UNIT III

FUNCTIONS OF MANAGEMENT - II

DECISION MAKING

The word decision has been derived from the Latin word "decidere" which means "cutting off". Thus, decision involves cutting off of alternatives between those that are desirable and those that are not desirable.

In the words of George R. Terry, "Decision-making is the selection based on some criteria from two or more possible alternatives".

Characteristics of Decision Making

- Decision making implies that there are various alternatives and the most desirable alternative is chosen to solve the problem or to arrive at expected results.
- The decision-maker has freedom to choose an alternative.
- Decision-making may not be completely rational but may be judgemental and emotional.
- Decision-making is goal-oriented.
- Decision-making is a mental or intellectual process because the final decision is made by the decision-maker.
- A decision may be expressed in words or may be implied from behaviour.
- Choosing from among the alternative courses of operation implies uncertainty about the final result of each possible course of operation.
- Decision making is rational. It is taken only after a thorough analysis and reasoning and weighing the consequences of the various alternatives.

TYPES OF DECISIONS

a) Programmed and Non-Programmed Decisions: Herbert Simon has grouped organizational decisions into two categories based on the procedure followed. They are:

i) Programmed decisions: Programmed decisions are routine and repetitive and are made within the framework of organizational policies and rules. These policies and rules are established well in advance to solve recurring problems in the organization. Programmed decisions have short-run impact. They are, generally, taken at the lower level of management.

ii) Non-Programmed Decisions: Non-programmed decisions are decisions taken to meet non-repetitive problems. Non-programmed decisions are relevant for solving unique/ unusual problems in which various alternatives cannot be decided in advance. A common feature of non-programmed decisions is that they are novel and non-recurring and therefore, readymade solutions are not available. Since these decisions are of high importance and have long-term consequences, they are made by top level management.

b) Strategic and Tactical Decisions: Organizational decisions may also be classified as strategic or tactical.

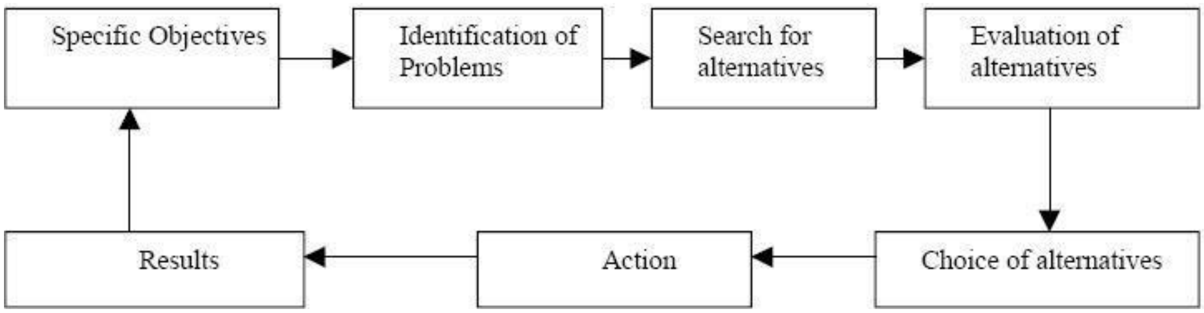
i) Strategic Decisions: Basic decisions or strategic decisions are decisions which are of crucial importance. Strategic decisions a major choice of actions concerning allocation of resources and contribution to the achievement of organizational objectives. Decisions like plant location, product diversification, entering into new markets, selection of channels of distribution, capital expenditure etc are examples of basic or strategic
decisions.

ii) Tactical Decisions: Routine decisions or tactical decisions are decisions which are routine and repetitive. They are derived out of strategic decisions. The various features of a tactical decision are as follows:

- Tactical decision relates to day-to-day operation of the organization and has to be taken very frequently.
- Tactical decision is mostly a programmed one. Therefore, the decision can be made within the context of these variables.
- The outcome of tactical decision is of short-term nature and affects a narrow part of the organization.
- The authority for making tactical decisions can be delegated to lower level managers because: first, the impact of tactical decision is narrow and of short-term nature and Second, by delegating authority for such decisions to lower-level managers, higher level managers are free to devote more time on strategic decisions.

DECISION MAKING PROCESS

The decision making process is presented in the figure below:



1. Specific Objective: The need for decision making arises in order to achieve certain specific objectives. The starting point in any analysis of decision making involves the determination of whether a decision needs to be made.

2. Problem Identification: A problem is a felt need, a question which needs a solution. In the words of Joseph L Massie "A good decision is dependent upon the recognition of the right problem". The objective of problem identification is that if the problem is precisely and specifically identifies, it will provide a clue in finding a possible solution. A problem can be identified clearly, if managers go through diagnosis and analysis of the problem.

Diagnosis: Diagnosis is the process of identifying a problem from its signs and symptoms. A symptom is a condition or set of conditions that indicates the existence of a problem. Diagnosing the real problem implies knowing the gap between what is and what ought to be, identifying the reasons for the gap and understanding the problem in relation to higher objectives of the organization.

Analysis: Diagnosis gives rise to analysis. Analysis of a problem requires:

- Who would make decision?
- What information would be needed?
- From where the information is available?

Analysis helps managers to gain an insight into the problem.

3. Search for Alternatives: A problem can be solved in several ways; however, all the ways cannot be equally satisfying. Therefore, the decision maker must try to find out the various alternatives available in order to get the most satisfactory result of a decision. A decision maker can use several sources for identifying alternatives:

- His own past experiences
- Practices followed by others and
- Using creative techniques.

4. Evaluation of Alternatives: After the various alternatives are identified, the next step is to evaluate them and select the one that will meet the choice criteria. /the decision maker must check proposed alternatives against limits, and if an alternative does not meet them, he can discard it. Having narrowed down the alternatives which require serious consideration, the decision maker will go for evaluating how each alternative may contribute towards the objective supposed to be achieved by implementing the decision.

