

## **Decoding Success: Mastering the Art of Strategic Decision-Making**

**Dr. Ram Bajaj<sup>1\*</sup>**

<sup>1\*</sup>Chairman-RNB Global University-Bikaner, e-mail-chairman@rnbglobal.edu.in

***“Good decision-making brings energy to your Life- Dr. Ram Bajaj”***

Life gives no second chance or retake. Right decision at right moment is therefore extremely necessary. Often people take to just any course in their eagerness to reach the destination quickly. It cannot be declared the right path. We should not take any path no matter how short or comfortable it may appear, if we don't know here we have to go. The whole life passes in aimless roaming and we just keep awaiting the results. In the end what remains is ZERO. So, decide the destination and note the path if you want to succeed in life.

Having strong decision-making skills is crucial for leadership in the workplace. The ability to make effective decisions not only saves time but also optimizes resource utilization, steering the company toward long-term success. Mastering the art of good decision-making fosters positive relationships with employees and enhances the overall work environment. This article delves into understanding decision-making abilities, offering examples, outlining steps for improvement, and advising on how to showcase these skills in your job search. Decisiveness reflects your knack for choosing the optimal option among available alternatives. Consistently making sound decisions is integral to advancing the company's objectives. This entails leveraging information to evaluate the risks and opportunities linked to each choice. Effective decision-makers navigate and mitigate biases that could sway their judgment. In managerial roles, employers look for individuals who excel in making decisions grounded in facts and data, prioritizing them over mere intuitions.

In recent years, decision-makers in both public and private sectors have been marked by a notable string of poor choices. Examples abound, such as the decisions to invade Iraq, disregard global warming treaties, and overlook the crisis in Darfur—all likely to be deemed unwise in the annals of history. The financial sector also witnessed questionable decisions, like investing in and securitizing subprime mortgage loans, as well as hedging risk with credit default swaps. These missteps were not confined to individual companies; even conglomerates like Tenneco suffered from ill-advised business purchases, resulting in a reduced scope. Major players like General Motors faltered in their choices of which cars to introduce to the market. Corporate giants Time Warner and Yahoo made their own missteps, with the former regretting the acquisition of AOL and the latter opting against selling itself to Microsoft.

In familiar scenarios, decisions tend to be swift and automatic, drawing from extensive experience regarding what's effective and what isn't. Yet, when confronted with unfamiliar situations, individuals find themselves needing to invest time in assessing potential benefits and risks before determining a course of action. This uncertainty increases the likelihood of mistakes and exposes them to negative consequences. The contrast between the ease of familiar choices and the deliberation required in uncharted territory highlights the inherent challenges of navigating the unknown.

The prevalence of decision-making disorders can be attributed to a couple of key factors. Firstly, decisions have traditionally been considered the domain of individuals, typically senior executives. The entire decision-making process, including the employed methods, information utilized, and underlying logic, has been somewhat of a black box left to their discretion. It's a mysterious journey from information input to decision output, and the intricacies within this process have been largely unexplored.

Secondly, unlike other business processes, decision-making hasn't been subject to systematic analysis within organizations. Very few firms have taken the initiative to "reengineer" their decision-making processes, despite the numerous opportunities for improvement. Interestingly, valuable insights into decision-making challenges have existed for quite some time. Concepts such as "groupthink," the artificial creation of consensus, were defined by academics over half a century ago, yet this phenomenon continues to plague decision-makers from company boardrooms to the White House. Even practices dating back to the sixteenth century, like the Catholic Church's introduction of the devil's advocate to critique canonization decisions, offer lessons rarely formalized in modern organizations.

It's intriguing to note that while businesspeople are actively purchasing and reading decision-making literature, the adoption of these recommendations remains relatively scarce within companies. The repercussions of this neglect are growing increasingly serious. It's high time to shift decision-making from the realm of individual idiosyncrasies. Organizations need to actively support their managers in implementing improved decision-making processes. While better

processes won't serve as an infallible guarantee for superior decisions, they undeniably enhance the likelihood of making sound choices. It's a strategic move toward a more systematic and effective approach to decision-making within the organizational framework.

Life is full of situations where there's no clear-cut "right" decision. Faced with a plethora of options, it's common to feel decision paralysis or experience dissatisfaction with your choices. The phenomenon known as "choice overload" can lead to self-blame, even when it's simply a matter of navigating through numerous possibilities. The trick lies in finding ways to simplify your decisions and resisting the urge to dwell on the myriad paths left unexplored. Embracing simplicity in decision-making helps alleviate the burden of choice and promotes a more contented mindset.

### **How to Make Good Decisions**

Cruel King of Arab Changiz Khan as fond of hunting. His faithful hawk always accompanied him on hunting expeditions. One day, even after daylong movement, Changiz Khan failed to get a game. He was feeling thirsty. He moved here and there in search of after and reached near a small hill. From the hill water was trickling down in drops. Taking a silver bowl out of his bag he placed it beneath the trickling water. When the bowl as filled Changiz Khan proceeded to drink it, but flittering its wings, his per hawk knocked the bowl down. Three times the same thing happened. Merciless ruler, Changiz Khan was extremely thirsty and outrageous too. Addressing the hawk, he said, If you knock the bowl this time, I will kill you. This time too, hawk knocked down the bowl. Ranging with anger, Changiz Khan at once killed the hawk with his sword. : You deserved this sentence, Changiz Khan said to the hawk.

