

ENABLING STRATEGIC
DECISION-MAKING IN
ORGANIZATIONS THROUGH
DATAPLEX

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ENABLING STRATEGIC DECISION-MAKING IN ORGANIZATIONS THROUGH DATAPLEX

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INVESTOR IN PEOPLE

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LIST OF ABBREVIATIONS

AI	Artificial Intelligence
BI	Business Intelligence
CPM	Central Policy Management
DB	Database
DBMS	Database Management System
DDBMS	Distributed Database Management System
DI	Data Intelligence
IAM	Identity Access Management
MDU	Manageable Data Unit
VPN	Virtual Private Network

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THE DECISION-MAKING PROCESS AT ORGANIZATIONS

1.1. INTRODUCTION TO DECISION-MAKING

The process through which an individual, group, or organization comes to conclusions over what actions needed to perform given specific goals and constraints is known as decision-making based on the available resources. This will be an iterative process involving issue framing, information gathering, and arriving to conclusions and experience-based learning (Schoemaker & Russo, 2017). The concept of a decision-making process can be traced back to the dawn of thought. Decisions should be made after careful consideration and deliberation. The human intelligence can be deduced from inference and self-evident premises using only reason. Aristotle structured logic with logical proofs, which allowed anybody to evaluate whether a conclusion was objectively true in a reasonable amount of time (Bartlett & Collins, 2011). Decision-making is an important thing in everyone's life, similarly, it is important to make decisions in an organization. The executives of an organization are responsible for the outcomes of the intuitive or rational decisions made. So, when it comes to making decisions, intuition or rationality must be standardized, because numerous factors might impact the choice of one or the other, or even both cognitive kinds, at any one time (Morgan, 2002).

Decision-making is nothing but including the process by which an individual or a whole organization intend to reach a conclusion regarding what further actions to pursue in future with a set of objectives and confines on accessible resources. Decision is literally a choice, i.e., when an individual intends to come to a conclusion regarding particular circumstances or situations. It denotes a course of behavior, i.e., what one should actually do

or not do. On the other hand, decision-making as a process is, referred to as a selection of one particular action from multiple courses of action. Therefore, it is a choice-making function and the choice that eventually determines one's action or inaction. The processes involved during decisions made are generally influenced by various factors, i.e., internal or external factors.

Decision-making is considered as an essential element in personal and organizational life. Numerous decisions are made by individuals in everyday life. In the business context, it is not exceptional and decision-making is required in each step. All organizational tasks, namely, planning, training, staffing, and controlling are performed through various decisions. The whole process of decision-making entails intellectual process, time, and preceding experiences. In this context, thinking process has a significant role in the whole process. Decision-making is therefore the fundamental part of different managerial activities in any organization. In the organizations, generally managers have the decision-making authority, and they have to decide what process has to be undertaken, i.e., either sensible process or intuitive process. Organizations usually make numerous decisions every single day in order to achieve their management requirements. Of these, some might be small and could be achieved quickly, whereas some are more complicated and influential and involve more detailed exploration. As decision-making happens at every nook and corner of the organization, it is therefore considered as an essential part of the manager's role. Accomplishing the organization's objectives in a compound and instable environment wherein concerned persons are enforced to take faster decisions and as well to transform them as fast, processes relating to decision-making are considered useful (Panpatte & Takale, 2010). The quality and promptness of decision-making is considered as the main factor of an organization's success or failure.

Making decisions is regarded as a main function of the organization. To find a solution to a problem, decision-making involves selecting a way to proceed from two or more viable options. Making a decision is a conceptual process that comprises picking one course of action from a set of alternatives. Planning is the second role of management, which will come after decision-making. Organizing, directing, coordinating, managing, and inspiring are some of the other roles that come after planning. According to Hafenbrädl, Waeger, Marewski, and Gigerenzer (2016), decisions are quickly made with the available little amount of data.

According to Corso, Raimundini, Granado, and Janissek-Muniz (2014), decision-making occurs in situations of confidence and ambiguity, with the final choice producing challenges in the process.

Panpatte and Takale (2019) say that the utilization of knowledge, skills, time, and prior experience is required during the decision-making process. The thought process is critical in this technique. Decisions are important because they govern organizational and managerial action. Each management level makes decisions in order to ensure that the organization's or company's objectives are fulfilled. Every organization must make successful decisions at some time as part of the managerial process. The organization chose to simplify the procedure. Most management choices are influenced by internal and external environmental restrictions. Management choices are made in chaotic and dangerous conditions since the environment is always changing and information is not always accurate and easily available.

Decisions taken in unexpected and dangerous conditions describe complex, unstructured, and unplanned scenarios (Dragomir, 2012; Rutherford-Silvers, 2007; Ștefănescu, 2013). Management decision-making has evolved over the decades as a consequence of additions to the literature from theorists and practitioners, as well as a lack of difficulties encountered. Decision models are important in achieving organizational goals in a complex and dynamic environment where leaders must make judgments and adjust swiftly. The success or failure of committees is determined by the speed and consistency with which decisions are made.

