

DECISION MAKING

Chapter One

Introduction to Decision Making

Unit Introduction

Decision-making is a critical process that enables individuals, communities, and organizations to determine their future activities to meet their goals and effectively utilize their resources. It involves several key steps, including problem framing, data collection, and reaching judgments, as well as applying experience-based learning. The decision-making process is often ongoing, with decisions continuously revisited and refined in response to new information or environmental changes (Chewning & Sleath, 1996).

Remember:

According to the rational unitary actor paradigm, businesses should carefully examine their surroundings and critically contrast external prospects with inherent advantages.

There are a variety of perspectives on how strategic decisions are made in complex organizations, each of which brings its own unique set of advantages and challenges. For example, a top-down, logical approach may be favored by those who believe that decisions should be made based on a clear, data-driven understanding of the situation (Schoemaker, 1993). This approach seeks to objectively analyze the available information and determine the best course of action based on this information. In contrast, a progressive, energy-driven approach may be favored by those who believe that decisions should be made based on a more intuitive understanding of the situation, taking into account the emotions, motivations, and expectations of those involved (Amitsis et al., 2007).

Regardless of the specific approach taken, it is important to recognize that decision-making in complex organizations is rarely straightforward. Often, many competing interests, conflicting goals, and limited resources make it challenging to reach a consensus on the best course of action (Cohen et al., 1972). Therefore, organizations must develop effective decision-making processes that analyze complex situations, engage stakeholders, and identify and implement the most appropriate solutions.

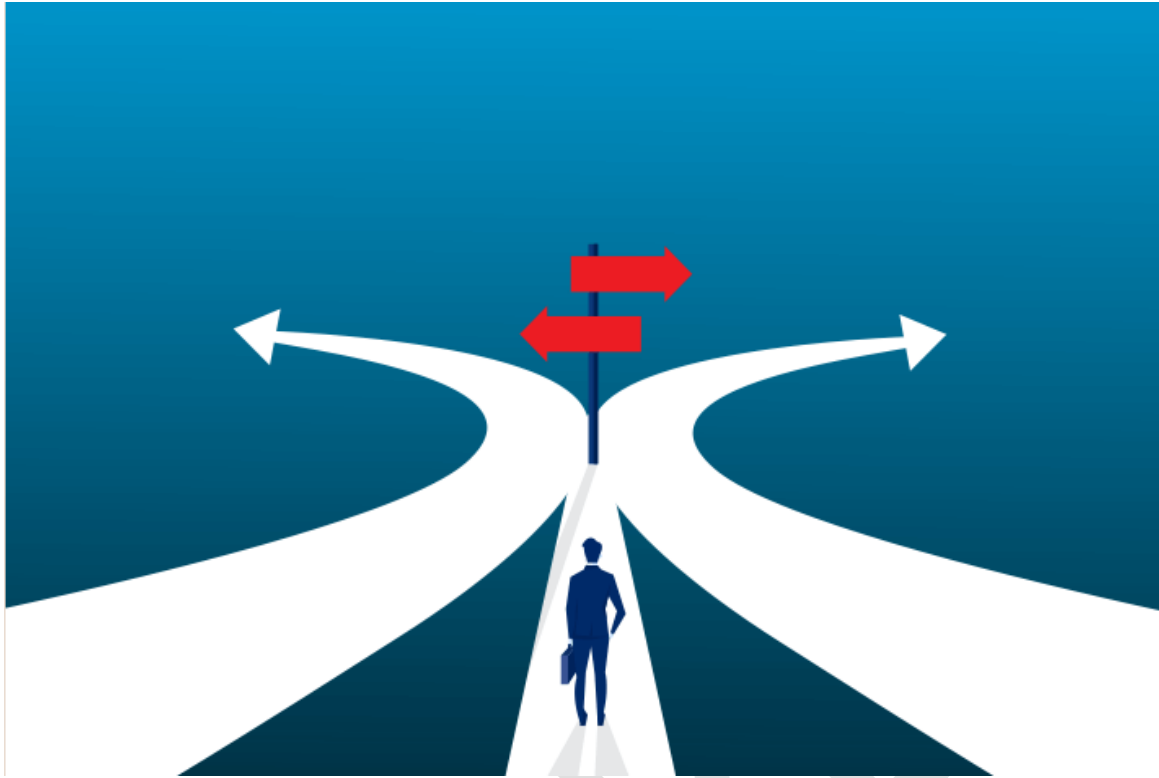


Figure 1.1. Image of how to make a decision (Source: Megan Kachigan, Creative Commons License)

Learning Objectives

At the end of this chapter, the reader will be able to understand,

1. The fundamental phases in decision making
2. The importance of decision making
3. The significance of principles of decision making
4. The concept of individual and corporate decision making
5. The significance of elements involved in decision making
6. The difference between individual and corporate decision making

Key Terms

1. Decision Making
2. Net present value (NPV)
3. General Motors (GM)
4. Managerial Performance
5. Individual Decision
6. Group Decision

7. Top-Down Decision-Making
8. Bottom-Up Decision-Making

1.1 Fundamental Phases in Decision-Making Process

While fully acknowledging that many emotional aspects also play a role in decision-making, most of this entry will concentrate on the cognitive causes of lousy decision-making (Weber & Johnson, 2009). We see the four main stages of the decision-making process as follows:

- i. Framing
- ii. Intelligence collecting
- iii. Choice
- iv. learning through feedback.