Changiz Khan began to search the bowl. Soon he saw the bowl struck at a place between the two hills that it was difficult to be removed. Changiz Khan decided to climb the hill so that he could reach the source of trickling water. At the source he saw a big and poisonous creature with black and white spots lying dead and water (poison) was trickling from its body. King shook fear and forgot his thirst. He remembered his faithful and dear hawk he had killed moments before. In fact, the hawk as saving the king again and again from the death. He began to repent that he had been unjust to his dear hawk. He at once dashed back towards his palace murmuring all the way, I have learned a bitter lesson today. I have learned that no decision should be taken impulsively in excitement, anger or without thinking.

### **Why Changiz Khan could not understand this thing before killing his faithful and well-wisher hawk?**

A wise man first thinks thoroughly, then takes a decision to do some work. But a fool does a work first, then thinks. Hence, it is a sign of wisdom to check both the sides of a coin first before accepting it. A person commits another mistake if he does not rectify his first mistake. It is always better to hear reprimands from wise people rather than listening to the flattery by the fools. A wise person learns even from the fools but fools do not even attempt to gain something from the wise ones. Always tries to think a step ahead of the others. But you can understand this only when you know what the limit of others is thinking.

### **Can the future of a man or a team be changed by right or wrong decision?**

French team have won FIFA World Cup 1998 that as played in their on country France. Teams captain Zinedine Zidane was the man credited for winning the championship for his country, he had made the impossible task possible, France in that year had defeated virtually invincible Brazil to become the champion.

Being the Champion, France got a direct entry to FIFA World Cup 2002, which as hosted that year in Asia by Japan and Korea jointly. In the first round France had to play matches against all the three teams in the group. Captain Zinedine Zidane had been injured in a practice match; hence he could not play in the first two matches in the first round. Third match was very crucial to qualify for the second round.

The coach and the captain had a parley between them. Though Zinedine Zidane as not fit fully, but the coach wanted him to play in the third match. Third match as against Denmark. Zinedine Zidane did play in the match but not being fully fit he could not do much for his team. The man who had alone steered his team towards victory in 1998 could not even score a goal for being injured and unfit. France as knocked out of the race for world soccer tournament in the very first round. Later the coach and the captain admitted that they had made a blunder. Had there been another player in place of Zinedine Zidane they would have won the third match.

Putting the spotlight on decisions doesn't necessarily demand an exclusive focus on the mental processes of managers. While acknowledging the need to unpack the black box of decision-making, it can also involve scrutinizing the tangible

elements of the decision-making process—identifying the decisions that require attention, assessing available information, understanding key roles, and more. Forward-thinking organizations implement comprehensive interventions, addressing a spectrum of factors such as technology, information systems, organizational structure, methodologies, and personnel to optimize the decision-making landscape.

### **EFFECT OF WRONG DECISION**

We have all heard about Napoleon Bonaparte, who had dreamed to conquer the world. He had been launching attacks after attacks and winning wars after wars. But one wrong decision destroyed most of his army, and he had to retreat to save his life. In the winters of 1812, Napoleon Bonaparte decided to launch an attack on Russian army. The entire Russia as reeling under bitter cold. The bone chilling cold took off the courage of Napoleons army. Most of his troops were killed and ultimately Napoleon as forced to retreat with his remaining forces.

Consequences of the war could have had been different, if he had not taken that wrong decision.

Some historians maintain and feel that Maharana Pratap had taken a hasty decision in the Battle of Haldighat and launched a hurried attack on the enemy's army. Had Maharana Pratap not taken that desicion and worked hastily in the Battle of Haldighati and not attacked the army of Raja Maan Singh , he would not have to suffer the losses that followed. Maharana Pratap could not win the a rust because of his hasty decision.

### **STEPS TO IMPROVE YOUR ABILITIES TO MAKE DECISIONS**

#### **Step 1: Identify the decision**

You realize that you need to make a decision. Try to clearly define the nature of the decision you must make. This first step is very important.

#### **Step 2: Gather relevant information**

Collect some pertinent information before you make your decision: what information is needed, the best sources of information, and how to get it. This step involves both internal and external “work.” Some information is internal: you’ll seek it through a process of self-assessment. Other information is external: you’ll find it online, in books, from other people, and from other sources.

#### **Step 3: Identify the alternatives**

As you collect information, you will probably identify several possible paths of action, or alternatives. You can also use your imagination and additional information to construct new alternatives. In this step, you will list all possible and desirable alternatives.

#### **Step 4: Weigh the evidence**

Draw on your information and emotions to imagine what it would be like if you carried out each of the alternatives to the end. Evaluate whether the need identified in Step 1 would be met or resolved through the use of each alternative. As you go through this difficult internal process, you’ll begin to favor certain alternatives: those that seem to have a higher potential for reaching your goal. Finally, place the alternatives in a priority order, based upon your own value system.

#### **Step 5: Choose among alternatives**

Once you have weighed all the evidence, you are ready to select the alternative that seems to be the best one for you. You may even choose a combination of alternatives. Your choice in Step 5 may very likely be the same or similar to the alternative you placed at the top of your list at the end of Step 4.

#### **Step 6: Take action**

You’re now ready to take some positive action by beginning to implement the alternative you chose in Step 5.

**Step 7: Review your decision & its consequences** In this final step, consider the results of your decision and evaluate whether or not it has resolved the need you identified in Step 1. If the decision has not met the identified need, you may want to repeat certain steps of the process to make a new decision. For example, you might want to gather more detailed or somewhat different information or explore additional alternatives.

