



DECISION MAKING



What Is Decision Making?

Decision making refers to making choices among alternative courses of action—which may also include inaction. While it can be argued that management is decision making, half of the decisions made by managers within organizations fail. Therefore, increasing effectiveness in decision making is an important part of maximizing your effectiveness at work.

Individuals throughout organizations use the information they gather to make a wide range of decisions. These decisions may affect the lives of others and change the course of an organization. For example, the decisions made by executives and consulting firms for Enron ultimately resulted in a \$60 billion loss for investors, thousands of employees without jobs, and the loss of all employee retirement funds. But Sherron Watkins, a former Enron employee and now-famous whistle-blower, uncovered the accounting problems and tried to enact change. Similarly, the decisions made by firms to trade in mortgage-backed securities is having negative consequences for the entire U.S. economy. Each of these people made a decision, and each person, as well as others, is now living with the consequences of his or her decisions.

Because many decisions involve an ethical component, one of the most important considerations in management is whether the decisions you are making as an employee or manager are ethical. Here are some basic questions you can ask yourself to assess the ethics of a decision.

- Is this decision fair?
- Will I feel better or worse about myself after I make this decision?
- Does this decision break any organizational rules?
- Does this decision break any laws?
- How would I feel if this decision was broadcast on the news?

Types of Decisions

Despite the far-reaching nature of the decisions in the previous example, not all decisions have major consequences or even require a lot of thought. For example, before you come to class, you make simple and habitual decisions such as what to wear, what to eat, and which route to take as you go to and from home and school. You probably do not spend much time on these mundane decisions. These types of straightforward decisions are termed programmed decisions;

these are decisions that occur frequently enough that we develop an automated response to them. The automated response we use to make these decisions is called the decision rule. For example, many restaurants face customer complaints as a routine part of doing business. Because this is a recurring problem for restaurants, it may be regarded as a programmed decision. To deal with this problem, the restaurant might have a policy stating that every time they receive a valid customer complaint, the customer should receive a free dessert, which represents a decision rule. Making strategic, tactical, and operational decisions is an integral part of the planning function in the P-O-L-C (planning-organizing-leading-controlling) model.

However, decisions that are unique and important require conscious thinking, information gathering, and careful consideration of alternatives. These are called nonprogrammed decisions. For example, in 2005, McDonald's became aware of a need to respond to growing customer concerns regarding foods high in fat

and calories. This is a nonprogrammed decision because for several decades, customers of fast-food restaurants were more concerned with the taste and price of the food, rather than the healthiness. In response, McDonald's decided to offer healthier alternatives, such as substituting apple slices in Happy Meals for French fries and discontinuing the use of trans fats. A crisis situation also constitutes a nonprogrammed decision for companies. For example, the leadership of Nutrorim was facing a tough decision. They had recently introduced a new product, ChargeUp with Lipitrene, an improved version of their popular sports drink powder, ChargeUp. But a phone call came from a state health department to inform them that several cases of gastrointestinal distress had been reported after people consumed the new product. Nutrorim decided to recall ChargeUp with Lipitrene immediately. Two weeks later, it became clear that the gastrointestinal problems were unrelated to ChargeUp with Lipitrene. However, the damage to the brand and to the balance sheets was already done. This unfortunate decision caused Nutrorim to rethink the way decisions were made under pressure so that they now gather information to make informed choices even when time is of the essence.

Decision making can also be classified into three categories based on the level at which they occur. Strategic decisions set the course of organization. Tactical decisions are decisions about how things will get done. Finally, operational decisions are decisions that employees make each day to run the organization. For example, remember the restaurant that routinely offers a free dessert when a customer complaint is received. The owner of the restaurant made a strategic decision to have great customer service. The manager of the restaurant implemented the free dessert policy as a way to handle customer complaints, which is a tactical decision. And, the servers at the restaurant are making individual decisions each day evaluating whether each customer complaint received is legitimate to warrant a free dessert.

