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# **Analysis of Decision-Making in Management**

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Making decisions is a crucial component of contemporary management. A manager does everything by making choices. Every day, a manager makes hundreds of conscious or subconscious judgements. Managers make decisions, while others carry out actions. Big choices are made with care and consciousness utilizing human judgement and experience, while little ones are made practically unconsciously using rules. Decision-making pervades all administrative responsibilities, including planning, Organising, staffing, leading, and controlling. For example, in planning, the management selects what to create, where and when, and so on, but in Organising, the manager decides on work division, delegating authority, and assigning responsibility. Making a decision means committing to something, a point of view, a principle, or a path of action [1].

- 1. It is deciding on the best course of action from among many options. The following variables influence decision-making.
- 2. Decision-making entails considering many choices and selecting the most desired option to address a problem.
- **3.** The existence of alternatives implies that the decision-maker has the flexibility to choose a preferred choice.
- **4.** Like every other administrative process, decision-making is goal-oriented. It suggests that the decision maker seeks to attain certain outcomes via decision-making.

## **Types of Decisions**

Choices are categorized in the following ways. Decisions that are programmed and non-programmed: Decisions that are programmed are those that are made in line with policy, procedure, and regulations. These are regular and recurrent judgements, and programmed decisions are quite simple to make. For example, deciding salary payment to sick employees, granting discounts to repeat clients, and so on are all programmed decisions. Non-programmed choices are unique and do not repeat themselves. If an issue has never occurred before or if there is no clear-cut solution, it must be addressed by non-programmed choice. For example, deciding what to do about a failed product line is a non-programmed choice since there is no specific protocol for it. There are clearly defined guidelines for programmed decisions, thus two people cannot come up with different answers to the same issue.

In the event of a non-programmed choice, there are no hard and fast rules for dealing with the issue; each management may bring his or her own personal views, attitudes, and judgements to bear on the decision; two managers may arrive at radically different answers to the same problem. This capacity to make nonprogrammed judgements becomes critical for higher-level managers.

Decisions, both major and minor: Major choices are those that have long-term consequences or have ramifications for other departments. Minor choices are those that do not have a long-term impact or touch just one department; significant decisions are those that diversify current product lines and incorporate new technologies. The choice to acquire raw materials is a small decision. Important decisions are made at a higher level in the organisational structure, whereas minor decisions are made at a lower one.

Easy and complicated choices: When there are just a few factors to consider while addressing an issue, the choice is sample. If the variables are numerous, then it is a complicated choice. Strategic and tactical or operational decisions: A strategic decision is a key choice of actions regarding resource allocation and contribution to the attainment of organisational goals. Strategic choices are large, unplanned decisions with long-term consequences. A strategic choice may represent a significant shift from previous ones. Changes in the product mix, for example. Higher-level managers make strategic judgements. Strategic decisions lead to tactical or operational decisions. It is made in the framework of well-established rules and processes and pertains to the day-to-day operations of the business. Choices on air conditioning and parking facilities are operational decisions. These choices are made at a lower organisational level [2]–[4]. Decisions may be made by an individual or by a group. Individuals make decisions that are regular in nature, with few variables and specific processes in place to deal with them. Groups, on the other hand, make choices that have an influence on other departments and may result in changes to the organisation.

# **Decision Making Process: Steps in Rational Decision Making**

A logical choice is one that uses acceptable tools to achieve the intended result. The decision-making process includes the following phases.

- **1** Identifying the issue.
- 2 Choosing priorities among challenges.
- **3** Identifying the issue.
- **4** Creating alternate alternatives or activity plans.
- **5** Assessing options.
- **6** Turning the choice into effective action and action follow-up.
- 1 Identifying the Issue: A decision made by a management is the organizations reaction to a challenge. As a result, it is required to investigate the surroundings for the presence of a problem. A issue is stated to exist; When there is divergence from prior experience. For example, this years revenues are lower than last years, but costs are higher than in prior years, and so on. When there is a divergence from the original plan. For example, revenues are lower than projected, costs are more than planned, and so on. When rivals outperform. Some firms, for example, provide items of the same quality at a lesser cost. When employees bring concerns to the managers attention, Workers, for example, may complain about inadequate ventilation.
- **2 Problem Prioritization:** A manager may have recognized a lot of difficulties. The significance of each of these issues varies. He may discover that some of the difficulties can be handled by their subordinates since they are closest to them. Any such issues should be sent to them. Certain issues may need information that is only accessible at a higher level or that affects other departments. Such issues are escalated to higher-level supervisors. And he will concentrate on the issues that he can best tackle.
- **3 Problem Identification**: Signs of the issue that are detected by the management may at times deceive him. The symptom may cause the management to suspect one component when the issue is really located in another. For example, if sales are down, management may believe that the issue is one of inadequate selling procedures or market saturation in the previous market. Yet, the true issue may be a failure to respond fast to changing client demands. A management should use the systems approach to diagnose an issue. He should investigate all of his organizations sub-parts that are linked to the sub-part where the issue seems to be found.
- 4 Creating Alternative Options or Plans of Action: A issue may be addressed in various ways; nevertheless, all the approaches cannot be equally satisfactory. If there is just one solution to an issue, there is no need for a choice. As a consequence, in order to get the most suitable choice outcome, the