### **EFFECTS OF RIGHT DECISIONS**

Abraham Lincoln as passing through a tough period because of civil ar. The civil war affected him heavily. He had to take every decision after thorough considerations without acting on emotional impulses and excitement. He had taken a significant decision with patience in mind and without any excitement. The decision of attacking the retreating army of General Lee proved quite right. The decision of Abraham Lincoln got much appreciation all around. Then only we can say “ You cannot defeat a person who always takes right decision”. Envisioning the future within the framework of organizational values, setting clear objectives, assessing potential threats, and making strategic decisions can bring about a revolutionary shift in an organization. Even seemingly trivial matters can carry significant implications for an organization's outcomes. As issues grow in complexity and gravity, the impact of decisions resonates more profoundly.

Timely and well-informed decisions have the potential to usher in transformative outcomes, while misguided choices at inopportune moments can lead to catastrophic consequences. The ripple effect of decisions underscores their pervasive influence on the trajectory of an organization.

## **STRATEGIC DECISION-MAKING OFFERS A MYRIAD OF BENEFITS FOR ORGANIZATIONS**

### **Goal Achievement:**

Regardless of industry and size, strategic decision-making accelerates progress toward achieving diverse organizational goals, whether it's international competitiveness, brand awareness, superior customer service, or industry leadership.

### **Liquidity Monitoring:**

Strategic decision-making ensures that an organization's cash flow aligns with long-term goals. Regularly tracking liquidity reports and cash flow systems helps maintain financial health.

### **Enhanced Revenue Generation:**

Senior management, through strategic management, can introduce essential changes in operating processes. Analyzing competitors' strategies often inspires companies to develop more profitable ideas and optimize processes for better revenue generation.

### **Risk Mitigation:**

Strategic management improves policies related to employees and other stakeholders, minimizing conflicts and legal risks. Consulting professionals like attorneys and insurance providers aids in legal compliance and prevents penalties.

### **Understanding and Buy-In:**

Involving the board and staff in strategic decision-making fosters a better understanding of chosen directions and their associated benefits, promoting support and buy-in from stakeholders.

### **Progress Measurement:**

Strategic management compels organizations to set clear objectives and establish measures of success. This ensures ongoing success by defining critical factors and presenting objectives and measures to the board and senior management.

### **Business Growth:**

Strategic decision-making is instrumental in driving business growth by determining the best ways to achieve objectives. A well-defined decision-making process, supported by data analytics tools like Power BI, enables informed and intelligent decisions.

### **Proactivity:**

Implementing strategic decisions enhances organizational efficiency and proactivity. Deciding the course of future actions sets the tone for the entire organization, mitigating future risks with a farsighted approach.

### **Awareness of External Threats:**

Strategic decision-making requires awareness of external threats, reducing the chances of failure by planning for potential challenges in advance.

### **Competitor Analysis:**

Adopting strategic management improves understanding of competitor strengths and weaknesses, enabling organizations to craft strategies that outperform competitors and better meet user needs in the marketplace.

## **Techniques of Decision Making: Qualitative and Quantitative Techniques**

### **1. Qualitative Techniques:**

#### **Intuition:**

It is making a choice without the use of conscious thought or logical inference. It is important for a manager to develop his intuitive skills because they are as important as rational analysis in many decisions.

#### **The Intuitive Approach to Decision Making:**

When managers make decisions solely on hunches and intuition they are practising management as though it were wholly an art based only on feelings. The intuitive approach refers to the approach used when managers make decisions based largely on hunches and intuitions.

### **Rational Approaches to Decision Making Revisited:**

Approaches to decision making that attempt to evaluate factual information through the use of some type of deductive reasoning are referred to as rational approaches.

**The following points discuss two types of rational approaches:**

#### **a. The Optimising Approach:**

**The optimising approach (sometimes called the rational or scientific approach) to decision making includes the following steps:**

- i. Recognise the need for a decision.
- ii. Establish, rank and weigh the decision criteria.
- iii. Gather available information and data.
- iv. Identify possible alternatives.
- v. Evaluate each alternative with respect to all criteria.
- vi. Select the best alternative.

Once the need to make the decision is known, criteria must be set for expected results of the decision. These criteria should then be ranked and weighed according to their relative importance.

Next, factual data relating to the decision should be collected. After that, all alternatives that meet the criteria are identified. Each is then evaluated with respect to all criteria. The final decision is based on the alternative that best meets the criteria.

#### **Limitations of the Optimising Approach:**

The optimising approach to decision making is no doubt an improvement over the intuitive approach. But it is not without its problems and limitations.

First, the assumptions on which the approach is based are often unrealistic; decision makers do not always have clearly defined criteria for making decisions.

Second, many decisions are based on limited knowledge of the possible alternatives; even when information is available, it is usually less than perfect.

Third, there is always a temptation to manipulate or ignore the gathered information and choose a favoured (but not necessarily the best) alternative.

Due to limitations of the optimising approach, most decisions still involve some judgment. Thus, in making decision, the manager generally uses a combination of intuitive and rational approaches.

#### **b. The Satisfying (Administrative) Approach Restated:**

Believing the assumptions of the optimising approach to be generally unrealistic, Herbert Simon, in attempting to understand how managerial decisions are actually made, formulated his principle of bounded rationality. This principle states, "The capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problems whose solutions is required for objectively rational behaviour — or even for a reasonable approximation to such objective rationality". Basically, the principle of bounded rationality states that human rationality has definite limits.