Level of Decision	Examples of Decision	Who Typically Makes Decisions
Strategic Decisions	Should we merge with another company? Should we pursue a new product line? Should we downsize our organisation?	Top Management Teams, CEOs, and Boards of Directors
Tactical Decisions	What should we do to help facilitate employees from the two companies working together? How should we market the new product line? Who should be let go when we downsize?	Managers
Operational Decisions	How often should I communicate with my new coworkers? What should I say to customers about our new product? How will I balance my new work demands?	Employees throughout the organisation

Making Rational Decisions

The rational decision-making model describes a series of steps that decision makers should consider if their goal is to maximize the quality of their outcomes. In other words, if you want to make sure you make the best choice, going through the formal steps of the rational decision-making model may make sense.

Let's imagine that your old, clunky car has broken down and you have enough money saved for a substantial down payment on a new car. It is the first major purchase of your life, and you want to make the right choice.

The first step, therefore, has already been completed—we know that you want to buy a new car.

Next, in step 2, you'll need to decide which factors are important to you. How many passengers do you want to accommodate? How important is fuel economy to you? Is safety a major concern? You only have a certain

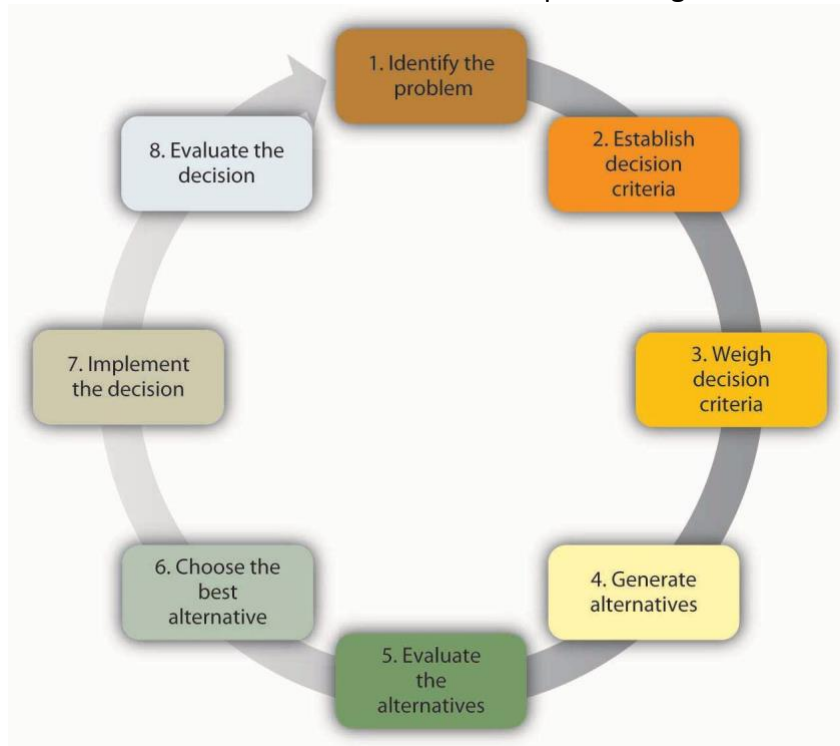
amount of money saved, and you don't want to take on too much debt, so price range is an important factor as well. If you know you want to have room for at least five adults, get at least 20 miles per gallon, drive a car with a strong safety rating, not spend more than \$22,000 on the purchase, and like how it looks, you've identified the decision criteria. All of the potential options for purchasing your car will be evaluated against these criteria.

Before we can move too much further, you need to decide how important each factor is to your decision in step 3. If each is equally important, then there is no need to weight them, but if you know that price and gas mileage are key factors, you might weight them heavily and keep the other criteria with medium importance.

Step 4 requires you to generate all alternatives about your options.

Then, in step 5, you need to use this information to evaluate each alternative against the criteria you have established. You choose the best alternative (step 6) and you go out and buy your new car (step 7).