decision maker must identify several possibilities. It should also be noted that not all options may be evaluated, either because information about all alternatives is not accessible or because certain alternatives cannot be investigated due to limits. As a result, the notion of limiting factor should be employed while constructing alternatives. A limiting factor is one that prevents you from achieving your goal. For example, if an organisation is unable to raise significant funds, it will be unable to explore initiatives requiring significant expenditure [5]–[7].

A decision maker may find alternatives based on his or her own experience, the practises of others, and creative techniques. A decision maker employing prior experience considers the decision makers actions in the past with the difference between previous problems and the current one. The effective action of the past might become a future option. The constraint is that what worked in the past may not work in the current situation due to changes in the context in which the choice was made. Another technique to generate alternatives is to mimic the experience of others. Alternatives utilised by effective decision makers might be thought of as decision-making alternatives. The third way to produce alternatives is via a creative process in which different activities are used to generate completely new concepts. Individuals or organisations creative ideas aid in the development of alternatives. Brainstorming is a common group method. The brainstorming group is made up of 5 to 10 members. The greatest approach to brainstorming is to generate as many options as possible without stopping to examine them [8]–[10].

5 Assessing and Comparing the Outcomes of Competing Solutions: After the development of several options, the following stage is to assess and compare the implications of those alternatives using quality and acceptability. The quality of a choice must be judged considering both concrete and intangible repercussions. Tangible outcomes are those that can be quantified or statistically shown. For example, one may compute the installation and operating expenses of two different models of air conditioners. Intangible repercussions are impossible to quantify. The impact of a good labour relationship in one region, for example, cannot be compared to the effect of local taxation in another location.

The acceptability of the solution is also critical. A choice that is excellent in quality but not in acceptability, or a decision that is acceptable but not good in quality. Managers must determine the relative relevance of these two in such circumstances. In manufacturing, finance, and purchasing, the quality of the solution is more essential than acceptability, however in all human matters such as lighting, office layout, and so on, acceptability is more significant. Whenever adequate information on the quality or acceptability of a solution is not available, pilot testing on a limited scale is recommended. For example, a corporation may test a new product in a local market before extending its sale countrywide.

6 Turning the Choice into Effective Action and Action Follow-Up: This phase entails communicating decisions to personnel. The decision must be stated in straightforward words. All possible efforts should be taken to ensure employee engagement in various decision-making phases. Employee involvement in decision making not only increases acceptance, but also enhances decision quality. A manager may make the wrong judgement at times owing to a lack of data. As a precaution against wrong judgement, the manager in converting a decision into effective action should develop a system of follow-up so that he may amend or revise his decision at the earliest opportunity.

# **Environment of Decision-Making**

A decision-maker may not be fully informed about choice alternatives or the effect of a selected option. This situation might be very difficult and unpredictable. The environment of decision making refers to these knowledge circumstances. The atmosphere may be classified into three types: certainty, risk, and ambiguity. The decision-making environment is a continuum, with total confidence at one extreme.

Figure 5.1 represent the complete uncertainty.

Decision-making under certainty: The phrase certainty refers to having complete awareness of each alternative's outcome (Figure 5.1). All necessary data is accessible for decision making. A corporation, for example, wishes to carry items from five warehouses to a lot of clients. It is possible to collect pertinent information for the issue, such as the mode of transportation available and the cost of moving a unit from each warehouse to each consumer. This allows you to create a low-cost distribution scheme. Risky decision-making: The effects of a given choice cannot be defined with certainty in decision making under risk, but they may be specified with known probability values. The probability score is a measure of possibility of the occurrence of an event. In such instances, the anticipated value of the payout associated with each choice is used to assess the alternatives.