5. Choice of Alternative: The evaluation of various alternatives presents a clear picture as to how each one of them contribute to the objectives under question. A comparison is made among the likely outcomes of various alternatives and the best one is chosen.

6. Action: Once the alternative is selected, it is put into action. The actual process of decision making ends with the choice of an alternative through which the objectives can be achieved.

7. Results: When the decision is put into action, it brings certain results. These results must correspond with objectives, the starting point of decision process, if good decision has been made and implemented properly. Thus, results provide indication whether decision making and its implementation is proper.

Characteristics of Effective Decisions

An effective decision is one which should contain three aspects. These aspects are given below:

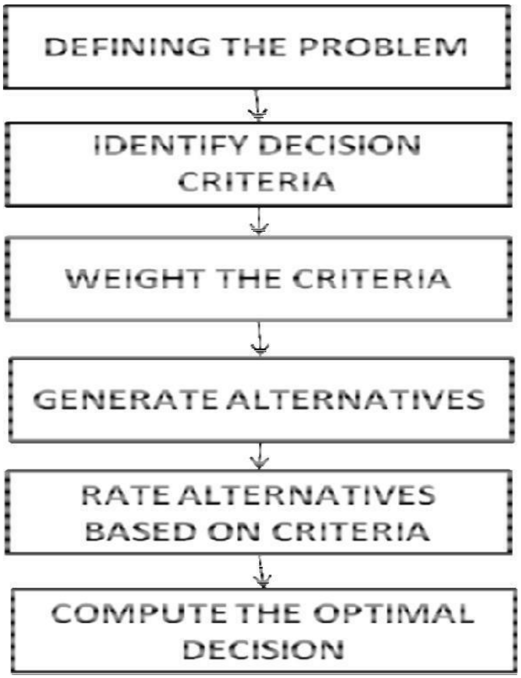
- **Action Orientation:** Decisions are action-oriented and are directed towards relevant and controllable aspects of the environment. Decisions should ultimately find their utility in implementation.
- **Goal Direction:** Decision making should be goal-directed to enable the organization to meet its objectives.
- **Effective in Implementation:** Decision making should take into account all the possible factors not only in terms of external context but also in internal context so that a decision can be implemented properly.

RATIONAL DECISION MAKING MODEL

The Rational Decision Making Model is a model which emerges from Organizational Behavior. The process is one that is logical and follows the orderly path from problem identification through solution. It provides a structured and sequenced approach to decision making. Using such an approach can help to ensure discipline and consistency is built into your decision making process.

The Six-Step Rational Decision-Making Model

1. Define the problem.
2. Identify decision criteria
3. Weight the criteria
4. Generate alternatives
5. Rate each alternative on each criterion
6. Compute the optimal decision



1) Defining the problem

This is the initial step of the rational decision making process. First the problem is identied and then defined to get a clear view of the situation.

2) Identify decision criteria

Once a decision maker has defined the problem, he or she needs to identify the decision criteria that will be important in solving the problem. In this step, the decision maker is determining what's relevant in making the decision.

This step brings the decision maker's interests, values, and personal preferences into the process.

Identifying criteria is important because what one person thinks is relevant, another may not. Also keep in mind that any factors not identified in this step are considered as irrelevant to the decision maker.

3) Weight the criteria

The decision-maker weights the previously identified criteria in order to give them correct priority in the decision.

4) Generate alternatives

The decision maker generates possible alternatives that could succeed in resolving the problem. No attempt is made in this step to appraise these alternatives, only to list them.

5) Rate each alternative on each criterion

The decision maker must critically analyze and evaluate each one. The strengths and weakness of each alternative become evident as they compared with the criteria and weights established in second and third steps.

6) Compute the optimal decision

Evaluating each alternative against the weighted criteria and selecting the alternative with the highest total score.

DECISION MAKING UNDER VARIOUS CONDITIONS

The conditions for making decisions can be divided into three types. Namely a) Certainty, b) Uncertainty and c) Risk

Virtually all decisions are made in an environment to at least some uncertainty However; the degree will vary from relative certainty to great uncertainty. There are certain risks involved in making decisions.

a) Certainty:

In a situation involving certainty, people are reasonably sure about what will happen when they make a decision. The information is available and is considered to be reliable, and the cause and effect relationships are known.

b) Uncertainty

In a situation of uncertainty, on the other hand, people have only a meager database, they do not know whether or not the data are reliable, and they are very unsure about whether or not the situation may change.

Moreover, they cannot evaluate the interactions of the different variables. For example, a corporation that decides to expand its Operation to an unfamiliar country may know little about the country, culture, laws, economic environment, and politics. The political situation may be volatile that even experts cannot predict a possible change in government.

c) Risk

In a situation with risks, factual information may exist, but it may be incomplete. 1o improve decision making One may estimate the objective probability of an outcome by using, for example, mathematical models On the other hand, subjective probability, based on judgment and experience may be used

All intelligent decision makers dealing with uncertainty like to know the degree and nature of the risk they are taking in choosing a course of action. One of the deficiencies in using the traditional approaches of operations research for problem solving is that many of the data used in model are merely estimates and others are based on probabilities. The ordinary practice is to have staff specialists conic up with best estimates.

Virtually every decision is based on the interaction of a number of important variables, many of which has e an element of uncertainty but, perhaps, a fairly high degree of probability. Thus, the wisdom of launching a new product might depend on a number of critical variables: the cost of introducing the product, the cost of producing it, the capital investment that will he required, the price that can be set for the product, the size of the potential market, and the share of the total market that it will represent.