Of course, the outcome of this decision will be related to the next decision made; that is where the evaluation in step 8 comes in. For example, if you purchase a car but have nothing but problems with it, you are unlikely to consider the same make and model in purchasing another car the next time!



While decision makers can get off track during any of these steps, research shows that limiting the search for alternatives in the fourth step can be the most challenging and lead to failure. In fact, one researcher found that no alternative generation occurred in 85% of the decisions studied.

Conversely, successful managers are clear about what they want at the outset of the decision-making process, set objectives for others to respond to, carry out an unrestricted search for solutions, get key people to participate, and avoid using their power to push their perspective.

The rational decision-making model has important lessons for decision makers.

First, when making a decision you may want to make sure that you establish your decision criteria before you search for all alternatives. This would prevent you from liking one option too much and setting your criteria accordingly. For example, let's say you started browsing for cars before you decided your decision criteria. You may come across a car that you think really reflects your sense of style and make an emotional bond with the car. Then, because of your love for this car, you may say to yourself that the fuel economy of the car and the innovative braking system are the most important criteria. After purchasing it, you may realize that the car is too small for all of your friends to ride in the back seat when you and your brother are sitting in front, which was something you should have thought about! Setting criteria before you search for alternatives may prevent you from making such mistakes. Another advantage of the rational model is that it urges decision makers to generate all alternatives instead of only a few. By generating a large number of alternatives that cover a wide range of possibilities, you are likely to make a more effective decision in which you do not need to sacrifice one criterion for the sake of another.

Despite all its benefits, you may have noticed that this decision-making model involves a number of unrealistic assumptions. It assumes that people understand what decision is to be made, that they know all their available choices, that they have no perceptual biases, and that they want to make optimal decisions. Nobel Prize-winning economist Herbert Simon observed that while the rational decision-making model may be a helpful tool for working through problems, it doesn't represent how decisions are frequently made within organizations. In fact, Simon argued that it didn't even come close!

Think about how you make important decisions in your life. Our guess is that you rarely sit down and complete all eight steps in the rational decision-making model. For example, this model proposed that we should search for all possible alternatives before making a decision, but this can be time consuming and individuals are often under time pressure to make decisions. Moreover, even if we had access to all the information, it could be challenging to compare the pros and cons of each alternative and rank them according to our preferences. Anyone who has recently purchased a new laptop computer or cell phone can attest to the challenge of sorting through the different strengths and limitations of each brand, model, and plans offered for support and arriving at the solution that best meets their needs.

Making "Good Enough" Decisions

The bounded rationality model of decision making recognizes the limitations of our decision-making processes. According to this model, individuals knowingly limit their options to a manageable set and choose the best alternative without conducting an exhaustive search for alternatives. An important part of the bounded rationality approach is the tendency to satisfice, which refers to accepting the first alternative that meets your minimum criteria. For example, many college graduates do not conduct a national or international search for potential job openings; instead, they focus their search on a limited geographic area and tend to accept the first offer in their chosen area, even if it may not be the ideal job situation. Satisficing is similar to rational decision making, but it differs in that rather than choosing the best choice and maximizing the potential outcome, the decision maker saves time and effort by accepting the first alternative that meets the minimum threshold.

Making Intuitive Decisions

The intuitive decision-making model has emerged as an important decision-making model. It refers to arriving at decisions without conscious reasoning. Eighty-nine percent of managers surveyed admitted to using intuition to make decisions at least sometimes, and 59% said they used intuition often.

When we recognize that managers often need to make decisions under challenging circumstances with time pressures, constraints, a great deal of uncertainty, highly visible and high-stakes outcomes, and within changing conditions, it makes sense that they would not have the time to formally work through all the steps of the rational decision-making model. Yet when CEOs, financial analysts, and healthcare workers are asked about the critical decisions they make, seldom do they attribute success to luck. To an outside observer, it may seem like they are making guesses as to the course of action to take, but it turns out that they are systematically making decisions using a different model than was earlier suspected.