Consider the difficulties you have in making independent decisions in your own life. As a result, we can see how tough and critical business decisions may be when the stakes are too high and the repercussions are terrible (Greenberg, 2011). The fundamental essence of decision-making is the same in both circumstances. The process of selecting an option from a group of choices is referred to as decision-making (March, 2010).

Management theorists consider decision-making as one of the most important managerial activities (Drucker, 2010; Mintzberg, 2008). The greatest business decisions are not just made by managers, but by all employees, at all levels.

“Most discussions of decision making assume that only top executives make decisions,” said the late management expert. This is a critical error. “At every level of the company, the ability to make informed judgments is essential.” Many organizational decisions are now made by groups, teams, or committees (Bonito, 2012).

According to Oliveira (2015), intuition is the product of an unexpected, unanticipated, and unconscious process that delivers a conscious conclusion. Rationality, from the other hand, obtains the same conscious outcomes through a significantly more rigorous, regulated, deliberate, and conscious process. As a result, although being diametrically opposed, cognitive intuition

and rationality can subsequently overlap, resulting in either rational intuition or intuitive rationality.

Senior executives, according to Moresi (2000), make strategic decisions based on qualitative data, whereas lower-level executives require data that allow them to make regular and operational decisions. The author of this essay tries to understand the viewpoint of hierarchical first-level managers, who were at least one direct subordinate and may report to a superior manager or director. These executives are in the spotlight because of their capacity to hinder innovative ideas or critical projects inside a hierarchical decision-making process.

According to Mintzberg and Quinn (2001), making decisions without considering organizational culture can lead to unpredictable results. In other words, it influences the leader, leadership style, and consequently decision-making.

Litherland (2013) defines the problem, identifies and restricts its elements, proposes promising solutions, evaluates possibilities, selects the best solution, implements the choice, and develops a management and assessment system. The most common method used by administrators is this one. For the past two decades, strategic decision-making has been the focus of strategic research (Papadakis & Barwise, 2002). Decision-making processes can be categorized as having “logical” or “irrational” basis as described by Barnard (1938). Mintzberg, Raisinghani, and Theoret (1976) describe three stages of strategic decision-making: identification, development, and choice.

The identification stage comprises two processes: decision recognition and diagnosis. In the decision recognition, possibilities, crises, and difficulties are recognized and evoke decisional activity.

There are two procedures in the development process: searching and designing (Mintzberg et al., 1976). Exploring the organization’s memory, sitting back and waiting for an answer, announcing the need for a solution to outsiders in the hopes of obtaining an answer, and finally actively seeking for answers are all part of the search process. When the search process fails, the design routine kicks in; the failure to find a “ready-made” solution results in the production of a “custom-made” solution. Rather from the time-consuming job of developing multiple and eliminating all except one, organizations generally build only one custom-made solution. The bulk of decision-making procedures are deployed and utilized during the development phase’s search and design routines, as opposed to certain other routines and stages within the cycle. The three successive steps in the selection phase are “screen,” “evaluation-choice,” and “permission.”

Almost every community and institution makes decisions on a regular basis, including homes, schools, government agencies, and commercial boardrooms. Those at the top of an organization make key decisions, especially when it comes to leadership and management (Hickson, Butler, Cray, Mallory, & Wilson, 1986). Management decision-making is defined by Bartol and Martin in 1994 as the process of identifying and solving organizational problems. Decision-making, according to Harris (2009), comprises detecting and properly selecting from a number of choices based on inclination. It includes a wide range of processes that operate as links between thinking and action, as well as antecedents to conduct (Talley, 2011).

Decision-makers and managers must actively participate in the decision-making process. This decision-making procedure will enable decision-makers and managers to develop possibilities, evaluate each alternative, and select the best strategy or solution to the problem. Many investigations on strategic decision-making show the process as a sequence of steps, phases, or routes. Several impediments to an accurate characterization of the situation at hand have been discovered, including: focusing on outcomes rather than causes, selective perception, describing issues via solutions, and so on (Cornescu, Marinescu, Curteanu, & Toma, 2004).

1.2. THE PROCESS OF DECISION-MAKING AT ORGANIZATIONS

Most models of decision-making, in general, integrate some important steps, which should be followed by managers when making decisions (Litherland, 2013). These include identification of the actual problem, figure out alternative solutions, and evaluate those alternatives, choose one better alternative, implement decision and evaluate decision. Decision-makers, i.e., individuals or managers should let themselves to be in the entire decision-making process. The entire process will bring up the new opportunities to decision-makers and give them the new alternatives, assess every single alternative, and choose the best alternative to the existing problem. Fig. 1.1 shows the different processes involved in the decision-making of organizations. The first step involved in making a decision is to have distinguished a differentiation between the present and the preferred situation. This inconsistency, or difference, gives stress to the managing director, make the situation hassle, and enforcing him/her to implement actions, for example, time limit, financial distress, or regarding future job evaluations, amongst other probabilities.