Uncertainty is said to occur when the decision maker does not know the probabilities associated with the various outcomes, while being able to identify the possible outcomes and their associated pay-offs. Since the odds are unknown, the decision maker cannot apply the payoff criteria. He may, however, use the MaxiMin requirement. The MaxiMaxi or Minimax regret criteria. If a manufacturer is pessimistic or cautious, he might select the choice act that maximises the lowest pay-off, which is known as the Maximin criteria. If a manufacturer is hopeful, he may select the choice act with the highest pay-off. This is known as the max-max criteria. A manager who employs the minimax regrets criteria views the decision issue as neither gloomy nor hopeful. The minimax regret criteria, as the name indicates, is one through which the decision maker minimizes the greatest amount of regret that may occur regardless of the result.

## **Organizing and Staffing**

The foundation upon which the whole organization is formed is the organization. No management job can be carried out smoothly unless it is well organized. A well-organized organization adds significantly to the company's continuity and success. A weak organizational structure makes excellent performance difficult, regardless of how talented the people are.

The word organisation connotes various things to different individuals. Sociologists, for example, define organisation as the study of the relationships of individuals, classes, or the hierarchy of an enterprise. Organization, according to psychologists, is an effort to understand, predict, and affect the behaviour of personnel in a business. The term organization is also often used to refer to a group of individuals and the structure of their interactions. We will examine organization under the following headings in order to comprehend its meaning and characteristics:

- 1 Organization as a collection of individuals.
- **2** Organization is a connection framework.
- **3** Organization as a managerial function.
- 4 Organization as a method

Organization as a collection of people: An organization is considered as a group of individuals who work together to achieve a common purpose. The notion of organization emerged in the early phases of human civilization when two or more people started to collaborate and combine to meet their fundamental requirements of food, clothing, housing, and life protection. Organization emerges when individuals pool their resources to achieve a shared goal. Chester I. Barnard described organization as an identifiable group

of persons who contribute their efforts. An organization is formed when a group of people communicate and interact with one another and are ready to work together to achieve a shared goal. The group of individuals set down rules and regulations and the formal structure or connection among themselves.

Some individuals see organization as a connection structure. Organization establishes the scope of the enterprises activity by establishing the framework of linkages. If organization is only recognized as a structure, it will be seen as a static entity utilized to explain formal connections. Yet, an organization is a dynamic entity made up of persons, means, aims, and interpersonal interactions. Nevertheless, the word structure is not used alone to signify organization; it is paired with the term organization in the form of organization structure or structure of organization. Organization is a fundamental management function. It entails determining and providing diverse resources to attain a particular aim. Hence, organization is described as the act of integrating and directing the efforts of people, financial, and other resources to achieve certain goals. Organizing, like planning, is used in all aspects of management. For example, organization is required for planning, development, and the design of plans and policies. Strategic management is the process of building connection among the members of the organization. Organization structure is created using this approach. The connections are constructed in terms of authority and responsibility. Each employee in the organization is allocated a particular function or duty to fulfil and is given the power to do so. Organization entails identifying and grouping of tasks to be completed, allocating them among personnel, and developing authority and responsibility relationships among them for the attainment of organizational goals, writes Louise A Allen. Organizing is a process that includes departmentalization, departmental linkage, defining authority and responsibility, and prescribing authority relationships. This technique produces the organizational structure.

# Steps in Organizing

A manager distinguishes and combines his organizations tasks while organizing. The process of departmentalization or separation of operations based on some commonality is referred to as differentiation. The process of attaining unity of effort across diverse departments, segments, or subsystems is known as integration. Organization entails the following interconnected steps:

- 1 Study of Goals: The first step in organizing is to understand the enterprises aims. The resources and actions that must be done, as well as the sort of organization that must be developed, are determined by the objectives. Goals also act as recommendations for management and employees. They help the company achieve unity of purpose.
- **2 Activity Identification and Grouping:** If the members of the group are to successfully pool their efforts, the key activities must be properly divided. Each work must be appropriately categorized and organized. This will allow individuals to understand what is expected of them as group members and will aid in preventing duplication of efforts. For example, an enterprises complete operation may be separated into primary functions such as production, buying, marketing, finance, and so on, and each function may be further subdivided into multiple roles. For example, in the manufacturing department, different departments for research, industrial engineering, and so on may be established. The tasks may then be categorized and organized to ensure that the subsequent processes are carried out effectively.
- **3 Assignment of Duties:** After categorizing and organising tasks into distinct roles, they should be assigned to persons to ensure consistency in work performance. Each person should be assigned a particular task based on his or her abilities and held accountable for it.
- **4 Delegation of Authority:** Responsibility without authority is perilous, and authority without responsibility is an empty vessel. As a result, authority matching to duty is assigned to subordinates in order for them to demonstrate job performance.