Research on life-or-death decisions made by fire chiefs, pilots, and nurses finds that these experts do not choose among a list of well-thought-out alternatives. They don't decide between two or three options and choose the best one. Instead, they consider only one option at a time. The intuitive decision-making model argues that, in a given situation, experts making decisions scan the environment for cues to recognize patterns.

Once a pattern is recognized, they can play a potential course of action through to its outcome based on their prior experience. Due to training, experience, and knowledge, these decision makers have an idea of how well a given solution may work. If they run through the mental model and find that the solution will not work, they alter the solution and retest it before setting it into action. If it still is not deemed a workable solution, it is discarded as an option and a new idea is tested until a workable solution is found. Once a viable course of action is identified, the decision maker puts the solution into motion. The key point is that only one choice is considered at a time. Novices are not able to make effective decisions this way because they do not have enough prior experience to draw upon.

Making Creative Decisions

In addition to the rational decision making, bounded rationality, and intuitive decision-making models, creative decision making is a vital part of being an effective decision maker.

Creativity is the generation of new, imaginative ideas. With the flattening of organizations and intense competition among companies, individuals and organizations are driven to be creative in decisions ranging from cutting costs to generating new ways of doing business. Please note that, while creativity is the first step in the innovation process, creativity and innovation are not the same thing. Innovation begins with creative ideas, but it also involves realistic planning and follow-through.

The five steps to creative decision making are similar to the previous decision-making models in some ways.

All of the models include problem identification, which is the step in which the need for problem solving becomes apparent. If you do not recognize that you have a problem, it is impossible to solve it.

Immersion is the step in which the decision maker thinks about the problem consciously and gathers information. A key to success in creative decision making is having or acquiring expertise in the area being studied.

Then, incubation occurs. During incubation, the individual sets the problem aside and does not think about it for a while. At this time, the brain is actually working on the problem unconsciously.

Then comes illumination or the insight moment, when the solution to the problem becomes apparent to the person, usually when it is least expected. This is the “eureka” moment similar to what happened to the ancient Greek inventor Archimedes, who found a solution to the problem he was working on while he was taking a bath.

Finally, the verification and application stage happens when the decision maker consciously verifies the feasibility of the solution and implements the decision.



A NASA scientist describes his decision-making process leading to a creative outcome as follows: He had been trying to figure out a better way to de-ice planes to make the process faster and safer. After recognizing the problem, he had immersed himself in the literature to understand all the options, and he worked on the problem for months trying to figure out a solution. It was not until he was sitting outside of a McDonald’s restaurant with his grandchildren that it dawned on him. The golden arches of the “M” of the McDonald’s logo inspired his solution: he would design the de-icer as a series of M’s.

How Do You Know If Your Decision-Making Process Is Creative?

Researchers focus on three factors to evaluate the level of creativity in the decision-making process.

Fluency refers to the number of ideas a person is able to generate.

Flexibility refers to how different the ideas are from one another. If you are able to generate several distinct solutions to a problem, your decision-making process is high on flexibility.

Originality refers to an idea’s uniqueness.

You might say that Reed Hastings, founder and CEO of Netflix, is a pretty creative person. His decision-making process shows at least two elements of creativity. We do not exactly know how many ideas he had over the course of his career, but his ideas are fairly different from one another. After teaching math in Africa with the Peace Corps, Hastings was accepted at Stanford University, where he earned a master’s degree in computer science. Soon after starting work at a software company, he invented a successful debugging tool, which led to his founding the computer trouble shooting company Pure Software in 1991. After a merger and the subsequent sale of the resulting company in 1997, Hastings founded Netflix, which revolutionized the DVD rental business through online rentals with no late fees. In 2007, Hastings was elected to Microsoft’s board of directors. As you can see, his ideas are high in originality and flexibility.