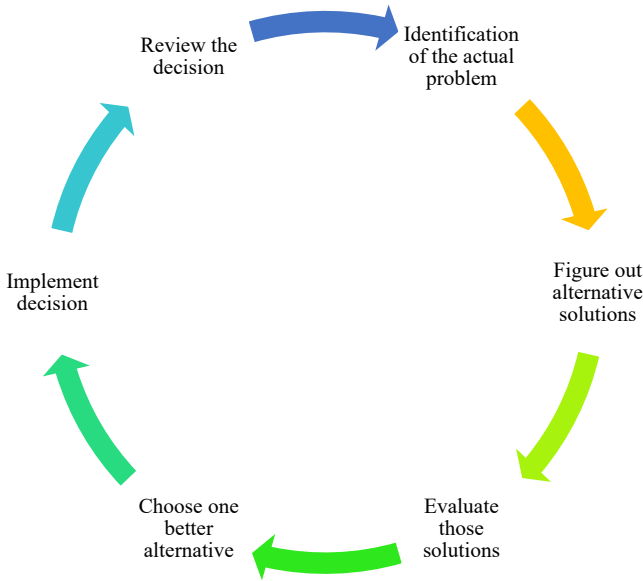


Fig. 1.1. Different Processes of Decision-Making.

1.2.1. Identification of the Actual Problem

The primary step in the entire decision-making process is finding out the actual problem. In order to make a better decision, it is actually important to find out the problem. It is important for the organization and the manager to contemplate analytical or strategic factors in distinguishing the problem. These factors are, actually, hindrances in the way of identifying proper solution. Besides, these are, as well referred to as limiting factors. This includes, identifying root causes, regulating assumptions and managerial boundaries and boundaries. Identification of the problem will pave the new way for rectifying the problems. Problem recognition should be followed by an inclination to implement something to resolve the situation. Prior to taking any significant action, the problem should entail accurate diagnosis, i.e., identification of the problem (Alhawamdeh & Alsmairat, 2019). Diagnosis entails evaluating the actual source of the problem by wisely choosing all relevant substance and eliminating information which is not actually significant to the problem within reach. At times, decisions should be made when an issue or difficulty does not subsist: for instance, a business might want to expand rapidly to exploit market opportunities and should choose which way to go.

1.2.2. Figure Out Alternative Solutions

After defining and identifying the actual problem, the next stage is to create alternative methods and solutions. The underlying principle of creating alternate solutions is to have the most favorable decision out of the existing alternative strategies or plans (Panpatte & Takale, 2019). By figuring out various alternative solutions, it can be possible for the manager to come across innovative or unique solutions to the problems.

1.2.3. Evaluate Current Solutions

Now with relevant information at hands, evaluating potential solutions to the present problem is considered important. When intending to address a goal, there are generally multiple options that are taken into account. Evaluating those solutions in different situations and choosing one optimal and useful option amongst various alternative choices will lead to success. Incorrect decisions might result in breakdown of the organization or business as a whole, that's why the evaluation process should be followed precisely and wisely.

1.2.4. Choose the Best Alternative

This is one of the important parts in the decision-making processes where one can really choose the decision from the different alternatives. Hopefully, in this process, one can identify and clarify what decision should be made, collect all significant information, and consider the prospective paths to take. These steps determine the survival of organization and help business run against stiff competition in the market.

1.2.5. Implement Decision

Once decisions are made, implementing them will help managers to work effectively. After ranking the possible options, it is important for the manager to implement the one best option that pave the way for the greatest chance of accomplishing their target or purpose. When decisions are implemented appropriately, it becomes an opportunity for an organization to reposition and standardize in a better "way." The manager's decision is converted into a plan or a sequence of activities.

1.2.6. Review the Decision

Once the decision is made, it is important to review that decision. This step contributes to follow the success metrics that was planned in step 1, i.e., identification of the actual problem. This step is the important phase, since it defines whether or not the decision taken meets team's criteria of achievement and success. When there is a demand to make wise decisions, it is always important to consider the favorable and adverse business consequences and must facilitate the positive effects. This will literally avoid the potential losses to the business and helps the business running with a persistent growth.

1.3. THE THREE LEVELS OF DECISION-MAKING AT ORGANIZATIONS

Decisions, in organizations, is classified into three groups on the basis of the level at which they take place. These include strategic, tactical, and operational decisions (Lunenberg, 2011).

1.3.1. Strategic Decisions

Strategic decisions establish the actual course of a business or an organization as a whole. Tactical decisions are all about how actually things will be performed. Operational decisions are day-to-day decisions that are eventually made by employees to run the organization. Strategic decisions are considered to be the major decision roles of any business. These are generally tackled by higher and as well middle-level management. Besides, they typically involve the policies of the business or the strategic proposal for the near future. Strategic decision-making level and managers could not be parted and, hence, they go in concordance. Also, with the business's concern, strategic decision-making levels are considered critical to superiors that run the organization (Bess & Dee, 2008). Nonetheless, managers are likely to influence with certain factors when it comes to strategic decision-making processes (SDMPs). Above all, these factors will either directly or indirectly influence the goodwill of the organization (Zell, Glassman, & Duron, 2007). These decisions are generally lasting decisions and have consequences for the coming period, which even last for years. Numerous risks and uncertainty can be expected in strategic level planning. This level needs a thorough examining and assessment of external environment in order to search for information. Among the three levels, the