**Based on this principle, Simon proposed a decision model of the administrative man, which is based on following assumptions:**

- i. A person's knowledge of alternatives and criteria is limited.
- ii. In general people act on the basis of a simplified, ill-structured, mental abstraction of the real world; this abstraction is influenced by personal perceptions, biases, and so forth.
- iii. People do not attempt to optimise but will take the first alternative that satisfies their current level of aspiration. This is called satisficing.
- iv. An individual's level of aspiration concerning a decision fluctuates upward and downward, depending on the values of the most recently identified alternatives.

Optimising means selecting the best possible alternative; satisficing means selecting the first alternative that meets the decision maker's minimum standard of satisfaction. Assumption four is based on the belief that the criteria for a satisfactory alternative are determined by the person's current level of aspiration. Level of aspiration refers to the level of performance a person expects to attain, and it is impacted (influenced) by the person's prior successes and failures.

Fig. 2 represents the satisficing approach to decision making. If the decision maker is satisfied that an acceptable alternative has been found, she or he selects that alternative. Otherwise the decision maker searches for an additional alternative. In Fig. 2 the double arrows indicate a two-way relationship – The value of the new alternative is influenced by the value of the best previous alternative.

The value of the best previous alternative is, in turn, influenced by the value of the new alternative. As is indicated by the arrows, a similar two-way relationship exists between the value of the new alternative and the current level of aspiration. The end result of this evaluation determines whether or not the decision maker is satisfied with the alternative. Thus the decision maker (called the administrative man) selects the first alternative which meets the minimum satisfaction criteria and makes no real attempt to optimise.

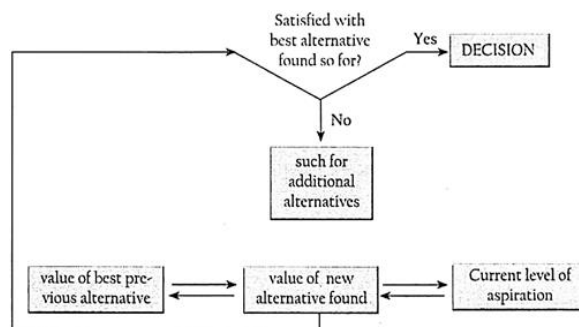


Fig. 2 : Model of the Satisficing Approach

## 2. Quantitative Techniques:

Armed with information managers can make better decisions. Frontline managers, for example, who are supplied with direct activity cost information, can better manage revenue margins (profits) and costs. Organisations can achieve more consistency between upper management and lower-level managers by providing more information throughout the organisation.

### The quantitative decision-making techniques are:

- i. Management Information System (MIS),
- ii. Decision Support System (DSS),
- iii. Decision tree and
- iv. Delphi technique.

#### i. Management Information Systems (MIS):

Management information systems (MIS) are reporting systems which summarise, collate and present information on a certain activity such as processing a transaction. An MIS is a procedure which is concerned with getting appropriate information to managers as and when they need it.

It is a comprehensive computer system for providing financial and qualitative information to all levels of management. Access to data is by the need to know and is restricted to areas regarded as useful for particular managers; confidential information is restricted to top management.

Management information systems (MIS) provide support to an organisation's managers by providing daily reports, schedules, plans and budgets. A basic MIS is presented in Fig. 3. Information activities of each functional manager vary depending on whether he is in accounting department or marketing department as also the management level.

In general middle-level managers focus mainly on internal activities and information, higher- and top-level managers also remain engaged in external activities. However, middle-managers are the largest MIS user group. Since they use this technique extensively and frequently they need networked information to plan such emerging activities as employee training, materials handling and cash flows.

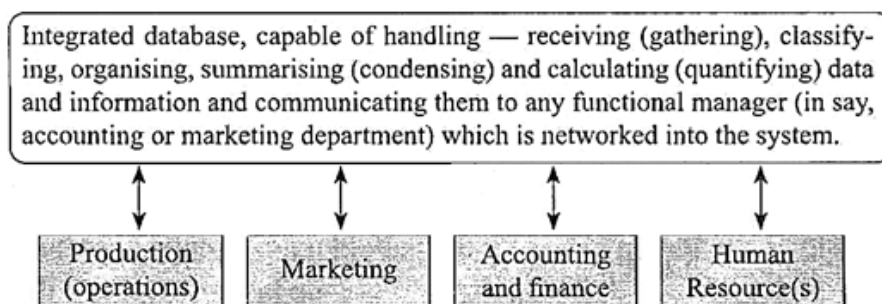


Fig. 3 : A Simple MIS

MIS produce reports which fall into three main categories.

First are periodic, scheduled reports. For example, an MIS may produce weekly reports regarding sales activity broken down by region.

Second, MIS produce demand reports, which are generated on request by the managers.

Finally, some MIS produce exception reports, which are generated as warnings based on certain business conditions. For example, an inventory system may produce an exception report to warn managers of low stock levels for a particular product line. MIS are normally highly structured since they involve highly repetitive, simple calculations with little variability in their presentation.

## **ii. Decision Support System (DSS):**

With Internet-hosted databases and user-friendly query tools becoming more common, corporations are turning to decision support system (DSS) software to analyse the firm's databases and turn them into information useful for decision making. DSS typically includes analytical and report-writing features, thus enabling users to translate new data into a form useful for decision support.

DSS is a computer information system which performs complex data analysis that helps users make informed decisions. It is a procedure which is concerned with getting appropriate information to managers as and when they need it and which aids two managers in making decisions.