Decision Making Model	Use This Model When:
Rational	- Information on alternatives can be gathered and quantified. - The decision is important. - You are trying to maximize your outcome.
Bounded Rationality	- The minimum criteria are clear. - You do not have or you are not willing to invest much time to make the decision. - You are not trying to maximize your outcome.
Intuitive	- Goals are unclear. - There is time pressure and analysis paralysis would be costly. - You have experience with the problem.
Creative	- Solutions to the problem are not clear. - New solutions need to be generated. - You have time to immerse yourself in the issues.

Ways to develop creativity?

There are many techniques available that enhance and improve creativity. Linus Pauling, the Nobel prize winner who popularized the idea that vitamin C could help build the immunity system, said, "The best way to have a good idea is to have a lot of ideas." One popular way to generate ideas is to use brainstorming.

Brainstorming is a group process of generated ideas that follows a set of guidelines that include no criticism of ideas during the brainstorming process, the idea that no suggestion is too crazy, and building on other ideas (piggybacking). Research shows that the quantity of ideas actually leads to better idea quality in the end, so setting high idea quotas where the group must reach a set number of ideas before they are done, is recommended to avoid process loss and to maximize the effectiveness of brainstorming. Another unique aspect of brainstorming is that the more people are included in brainstorming, the better the decision outcome will be because the variety of backgrounds and approaches give the group more to draw from. A variation of brainstorming is wild storming where the group focuses on ideas that are impossible and then imagines what would need to happen to make them possible.

Faulty Decision Making:

No matter which model you use, you need to know and avoid the decision-making traps that exist. Daniel Kahnemann (another Nobel prize winner) and Amos Tversky spent decades studying how people make decisions. They found that individuals are influenced by overconfidence bias, hindsight bias, anchoring bias, framing bias, and escalation of commitment.

Overconfidence Bias

Overconfidence bias occurs when individuals overestimate their ability to predict future events. Many people exhibit signs of overconfidence. For example, 82% of the drivers surveyed feel they are in the top 30% of safe drivers, 86% of students at the Harvard Business School say they are better looking than their



peers, and doctors consistently overestimate their ability to detect problems. To avoid this bias, take the time to stop and ask yourself whether you are being realistic in your judgments.

Hindsight Bias

Hindsight bias is the opposite of overconfidence bias, as it occurs when looking backward in time where mistakes made seem obvious after they have already occurred. In other words, after a surprising event occurred, many individuals are likely to think that they already knew this was going to happen. This may be because they are selectively reconstructing the events. Hindsight bias becomes a problem especially when judging someone else's decisions. For example, let's say a company driver hears the engine making unusual sounds before starting her morning routine. Being familiar with this car in particular, the driver may conclude that the probability of a serious problem is small and continue to drive the car. During the day, the car malfunctions, stranding her away from the office. It would be easy to criticize her decision to continue to drive the car because, in hindsight, the noises heard in the morning would make us believe that she should have known something was wrong and she should have taken the car in for service.

Anchoring

Anchoring refers to the tendency for individuals to rely too heavily on a single piece of information. Job seekers often fall into this trap by focusing on a desired salary while ignoring other aspects of the job offer such as additional benefits, fit with the job, and working environment. Similarly, but more dramatically, lives were lost in the Great Bear Wilderness Disaster when the coroner declared all five passengers of a small plane dead within five minutes of arriving at the accident scene, which halted the search effort for potential survivors, when, in fact, the next day two survivors walked out of the forest. How could a mistake like this have been made? One theory is that decision biases played a large role in this serious error; anchoring on the fact that the plane had been consumed by flames led the coroner to call off the search for any possible survivors.

Framing Bias

Framing bias refers to the tendency of decision makers to be influenced by the way that a situation or problem is presented. For example, when making a purchase, customers find it easier to let go of a discount as opposed to accepting a surcharge, even though they both might cost the person the same amount of money. Similarly, customers tend to prefer a statement such as "85% lean beef" as opposed to "15% fat"! It is important to be aware of this tendency because, depending on how a problem is presented to us, we might choose an alternative that is disadvantageous simply because of how it is framed.

