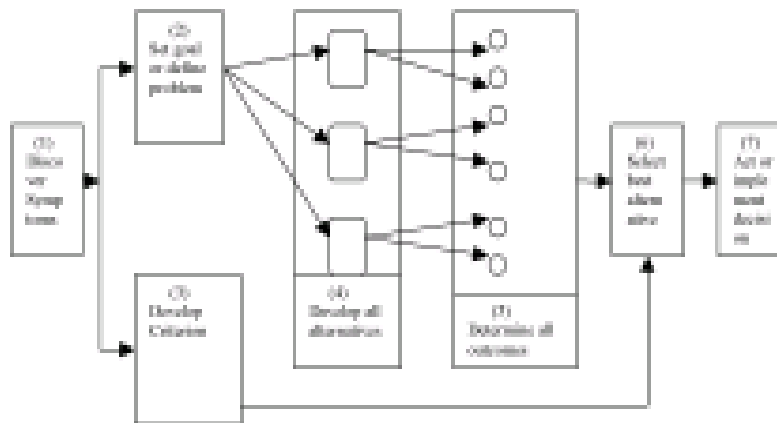
Steps in the Decision-making Process

- ❖ Models of decision making process
- ❖ There are three suggested models of how decisions are made:
 - ❖ The econological or economic man model.
 - ❖ The bounded rationality or administrative man model.
 - ❖ The implicit favorite or gamesman model.
- ❖ The Econological or Economic Man model represents the earliest attempt to model decision process.
- ❖ This model rests on two assumptions:
 1. It assumes that people are economically rational and that they will select the decision or course of action that has the greatest advantage or payoff from among the many alternatives.
 2. It also assumes that people attempt to maximize outcomes in an orderly and sequential process by going about the search for the best alternative in a planned, orderly, and logical fashion.
 - ❖ ! A basic econologic decision model suggests the following orderly steps in the decision process:
 1. Discover the symptoms of the problem or difficulty;
 2. Determine the goal to be achieved or define the problem to be solved;
 3. Develop a criterion against which alternative solutions can be evaluated;
 4. Identify all alternative courses of action;
 5. Consider the consequences of each alternative as well as the likelihood of the occurrence of each;

6. Choose the best alternative by comparing the consequences of each alternative (step 5) with the decision criterion (step 3); and,
7. Act or implement the decision.
 - ❖ The economic man model represents a useful prescription of how decisions should be made, but it does not adequately portray how decisions are actually made.
 - ❖ This model is unrealistic since it makes the following assumptions about human beings:
 1. People can have complete information;
 2. They can accurately recall any information any time they like;
 3. People can manipulate all this information in a series of complex calculations to provide expected values; and,
 4. People can rank the consequences in a consistent fashion for the purposes of identifying the preferred alternative.

Steps in The Decision-making Process

- ❖ ! The Bounded Rationality or Administrative Man Model has been presented by Simon.
- ❖ ! As the name implies, this model, does not assume individual rationality in the decision making process.
- ❖ ! Instead, it assumes that people while they may seek the best solutions usually settle for much less because the decisions they confront typically demand greater information processing capabilities than they possess.
- ❖ ! They seek a kind of bounded (or limited) rationality in decisions.
- ❖ ! The concept of bounded rationality attempt to describe decision processes in terms of three mechanisms:
 1. Sequential attention to alternative solutions: Instead of identifying all possible solutions and selecting the best, the various alternatives are identified and evaluated one at a time.
 2. Use of heuristics: Decision makers use heuristics to reduce large problems to manageable proportions so that decisions can be made rapidly. They look for obvious solutions or previous solutions that worked in similar situations.
 - ❖ ! A heuristic is a rule which guides the search for alternatives into areas that have a high probability for yielding satisfactory solutions.
 3. Satisfying: Whereas the econological model focuses on the decision maker as an optimizer, this model sees her or him as a satisficer.
An alternative is optimal if:



- (1) There exists a set of criteria that permits an alternative to be compared; and,
- (2) The alternative in question is preferred, by these criteria, to all other alternatives.