A DSS is generally based upon interactive computer networks which can help the managers to solve problems and to gauge the effects of alternative outcomes of a decision. While some DSSs are developed to solve specific problems others serve more general purpose. This allows management to analyse different types of problems.

A DSS involves sophisticated analytical modelling to support semi-structured and unstructured decision making, mainly at the managerial level. DSSs implement mathematical and/or heuristic models to process data. They go much further than the type of information presentation done by MIS systems. They also give recommendations to the user, identify advantages and disadvantages of decision alternatives. Sometimes, these systems employ artificial intelligence techniques.

Decision support technology is a comparatively new development in software. However, DSS offers highly flexible programming paradigms. It slices and dices data that may be novel and complex into understandable chunks to facilitate shared consideration of multiple criteria. The DSS can assist in decisions for which predetermined solutions are unknown by using sophisticated models and data analysis.

## **Advantages:**

(a) A DSS can result in much time savings as well as an improved decision making.

(b) DSS can speed collaboration when there are several decision makers and all of them have to be satisfied. By providing multiple users with access to the firm's data, DSS can clarify the decision-making process and enhance consistency among multiple decision makers. With electronic commerce competitors respond to strategic decisions within days or even hours. The speed with which decisions are made becomes more critical. DSS helps decision makers consider a wider range of alternatives in a short period of time.

Now-a-days middle and top-level managers receive decision-making assistance from a Decision Support System (DSS). It is an interactive system which locates and present information needed to lend necessary support to the decision-making process.

DSS are now-a-days extensively used to support the marketing department. They use mathematical models to project the outcome of new decision, adding variables — such as -previous outcomes in similar contexts — to help marketers to make optimal decisions.

## **iii. Decision Tree:**

Decision tree is an aid to decision-making in uncertain conditions that sets out alternative courses of action and the financial consequences of each alternative, and assigns subjective probabilities to the likelihood of future events occurring. For example, a firm or a business person thinking of opening a new factory the success of which will depend upon consumer spending (and thus the state of the economy) would have a decision tree like Fig. 4.

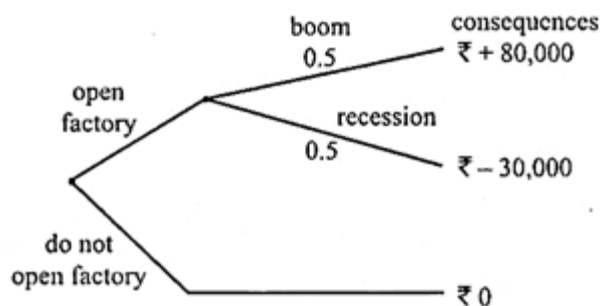


Fig. 4: Decision Tree

The business person has two options – to open a new factory to boost production capacity or not to open a new factory; and he has to consider two states of nature or events which can occur- economic boom or recession. The business person must assess the likelihood of each of these events occurring and, in the case, based on his knowledge and experience, he estimates that there is a one-in-two chance of a boom and a 0.5 probability of a recession. Finally, the business person estimates the financial consequences as a Rs. 80,000 profit for the new factory if there is a boom, and a Rs. 30,000 loss if there is a recession.

In order to make a decision, the manager needs a decision criterion to enable him to choose which he regards as the best of the alternatives and, since choices involve an element of risk, we therefore need to know something about his attitudes to risk. If the manager were neutral in his attitudes to risk then we could calculate the certainty equivalent of the ‘open factory’ alternative using the expected money value criterion, which takes the financial consequence of each outcome and weights it by the probability of its occurrence, thus –

$$\begin{aligned}
 0.5 \times (\text{₹ } 80,000) &= + \text{₹ } 40,000 \\
 0.5 \times (-\text{₹ } 30,000) &= - \text{₹ } 15,000 \\
 \hline
 &= + \text{₹ } 25,000
 \end{aligned}$$

which being greater than the Rs. 0 for certain of not opening the factory would justify going ahead with the factory project. However, if the manager were averse to risk then he might not regard the expected money value criterion as being appropriate, for he might require a risk premium to induce him to take the risk. Application of a more cautious certainty equivalent of the ‘open factory’ branch might even tip the decision against going ahead on the grounds of the ‘downside risk’ of losing Rs. 30,000.

**iv. The Delphi Technique:**

The Delphi technique is an approach to generating new ideas or problem-solving amongst a group or team. Each member or interested party submits his or her recommendations or views on the issue under review to a central contact point. All ideas generated in this way are then circulated to all those participants in the process, who then have the opportunity to submit comments on them.

This process is repeated until a consensus emerges. Although time consuming, it can be an effective approach to the management of change. The reason it that it enables all interested parties to express their view, generates consensus and, by incorporating all in the decision-making process, tends to generate commitment to the final outcome.

Decision-making needs to be accurate and rational to be effective. Decision-making becomes a challenging exercise especially when decisions are complex and have implications on major stakeholders. Success of an organisation depends on corrective decision-making. Right decisions may bring success, whereas a wrong decision may ruin an organisation. For the purpose of carrying out decision-making procedure, a wide variety of decision-making techniques are adopted.

**These techniques can be classified into two broad categories:**

**Technique # 1. Qualitative:**

Qualitative techniques of decision-making are subjective in nature as it is based on factors other than numerical data. It is a more in-depth analysis of the factors. Qualitative decision-making is based not just on the numerical statistical data but other associated factors that may have influence on the collected data.