Escalation of Commitment

Escalation of commitment occurs when individuals continue on a failing course of action after information reveals this may be a poor path to follow. It is sometimes called sunk costs fallacy because the continuation is often based on the idea that one has already invested in this course of action. For example, imagine a person purchases a used car that turns out to need another repair every few weeks. An effective way of dealing with this situation might be to sell the car without incurring further losses, donate the car, or drive it without repairing it until it falls apart. However, many people spend

hours of their time and hundreds, even thousands of dollars repairing the car in the hopes that they will justify their initial investment in buying the car.

A classic example of escalation of commitment from the corporate world may be Motorola's Iridium project. In 1980s, the phone coverage around the world was weak—it could take hours of dealing with a chain of telephone operators in several different countries to get a call through from, say, Cleveland to Calcutta. Thus, there was a real need within the business community to improve phone access around the world. Motorola envisioned solving this problem using 66 low-orbiting satellites, enabling users to place a direct call to any location around the world. At the time of idea development, the project was technologically advanced, sophisticated, and made financial sense. Motorola spun off Iridium as a separate company in 1991. It took researchers 15 years to develop the product from idea to market release. However, in the 1990s, the landscape for cell phone technology was dramatically different from the 1980s, and the widespread cell phone coverage around the world eliminated a large base of the projected customer base for Iridium. Had they been paying attention to these developments, the decision makers would probably have abandoned the project at some point in the early 1990s. Instead, they released the Iridium phone to the market in 1998. The phone cost \$3,000 and it was literally the size of a brick. Moreover, it was not possible to use the phone in moving cars or inside buildings! Not surprisingly, the launch was a failure and Iridium filed for bankruptcy in 1999.

So far we have focused on how individuals make decisions and how to avoid decision traps. Next we shift our focus to the group level. There are many similarities and many differences between individual and group decision making. There are many factors that influence group dynamics and also affect the group decision-making process.

When It Comes to Decision Making, Are Two Heads Better Than One?

When it comes to decision making, are two heads better than one? The answer to this question depends on several factors. Group decision making has the advantages of drawing from the experiences and perspectives of a larger number of individuals. Hence, they have the potential to be more creative and lead to a more effective decision. In fact, groups may sometimes achieve results beyond what they could have done as individuals. Groups also make the task more enjoyable for members in question. Finally, when the decision is made by a group rather than a single individual, implementation of the decision will be easier because group members will be invested in the decision. If the group is diverse, better decisions may be made because different group members may have different ideas based on their background and experiences. Research shows that for top management teams, groups that debate issues and that are diverse make decisions that are more comprehensive and better for the bottom line in terms of profitability and sales.

Despite its popularity within organizations, group decision making suffers from a number of disadvantages. We know that groups rarely outperform their best member. While groups have the potential to arrive at an effective decision, they often suffer from process losses. For example, groups may suffer from coordination problems. Anyone who has worked with a team of individuals on a project can attest to the difficulty of coordinating members' work or even coordinating everyone's presence in a team meeting. Furthermore, groups can suffer from social loafing, or the tendency of some members to put forth less effort while working

within a group. Groups may also suffer from groupthink, the tendency to avoid critical evaluation of ideas the group favors. Finally, group decision making takes a longer time compared with individual decision making, given that all members need to discuss their thoughts regarding different alternatives.

Thus, whether an individual or a group decision is preferable will depend on the specifics of the situation. For example, if there is an emergency and a decision needs to be made quickly, individual decision making might be preferred. Individual decision making may also be appropriate if the individual in question has all the information needed to make the decision and if implementation problems are not expected. However, if one person does not have all the information and skills needed to make the decision, if implementing the decision will be difficult without the involvement of those who will be affected by the decision, and if time urgency is more modest, then decision making by a group may be more effective.