There is also the crucial meta-decision stage. It covers the four phases mentioned and poses queries like:

- a) Are we resolving the relevant issue?
- b) Who needs to be responsible for the decision?
- c) Which of the previously mentioned four phases merits the most significant focus? (Takemura, 1994).

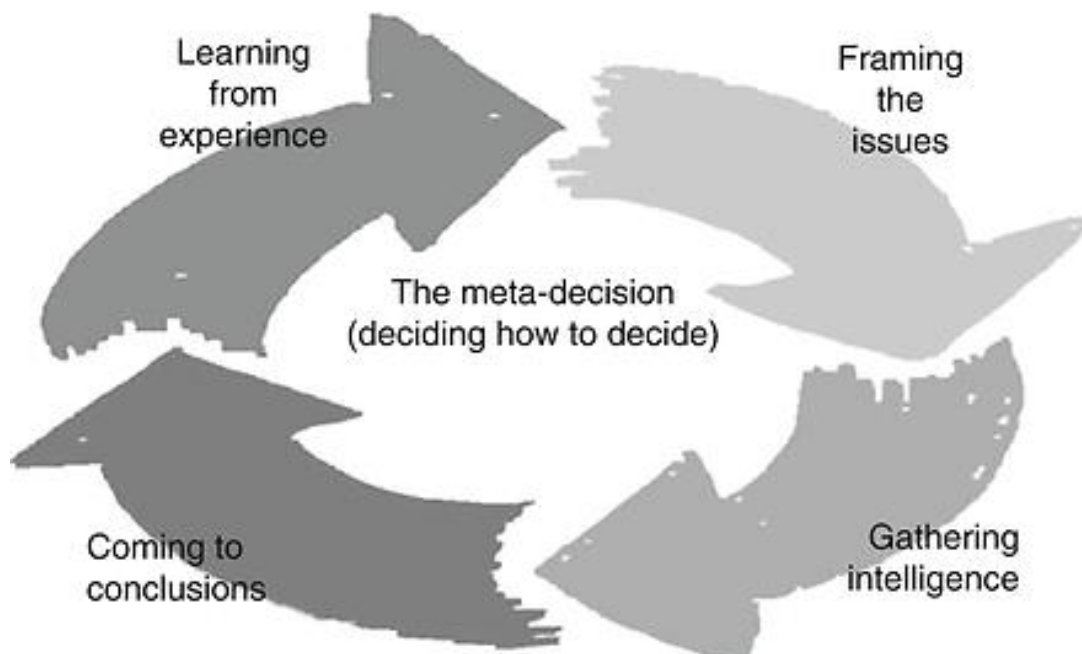


Figure 1.2. Illustration of decision-making processes (Source: Paul J. H. Schoemaker & J. Edward Russo, Creative Commons License)

1.1.1 Framing

Differentiating between decision framing and thinking framing is helpful. Decision frames specify the actions, circumstances, and results that the decision-maker perceives (Tversky & Kahneman, 1986). The higher learning structures that influence the decision frame, like scripts, knowledge bases, cognitive maps, schemata, and inference procedures, are called thinking frames. The decision framework's boundaries (such as geography, time, and market coverage), reference points (like needed return rates, performance benchmarks, and significant competitors), and measurements are important components (including investment return, market share, and measures of product quality) (Moorhead & Montanari, 1986). Many businesses regard their historical performance or that of their direct rivals as the appropriate benchmark for assessing their level of success. Many sectors of the UK industry in the 1970s suffered from a narrow perspective, as did Detroit-based automakers (Bateman et al., 2002).

The "do not invest" approach in the decision of new technology raises a more nuanced framing issue because it frequently uses the persistence of present trends as its benchmark (Kaplan, 1986). Moreover, this fixed perspective misses the competitors' actions, which will likely undermine the status quo. Such narrow viewpoints can be contested with game theory and metaphor shifts (including biological evolution). Another significant framing bias of the literature on behavioral decisions is the lack of a portfolio perspective; every decision is discussed independently of the others (see Thaler, 1980).

1.1.2 Intelligence-Gathering

The three main biases at this stage are:

- a) A propensity for overconfidence
- b) Dependence on deficient assessment algorithms
- c) A propensity for verifying over-disconfirming evidence.

Overconfidence or arrogance is a sign of poor secondary knowledge or failure to recognize our ignorance (Kahneman et al., 1982; Klayman et al., 1999). This could be remedied by recurrent feedback (like in weather forecasts and bridge infrastructure) or by refuting important beliefs by employing scenario construction, faulty trees, or reason generation (Russo & Schoemaker, 1992). The overconfidence bias is particularly likely to affect choices for which there are data and where judgment will unavoidably play a significant role. Knowing when to doubt one's instincts and how to expose false assumptions, particularly in small groups, are crucial.