# **Nature of Organization**

The following characteristics may be used to emphasize the nature of the organization:

- 1 Organization is usually linked to certain goals: Whether it is the whole company or a portion of it, goals impact organisation. The activities are separated; authority and duty are established to attain specified goals.
- 2 Individuals join groups or organisations to achieve similar goals and pool their efforts by defining and dividing diverse tasks, responsibility, and power.
- **3** Communication is an organizations nervous system: Organizational members may communicate with one another and coordinate their operations. No company can exist without an effective communication system.
- 4 Organizing is a fundamental management function: Organizing is done in connection to all other management responsibilities, namely planning, staffing, directing, and controlling, as well as in all business domains, namely production, marketing, buying, and personnel. All managers execute the organisational role.
- **5** Organizing is a never-ending process: It is not a one-step process. Managers are constantly restructuring and reforming their teams.
- 6 Organization connotes a structure of connection: The structure of relationship purposely produced by the management is referred to as formal organisation. An company may also have a network of social interactions that develop amongst employees. Informal organisation refers to such partnerships. People in formal organisations can communicate with one another, are ready to act, and have a common goal. People in informal organisations collaborate because they have similar interests and dislikes.
- 7 An organisation is comprised of a network of power and responsibility relationships:

Different jobs are established, and certain responsibilities are delegated to them. Each position is given sufficient power to complete the mission. To accomplish coordination and minimise disputes between people and departments, authority and responsibility connections must be clearly defined across the company.

# **Organization Structure**

An organisational structure demonstrates the power and responsibility relationships among the different roles within the company by indicating who reports to whom. It is a set of designed linkages between groups of related functions, as well as between physical components and persons, that are necessary to fulfil organisational goals. An organizations structure is often shown on an organisation chart or a job task pyramid. It depicts the power and responsibility connection between distinct organisational roles. A good organisation design should not be static but dynamic. It should be subject to periodic revision in light of changes in the business environment.

## **Purpose of Organization**

An organisation is a kind of human group formed to achieve shared goals. An industrial organisation is a sort of group of people who work together to carry out economic operations. Evidently, the better the organisation, the more complete the realisation of shared goals. Similarly, a loose organisation denotes an uncomfortable and hazardous situation. Organization is necessary for the following reasons:

- **1 To Enable Communication Patterns:** Organizational structures enhance communication and coordination patterns. Structure enhances communication between individuals by grouping activities and persons based on their work activities. Individuals that have a common issue typically need to exchange knowledge in order to address it.
- **2 To Distribute Power and Duty:** Organizational structure distributes authority and responsibility. It states who will guide whom and who will be held responsible for what outcomes. The structure enables organisation members to understand their roles and how they connect to one another.

- **3 To Identify Decision Centres:** The location of decision making in the company is determined by organisational structure. For example, a department shop may delegate price decisions to a lower-level management, but pricing decisions at an oil refinery are made at the highest level.
- **4 To Achieve Adequate Balance:** Organizational structure achieves optimal activity balance and concentration. Individuals who are more important to the organizations success may be promoted. In a pharmaceutical business, for example, R&D may be singled out for reporting to the managing director. Activities of equivalent significance may be assigned to a lower level.
- **5 To Foster Creativity:** A well-organized workplace fosters autonomous, creative thinking and initiative by offering well-defined job areas and a wide attitude towards the creation of new and better methods of doing things.
- **6 To Promote Development:** The organisation structure provides the framework under which a company operates; if the organisation structure is adaptable, it will aid in solving obstacles and providing chances for growth.
- 7 Making Advantage of Modern Advancements: A solid organisational structure that is adaptable to change may make the maximum use of cutting-edge technologies. It has the potential to alter the present pattern of authority-responsibility relationships as a result of technology advancements.

# **Principles of Organization**

Management philosophers have established organisational principles in order to ease the attainment of goals. The principles serve as guidance for organisational structure planning. As a result, a full grasp of organisational concepts is required for successful organisation. The following organisational principles are discussed:

1 Objectives: The enterprises goals have an impact on the organizations structure.

Every aspect of the organisation, as well as the business as a whole, should be focused towards the enterprises primary goal.