It is an in-depth analysis of all possible factors that can affect the decision-making process. While exercising qualitative decision-making, managers are required to have experiential knowledge of the various factors underlying a problem. Qualitative decision-making is also called group decision-making as decision is an outcome of mutual discussion.

**Various qualitative decision-making techniques are:**

**(i) Delphi Technique:**

Delphi method was developed way back in 1950s by Olaf Helmer and Norman Dalker at the RAND Corporation to forecast the impact of technology on warfare. It was incorporated to reduce the range of responses and arrive at a consensus. Since then, the Delphi method has been widely adopted by organisations as an important decision-making technique.

Delphi method aims at soliciting the views of experts through a series of strategically designed questionnaires interspersed with information and opinion feedback so as to converge their responses to a consensus.

A very comprehensive definition of Delphi method is given by Wechsler, who says, “Delphi is a survey which is steered by a monitor group, comprises several rounds of a group of experts who are anonymous among each other and for whose subjective-intuitive prognoses, a consensus is aimed at. After each survey round, a standard feedback about the statistical group judgment calculated from median and quartiles of single prognoses is given and if possible, the arguments and counter arguments of the extreme answers are fed back”.

**Thus, a Delphi method is adopted in the following procedure:**

- (a) A panel of experts is selected for resolving a particular problem.
- (b) These experts are kept separated and their anonymous judgment or opinion over the issue is sought through questionnaire or a survey. Maintaining their anonymity helps in getting the unbiased responses.
- (c) After this, members are asked to share and discuss their assessment with each other.
- (d) Replies are collected, summarised and is given back to all the experts.
- (e) With this information of previous round assessment, the experts are required to make fresh decisions with the new inputs.
- (f) This process goes on for numerous rounds until a satisfactory convergence of experts’ opinions is arrived at.

Delphi technique is a very useful technique for handling and resolving the complex problems which are subject to many interpretations and alternatives. Although, it is a time- consuming exercise and its success depends largely on the expertise, of the panelists and their communication skills.

**(ii) Brainstorming:**

Brainstorming is a powerful decision-making technique used to extract ideas from a group of people. For brainstorming, groups are formed and each individual is provided with a platform to explore and express their ideas to others. Brainstorming may be used by an organisation for multiple objectives such as solving a problem, generation of new ideas, team development, etc.

In order to be affective, brainstorming session needs to be structured so as to avoid chaos, individuals should be provided with a criticism-free environment and freedom to express their views. Unlike Delphi, brainstorming is done face- to-face so that each individual knows what is happening and may act and react.

**Brainstorming is carried out in an organisation by adopting the following procedure:**

- (a) Create a group and make it familiar with the objective and purpose of discussion.
- (b) Provide an environment in which each member of the group is able to interact clearly with every other member of the group.
- (c) Provide adequate time and opportunity to every member to express their opinion.
- (d) If possible, facilitator keeps on chalking down the ideas generated.
- (e) Finally, the ideas generated or alternative solutions deciphered are assessed, analysed and prioritised.

For example, an organisation has witnessed a sharp decline in its sales in recent months. It is now looking for various means by which it can increase its sales.

In this case, a company wants to first develop a list of alternatives for increasing sales and then prioritise them. Thus, this issue can be best resolved through a brainstorming activity by inviting people from within the company or outside experts to discuss on the issue. They may sit together and develop a list of alternatives and rank them unanimously.

**(iii) Nominal Group Technique (NGT):**

Nominal Group Technique is a variation of brainstorming technique. It is a structured process of obtaining the group’s opinions, ideas, suggestions, etc. Unlike brainstorming, in Nominal Group technique, each member is acquainted with the problem or issue under consideration and is required to pen down his opinion and suggestion on a piece of paper.

Thus, initially no discussion is permitted amongst members. After all participants have given their ideas, then each one's proposition and suggestion is discussed in an interactive manner within the group. Participants, as an outcome of this technique, develop a mathematical aggregation of each participant's preferences so as to give the group ranking.

**Thus, NGT technique is widely used in qualitative decision-making due to its following benefits:**

- (a) Involving personnel for decision-making process helps in wider acceptability of the final decision.
- (b) Silent generation of ideas initially minimises the possibility of biases and undue influences. It allows an individual to be creative.
- (c) Subsequent discussions and interactions allow the group to take the advantage of diversity of minds.

**(iv) Multi-Voting:**

Another group decision-making tool is multi-voting. In this method, repeated rounds of voting are carried out until a consensus is arrived at. In this method, each participant presents his opinion or proposition in front of the panel and each member casts a vote. When voting for every participant's suggestion is completed, the strategies or suggestions with highest voting qualify for the next round. This process is continued until a clear unanimous strategy is voted.

**(v) Didactic Interaction:**

This is a very useful decision-making technique when decisions to be taken are dichotomous in nature. The solution to such decisions is in terms of either "yes" or "no" decision. For example, to purchase machinery or not to purchase, to import or not to import, to sell or not to sell, etc. These decisions are mutually exclusive, i.e., acceptance of one decision automatically results in rejection of another.

For this method, instead of one group of experts, two group of experts are created, one favouring a "yes" decision and other favouring a "no" decision. Each group then generates the list of justifications for their decisions and then interact and discuss with their findings. With mutual interactions and discussions, both the groups arrive at a consensus and a decision is taken.