Using heuristics—shortcuts that simplify difficult decisions—is unavoidable in many situations. For example, present data might be used to forecast future market interest or share rates. Moreover, these anchors frequently cause the judgment to lag, which leads to stubbornness and an underestimation of changes (Tversky & Kahneman, 1974). In steady periods, management heuristics frequently achieve an effective equilibrium between accuracy and information processing costs (pricing, hiring, and

predicting). Many traditional rules of thumb became outmoded and harmful when believed to be true during times of discontinuity. As a result, businesses may have to deal with improper mental software while examining the benefits and drawbacks of new investments (Schoemaker, 1990).

The final bias identified, the failure to look for contradictory evidence, may result in the persistence of outdated heuristics. It is uncommon for managers to undertake inference- and hypothesis-testing tasks to refute conventional thought—Institutionally, filtration and resistance to contradictory evidence support ingrained views and behaviors. Sometimes, before adjustment to changing conditions can occur, a new generation of administrators or skilled start-up competitors is required (Nutt, 20017).

1.1.3 Choice

The selection phase may have the best analytical foundation among the four stages of the decision-making process. Net present value (NPV) analysis requires exceptionally disciplined calculations that could transcend human comprehension.

Net Present
Value

$$NPV = \sum_{t=0}^N \frac{NCF_t}{(1+i_t)^t}$$

Figure 1.3. Schematic of net present value (Source: Sebastian, Creative Commons License)

Verifiable inputs are required to achieve this technology's purported benefits (Sauermann, 2005). The calculation of the cash reserves or the downstream value decisions is less well understood in finance theory than how to modify the discount rate to account for systematic risk and a project's cost of capital. The problem might also include an unreasonable limitation on the company's innovation potential and the explicit consideration of a different valuation. Numerous unofficial choices are taken along the winding path from project concepts to official evaluation by individuals and small groups (Sieck & Yates, 1997).

People's innate fear of ambiguity is one aspect that makes strategic decisions particularly challenging. Ambiguity should not matter in logical models of decision. By incorporating over a presumptive subjective probability distribution - specified on the goal probability - uncertainty (as in second-order

probability distributions) and even ambiguity (as in ill-defined probability distributions) are disregarded. But behaviorally, people favor a known likelihood over a hypothetical one with the exact mathematical prediction (Ellsberg, 1961; Einhorn and Hogarth, 1986). Therefore, in people's casual screening of ideas, proposals entailing a significant degree of ambiguity—resulting from technological or commercial unpredictability are likely to be systematically devalued. In addition, by definition, high-ambiguity projects whose risk characteristics are difficult to quantify objectively would suffer from large enterprises' traditional reliance on the formal, quantifiable explanation of investments (Payne et al., 1988).



Figure 1.4. Graphical illustration of choice (Source: Clare Fleishman, Creative Commons License)

1.1.4 Learning

The learning organization is frequently neglected in favor of the performing organization, as is customary in most businesses (Senge, 1990). To produce consistent results and lower performance variability, traits that helped the company identify a lucrative position in the first place—like innovation, adaptability, casualness, and patience for failure—should be primarily inhibited. If this is the case, the absence of necessary variety may cause the company's short-term performance to be maximized at the cost of its chances of long-term survival. Exploitation must be balanced, which is difficult for most businesses (Gore, 1959).

Numerous problems hamper experience-based learning. They vary from self-justification and ego protection to inaccurate or confusing feedback (Russo & Schoemaker, 2002). Organizations struggle with irregular feedback and likely a lack of autonomy in the results since they can only make a restricted number of accurate strategic decisions in each given managerial generation. This means that the focus should switch to process feedback because outcome feedback will likely be chaotic and scarce. This necessitates looking at the assumptions, data collections, selection processes, motivation alignments, execution, and other factors that went into the decision-making process. Gulliver (1987) is a real-world illustration of the kind of "decision auditing" businesses might use.

The ultimate objective is to transform lessons discovered the hard way into post-mortems, even though post-mortems are an excellent method for learning from errors (Kahneman & Klein, 2009). A culture that embraces diversity and mistakes is necessary for ex-ante learning. For instance, a new organizational entity distinct from the current mainstream business or technology may be needed to learn about new technologies. For example, IBM followed this strategy when creating the PC, as did General Motors (GM) for the Saturn program. One approach to reconciling the inherent contradiction between the learning and performance cultures in organizations is through such division (Senge, 1990). The company should take advantage of its expertise to maximize success during the upcoming periods. The company must increase its chances of long-term survival by expanding its competencies through research. Short-term compromises could be necessary for long-term success. An asymmetrical organization and a strong commitment to confront the very mental models that rendered the firm successful are essential to managing this exchange well (O'Reilly & Tushman, 2004).

Did you know?

Good practice in decision making can be summarised by the five Cs: Consider; Consult; Commit; Communicate; and Check.