Groupthink

Have you ever been in a decision-making group that you felt was heading in the wrong direction, but you didn't speak up and say so? If so, you have already been a victim of groupthink. Groupthink is a group pressure phenomenon that increases the risk of the group making flawed decisions by leading to reduced mental efficiency, reality testing, and moral judgment. Groupthink is characterized by eight symptoms that include:

1. **Illusion of invulnerability** shared by most or all of the group members that creates excessive optimism and encourages them to take extreme risks.
2. **Collective rationalizations** where members downplay negative information or warnings that might cause them to reconsider their assumptions.
3. **An unquestioned belief** in the group's inherent morality that may incline members to ignore ethical or moral consequences of their actions.
4. **Stereotyped views** of out-groups are seen when groups discount rivals' abilities to make effective responses.
5. **Direct pressure** on any member who expresses strong arguments against any of the group's stereotypes, illusions, or commitments.
6. **Self-censorship** when members of the group minimize their own doubts and counterarguments.
7. **Illusions of unanimity** based on self-censorship and direct pressure on the group; the lack of dissent is viewed as unanimity.
8. **The emergence of self-appointed mind guards** where one or more members protect the group from information that runs counter to the group's assumptions and course of action.

While research on groupthink has not confirmed all of the theory, groups do tend to suffer from symptoms of groupthink when they are large and when the group is cohesive because the members like each other.

Recommendations for Avoiding Groupthink:

Groups Should:

- Discuss the symptoms of groupthink and how to avoid them.
- Assign a rotating devil's advocate to every meeting.

- Invite experts or qualified colleagues who are not part of the core decision-making group to attend meetings, and get reactions from outsiders on a regular basis and share these with the group.
- Encourage a culture of difference where different ideas are valued.

Individuals Should:

- Monitor their own behavior for signs of groupthink and modify behavior if needed.
- Check themselves for self-censorship.
- Carefully avoid mindguard behaviors.
- Avoid putting pressure on other group members to conform.
- Remind members of the ground rules for avoiding groupthink if they get off track.

Group Leaders Should:

- Break the group into two subgroups from time to time.
- Have more than one group work on the same problem if time and resources allow it. This makes sense for highly critical decisions.
- Remain impartial and refrain from stating preferences at the outset of decisions.
- Set a tone of encouraging critical evaluations throughout deliberations.
- Create an anonymous feedback channel where all group members can contribute to if desired.

Tools and Techniques for Making Better Decisions

Nominal Group Technique

(NGT) was developed to help with group decision making by ensuring that all members participate fully. NGT is not a technique to be used at all meetings routinely. Rather, it is used to structure group meetings when members are grappling with problem solving or idea generation. It follows four steps.

First, each member of the group engages in a period of independently and silently writing down ideas.

Second, the group goes in order around the room to gather all the ideas that were generated. This goes on until all the ideas are shared.

Third, a discussion takes place around each idea and members ask for and give clarification and make evaluative statements.

Finally, individuals vote for their favorite ideas by using either ranking or rating techniques. Following the four-step NGT helps to ensure that all members participate fully and avoids group decision-making problems such as groupthink.

Delphi Technique

It is unique because it is a group process using written responses to a series of questionnaires instead of physically bringing individuals together to make a decision. The first questionnaire asks individuals to respond to a broad question, such as stating the problem, outlining objectives, or proposing solutions. Each subsequent questionnaire is built from the information gathered in the previous one. The process ends when the group reaches a consensus. Facilitators can decide whether to keep responses anonymous. This process is often used to generate best practices from experts. For example, Purdue University professor Michael

Campion used this process when he was editor of the research journal *Personnel Psychology* and wanted to determine the qualities that distinguished a good research article. Using the Delphi Technique, he was able to gather responses from hundreds of top researchers from around the world without ever having to leave his office and distill them into a checklist of criteria that he could use to evaluate articles submitted to the journal.

Majority rule

refers to a decision-making rule where each member of the group is given a single vote, and the option that receives the greatest number of votes is selected. This technique has remained popular, perhaps because of its simplicity, speed, ease of use, and representational fairness. Research also supports majority rule as an effective decision-making technique.