**Technique # 2. Quantitative Decision-Making:**

Quantitative decision-making is the one which is based on numerical and quantifiable data. The quantitative approach to decision-making aims at solution finding through mathematical models. Such decision-making techniques are applicable in case of structured decisions. According to Good pasture, "Quantitative decision-making is most useful when there is a rational policy for obtaining the outcomes." There are numerous methods of making decisions with the help of quantifiable data.

**The most common ones are as follows:**

**(i) Decision Matrix:**

Decision matrix method was invented by Professor Stuart Pugh and is also called as Pugh method. Decision matrix method is a quantitative technique used to rank the multi-dimensional options available for an underlying problem. This technique is primarily used when various alternatives are available and many different parameters are to be considered for making a selection.

Various areas of applicability of decision matrix are investment options, vendor options, product options, etc. The Decision Matrix is used by exercising a series of pair-wise comparisons between alternatives against a number of criteria or requirements. One of its key advantages over other decision-making tools is that Decision Matrix is able to handle a large number of decision criterion simultaneously.

**(ii) Cost Benefit Analysis:**

Cost benefit analysis is a systematic process for evaluating the feasibility of projects or proposals under consideration. As the name indicates, this method aims at comparing total benefits derived from a project with the total costs incurred for the same.

**Cost benefit analysis, as a decision-making technique, is useful in situations where:**

- (a) Benefits and costs from a project can be numerically identified.
- (b) Evaluating and selection of a project among many alternatives.
- (c) Determining the feasibility of a capital purchase.

Being a numeric decision-making technique, cost benefit analysis should normally be undertaken for any project which involves policy development, capital expenditure, use of assets or setting of standards.

**(iii) Payback Analysis:**

Payback analysis is a financial tool in the hands of a decision-maker to determine the viability of the project by calculating payback period for the projects. Payback period may be defined as the period within which initial investment of a project is recovered. In other words, it tells how long a project will take to recover its initial investment. As a decision-making tool, on the basis of payback period, a manager may decide which project to accept and which to reject. A project with less payback period is preferred over others as it is fastest in recovering its investment.

**Payback period is calculated using the following formula:**

$$\text{Payback period} = \frac{\text{Initial investment}}{\text{Net cash flows from a project}}$$

**(iv) Decision Tree Analysis:**

Decision tree analysis may be defined as a decision support tool which makes use of a tree-like graph, i.e., branching and depicting all possible decision alternatives for a particular problem. A decision tree is a pictorial method which starts with a root, i.e., underlying problem or decision to be made.

This root is then spread to branches and nodes depicting various alternatives and solutions available before the decision-makers for the underlying problem along with the state of nature and respective probability of occurrence of alternatives. Decision trees, besides being pictorial, are also helpful in effective decision-making as they involve a systematic and formalized process leading to the presentation of holistic view of various alternatives to a particular problem and their respective consequences or outcomes.

**(v) Simulation:**

Simulation may be defined as an imitation of a real-life situation. As a decision-making technique, simulation is used by creating a replica of real-life situation so as to know what could be an outcome under real operating conditions. Donald G. Malcolm defines simulation as, “a model which depicts the working of a large-scale system of men, materials, machines and information operating over a period of time in a simulated environment of the actual real world conditions.” Simulation technique primarily aims at answering “what if” questions about real-life situations.

**The simulation method may be adopted in the following situations:**

- (a) In the study of projects involving huge investments before actual implementation.
- (b) For foreseeing the difficulties or problems that may arise due to implementation of new machinery, process or system.
- (c) For training employees without disturbing the actual operations.
- (d) Situations where actual execution or performance is irreversible such as – medical operations, layout of a building, wars, etc.

**(vi) Network Analysis:**

Network analysis refers to use of network techniques for solving large, complex problems comprising of many interrelated activities to be performed in a particular order. For example in metro construction, bridge construction, etc., network analysis is applicable for successful completion of projects within time.

Network is a graphical presentation of these interrelated activities in the order of their occurrence connected through arrows and depicted by nodes. Network analysis aims at developing a network and then planning, scheduling and controlling of performance of activities of a large complex project.

**There are primarily two network techniques which are widely applied. These are:**

- (a) **Programme Evaluation Review Technique (PERT)** – PERT is a technique applicable for projects with non-repetitive activities. PERT is a probabilistic approach where time of completion of each activity is not certainly known.
- (b) **Critical Path Method** – CPM is a project evaluation technique which aims at identification of total duration for the project completion time along with the shortest path for its completion. CPM is a deterministic networking technique where activity completion time is known with certainty.

**(vii) Operations Research:**

Operations research may be defined as a scientific method making use of various tools and techniques to quantitatively provide solutions to the problems. As a quantitative decision-making technique, operations research is very widely used to solve a wide variety of problems.

With the help of applying operation research techniques, management is able to solve many complex problems through a systematic and objective methodology, which is subject to minimal biases. Operations research as a scientific approach comprises of various techniques which have their respective areas of applicability.

**These techniques are:**

(a) **Linear programming** – It is an optimization technique. It deals with the optimisation (maximisation and minimisation) of an objective function, i.e., problem under consideration subject to availability of constraints.

(b) **Transportation model** – This is a decision-making technique which aims at managing the movement of goods from  $V$  number of sources to ‘ $m$ ’ number of destinations in the most cost-effective manner.

(c) **Assignment model** – This technique aims at assigning jobs to various task persons so as to minimise the cost of getting the work done.

(d) **Inventory control** – These techniques aims at taking decisions for economic order quantity, how much quantity to order, how frequently to order, what should be the safety stock level, etc.