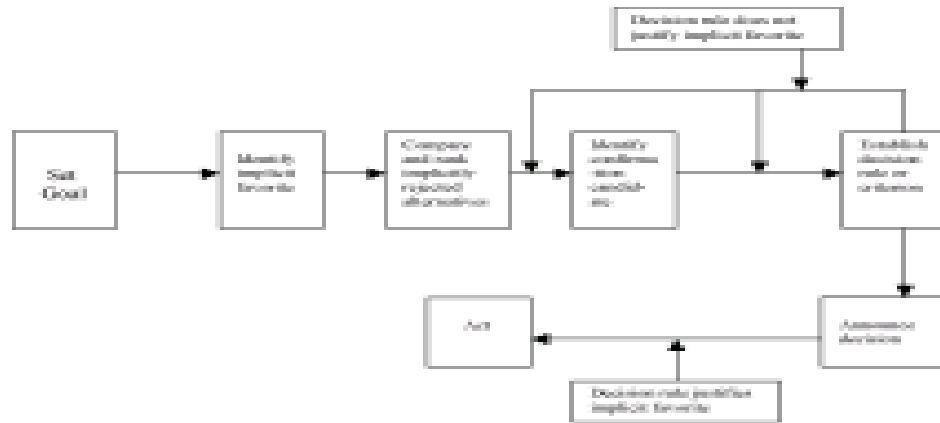
An alternative is satisfactory if:

- (1) There exists a set of criteria that describes minimally satisfactory alternatives; and,
- (2) The alternative in question meets or exceeds all these criteria.

! The bounded rationality model decision making process is outlined below:

1. Set the goal to be pursued or define the problem to be solved.
2. Establish an appropriate level of aspiration or criterion level (that is, when do you know that a solution is sufficiently positive to be acceptable even if it is not perfect?).
3. Employ heuristics to narrow problem space to a single promising alternative.
4. If no feasible alternative is identified (a) lower the aspiration level, and (b) begin the search for a new alternative solution (repeat steps 2 and 3).
5. After identifying a feasible alternative (a), evaluate it to determine its acceptability (b).
6. If the identified alternative is unacceptable, initiate search for a new alternative solution (repeat steps 3-5).
7. If the identified alternative is acceptable (a) implement the solution (b).
8. Following implementation, evaluate the ease with which the goal was (or was not) attained (a), and raise or lower level of aspiration accordingly on future decisions of this type.

! In contrast to the prescriptive economic model, it is claimed that the bounded rationality model is descriptive; that is, it describes how decision makers actually arrive at the identification of solutions to organizational problems.



- ❖ ! Implicit Favorite or Gamesman Model was developed by Soelberg (1967).
- ❖ ! In this process, an implicit favorite is identified very early in the choice process during the generation of alternatives.
- ❖ ! The search for additional choices is continued and quickly the best alternative candidate is selected, known as the confirmation candidate.
- ❖ ! Next, decision rules are generated to demonstrate unequivocally that the implicit favorite is superior to the alternative confirmation candidate.
- ❖ ! This is done through perceptual distortion of information about the two alternatives and through weighing systems designed to highlight the positive features of the implicit favorite.
- ❖ ! The decision rules are designed to contain only those one or two dimensions in which the implicit favorite can be shown to be superior to the confirmation candidate.
- ❖ ! The following are the steps in the process of this model:

1. Set goal;
2. Identify implicit favorite;
3. Compare and rank implicitly rejected alternatives;
4. Identify confirmation candidate;
5. Establish decision rule or criterion;
6. If decision rule does not justify implicit favorite repeat steps 4 and/or 5;
7. Otherwise, announce decision; and,
8. Act.

❖ ! **Steps in the decision making process:**

1. Recognition of decision requirement.
2. Diagnosis and analysis of causes.
3. Development of alternatives.
4. Evaluation of alternatives.
5. Selection of desired alternative.
6. Implementation of chosen alternative.
7. Evaluation and feedback.