- **2 Specialization:** A successful organisation must encourage specialisation. The enterprises operations should be separated into functions and allocated to people based on their specialty.
- **3 Span of Control:** A manager may personally oversee only a limited number of executives. As a result, a sufficient number of subordinates reporting to a management is required. For this reason, a maximum of six may be prescribed.
- **4 Exception:** This concept mandates that the organisational structure be constructed in such a way that managers are only needed to go through extraordinary issues.
- **6** Subordinates: Subordinates should make all regular judgements, but challenges involving exceptional concerns and policy decisions should be directed to higher levels.
- 5 The scalar concept, often known as the chain of command. From the top to the bottom, there must be clear lines of power. The right to decide, control, and coordinate is referred to as authority. Every subordinate must understand who his superior is and to whom policy decisions beyond his own authority must be directed.
- **6 Command Unity:** Each subordinate should have just one supervisor whose orders he must follow. Dual subordination must be avoided since it produces anxiety, disorder, and indiscipline, as well as undermining authority.
- **7 Delegation:** Appropriate power should be distributed at all levels of the organisation. The delegation of authority must be proportionate to the delegation of responsibility, i.e., the manager must have sufficient power to complete the job allocated to him.

- **8 Accountability:** A superior should be held accountable for his subordinates' actions. No superior should be permitted to dodge accountability by distributing power to his subordinates.
- **9 Authority:** Authority is the instrument that a manager uses to achieve the desired goal. As a result, each managers authority must be clearly defined. In the organisation, power and responsibility must be mutually exclusive.
- 10 Efficiency: The company should be able to achieve its purpose and goals at the lowest possible expense.
- 11 Simplicity: The organisational structure should be as basic as feasible, with the fewest layers possible. A vast number of organisational layers makes efficient communication and cooperation challenging.
- **12 Adaptability:** The organisation should be adaptive to shifting situations. It should allow for extension and replacement without causing dislocation or interruption to the core architecture. A healthy organisation must minimise cumbersome processes, red tape, and unnecessary control intricacy in order to respond to business and technological changes effectively and inexpensively.
- **13 Balance:** There should be a fair balance between centralization and decentralisation in the size of separate departments. The formal structure must be balanced in terms of factors with competing claims.
- **14 Directional Unity:** For a set of activities with the same goal, there must be one target and one strategy. The unification and coordination of operations at multiple levels is facilitated by unity of direction.
- **15 Personal Abilities:** Since an organisation is a formal collection of individuals, adequate selection, placement, and training are required. The organisational structure must guarantee that human resources are used to their full potential.

## REFERENCES

- [1] R. Gawlik, Methodological Aspects of Qualitative-Quantitative Analysis of Decision-Making Processes, *Manag. Prod. Eng. Rev.*, 2016, doi: 10.1515/mper-2016-0011.
- [2] H. Li, J. Zhang, J. Sun, and J. Wang, A visual analytics approach for flood risk analysis and decision-making in cultural heritage, *J. Vis. Lang. Comput.*, 2017, doi: 10.1016/j.jvlc.2017.05.001.
- [3] G. M. Wojcik *et al.*, Analysis of Decision-Making Process Using Methods of Quantitative Electroencephalography and Machine Learning Tools, *Front. Neuroinform.*, 2019, doi: 10.3389/fninf.2019.00073.
- [4] N. E. Anderson, J. Slark, and M. Gott, Unlocking intuition and expertise: using interpretative phenomenological analysis to explore clinical decision making, *J. Res. Nurs.*, 2019, doi: 10.1177/1744987118809528.
- [5] T. J. Loftus *et al.*, Decision analysis and reinforcement learning in surgical decision-making, *Surg. United States*, 2020, doi: 10.1016/j.surg.2020.04.049.
- [6] J. Noone, Concept analysis of decision making., *Nursing forum.* 2002. doi: 10.1111/j.1744-6198.2002.tb01007.x.
- [7] P. Krishnan, A philosophical analysis of clinical decision making in nursing, *J. Nurs. Educ.*, 2018, doi: 10.3928/01484834-20180123-03.
- [8] M. E. Suarez-Almazor, M. Richardson, T. L. Kroll, and B. F. Sharf, A qualitative analysis of decision-making for total knee replacement in patients with osteoarthritis, *J. Clin. Rheumatol.*, 2010, doi: 10.1097/RHU.0b013e3181df4de4.
- [9] D. Habbema, Statistical analysis and decision making in cancer screening, European Journal of

Epidemiology. 2018. doi: 10.1007/s10654-018-0406-8.

[10] D. Kahneman and A. Tversky, Prospect Theory: An Analysis of Decision Making under Risk, *Passion Perpetua Felicitas Late Antiq.*, 2021.