(e) **Queuing theory** – This technique is applicable for resolving the long queue issues and problems of traffic congestion. For example, at petrol pumps, railway booking window, service windows in a college, etc., all face long queues. This technique primarily answers questions such as whether to open a new counter or not, what is the desired number of persons in a queue so as to maintain efficiency, etc.

(f) **Sequencing theory** – This technique involves determination of an optimal order or sequence of performing a series of jobs so as to optimise the total time or cost involved in the process.

**HERE ARE A FEW DECISION-MAKING ABILITIES THAT CAN HELP IN MAKING MORAL CHOICES:**

Many centuries ago, the headman of the village had got his two daughters married to a potter s and a gardeners household respectively. Along time passed and one day the headman desired to see his daughters thinking if they were in need so that he could meet their needs. First he visited the household of his potter son-in-law and stayed for two days. While leaving he asked his daughter if she wanted anything or work in her favour so that he could try to fulfil it. Daughter replied, “Father everything is OK . We have no paucity. You only pray to Indra Dev (Rain God) not to cause rains , so that we face no problem in baking and incur no loss because of the wetting of the soft pots. Consoling the daughter , the headman left to visit the second daughter ho as married to a gardener.

The headman stayed there for two days and repeated the same question while leaving – if she needs anything. Daughter replied, “Father everything is OK .We have sowed fresh crops. Please do pray for Indra Dev (Rain God) to bring rain this year and e get a bumper harvest. The headman found himself in a puling situation. How can two, mutually opposing prayers be done simultaneously? A wise man shows prudence in complicated problems of life and takes to mutually opposite decisions. If a thatched room is got built at the potters household, his raw pots will not be damaged in rain; and thus wishes of both the daughters would be fulfilled. Hence, a wise person will ultimately find a solution and take a right decision.

**Moral decision-making requires a unique set of abilities. Here are a few key ones:**

**Ethical Awareness:**

The ability to recognize and comprehend the ethical dimensions of a situation is crucial. This involves being attuned to moral implications and potential consequences.

**Critical Thinking:**

A capacity for critical thinking allows individuals to analyze situations objectively, considering various perspectives and potential ethical dilemmas before making a decision.

**Empathy:**

Understanding and sharing the feelings of others is essential for making moral choices. Empathy helps in recognizing the impact of decisions on different stakeholders.

**Integrity:**

The ability to maintain personal integrity is fundamental. This involves staying true to one's ethical principles and values, even in the face of external pressures.

**Resilience:**

Moral decision-making often involves facing challenges and potential conflicts. Resilience is the ability to withstand external pressures and adhere to ethical principles.

**Communication Skills:**

Effectively communicating ethical considerations is vital. This includes expressing one's values, understanding others' perspectives, and fostering open dialogue on moral issues.

**Reflective Practice:**

Engaging in self-reflection allows individuals to assess their own values and beliefs continuously. This introspective ability contributes to making consistently ethical decisions.

**Decision-Making Under Uncertainty:**

Moral choices are often made in ambiguous situations. The ability to make decisions under uncertainty, while still considering ethical implications, is a valuable skill.

**Cultural Competence:**

Recognizing and understanding diverse cultural perspectives on morality is crucial, especially in a globalized world where ethical norms can vary widely.

**Courage:**

Moral decision-making sometimes requires courage to stand up for what is right, even in challenging circumstances. This involves facing potential criticism or opposition with conviction.

These abilities collectively contribute to an individual's capacity to navigate the complex terrain of moral decision-making, ensuring that choices align with ethical principles and contribute positively to the well-being of individuals and society.

Leveraging decision-making abilities in the workplace is key for effective leadership and problem-solving. Here are some practical ways to apply these skills:

**Emotional Management:**

Utilize emotional intelligence to manage your emotions during decision-making. Strive for a balanced approach, as excessive emotion can introduce biases and impede rational thinking.

**Assertiveness:**

Take a confident and assertive stance in your decision-making. This not only enhances your confidence but also enables you to navigate and make tough decisions without being overly aggressive.

**Experimentation:**

Embrace a culture of experimentation. Test your decisions by implementing small-scale trials or pilots. For instance, if considering a new project management software, initiate a free trial and gather feedback from a select group of employees before a full implementation.

**Collaboration:**

Involve relevant stakeholders in the decision-making process. Solicit input from team members or other departments to ensure a well-rounded perspective and increase the likelihood of successful implementation.

**Data-Driven Decisions:**

Rely on data and analytics to inform your decisions. Collect relevant information and analyze it systematically to make informed choices, minimizing the influence of personal biases.

**Risk Assessment:**

Develop the ability to assess risks associated with different decisions. Understand the potential consequences and weigh them against the benefits, fostering a balanced approach to risk-taking.

**Problem-solving Skills:**

Apply your decision-making skills to problem-solving. Break down complex issues into manageable components, analyze the root causes, and generate effective solutions.

**Adaptability:**

Cultivate adaptability in your decision-making approach. The workplace is dynamic, and the ability to adjust decisions based on changing circumstances is crucial for long-term success.

**Communication:**

Effectively communicate your decisions to relevant parties. Clearly articulate the rationale behind your choices, addressing concerns and providing clarity to foster understanding and support.

**Continuous Learning:**

Treat each decision as an opportunity for learning. Assess the outcomes, identify areas for improvement, and apply these lessons to future decision-making scenarios.

By integrating these decision-making abilities into your professional toolkit, you can enhance your effectiveness as a leader and contribute to a positive and dynamic workplace environment.