However, those who did not vote in favor of the decision will be less likely to support it.

Consensus

is another decision-making rule that groups may use when the goal is to gain support for an idea or plan of action. While consensus tends to require more time, it may make sense when support is needed to enact the plan. The process works by discussing the issues at hand, generating a proposal, calling for consensus, and discussing any concerns. If concerns still exist, the proposal is modified to accommodate them. These steps are repeated until consensus is reached. Thus, this decision-making rule is inclusive, participatory, cooperative, and democratic. Research shows that consensus can lead to better accuracy and it helps members feel greater satisfaction with decisions. However, groups take longer with this approach, and if consensus cannot be reached, members tend to become frustrated.

Decision trees

are diagrams in which answers to yes or no questions lead decision makers to address additional questions until they reach the end of the tree. Decision trees are helpful in avoiding errors such as framing bias. Decision trees tend to be helpful in guiding the decision maker to a predetermined alternative and ensuring consistency of decision making—that is, every time certain conditions are present, the decision maker will follow one course of action as opposed to others if the decision is made using a decision tree.

Linear programming is a mathematical modeling technique used to determine a level of operational activity in order to achieve an objective, subject to restrictions called constraints. Many decisions faced by an operations manager are centered around the best way to achieve the objectives of the firm subject to the constraints of the operating environment. These constraints can be limited resources, such as time, labor, energy, materials, or money, or they can be restrictive guidelines, such as a recipe for making cereal, engineering specifications, or a blend for gasoline. The most frequent objective of business firms is to maximize profit—whereas the objective of individual operational units within a firm.

Simulation

Simulation typically uses statistical and computer modelling to investigate the performance of a business process either for a new situation or to improve an existing set of processes. By modelling different process scenarios and outcomes, companies can minimise the traditional risks associated with change management

initiatives without having to make changes in a 'live' business environment where performance could adversely be affected. Simulation is used to model efficiently a wide variety of systems that are important to managers. A simulation is basically an imitation, a model that imitates a real-world process or system. In business and management, decision makers are often concerned with the operating characteristics of a system. One way to measure or assess the operating characteristics of a system is to observe that system in actual operation.

In order to better understand the fundamental issues of simulation, an example is useful. Suppose a regional medical center seeks to provide air ambulance service to trauma and burn victims over a wide geographic area. Issues such as how many helicopters would be best and where to place them would be in question. Other issues such as scheduling of flight crews and the speed and payload of various types of helicopters could also be important. These represent decision variables that are to a large degree under the control of the medical center. There are uncontrollable variables in this situation as well. Examples are the weather and the prevailing accident and injury rates throughout the medical center's service region.

Ethics and Decision Making:

Because many decisions involve an ethical component, one of the most important considerations in management is whether the decisions you are making as an employee or manager are ethical. Here are some basic questions you can ask yourself to assess the ethics of a decision:

- Is this decision fair?
- Will I feel better or worse about myself after I make this decision?
- Does this decision break any organizational rules?
- Does this decision break any laws?
- How would I feel if this decision were broadcasted on the news?

Suppose you are the CEO of a small company that needs to cut operational costs or face bankruptcy. You have decided that you will not be issuing the yearly bonus that employees have come to expect. The first thing you think about after coming to this decision is whether or not it is fair. It seems logical to you that since the alternative would be the failure of the company and everyone losing their jobs, not receiving a bonus is preferable to being out of work. Additionally, you will not be collecting a bonus yourself, so that the decision will affect every-one equally. After deciding that the decision seems fair, you try to assess how you will feel about yourself after informing employees that there will not be a bonus this year. Although you do not like the idea of not being able to issue the yearly bonus, you are the CEO, and CEOs often have to make tough decisions. Since your ultimate priority is to save the company from bankruptcy, you decide it is better to withhold bonuses rather than issuing them, knowing the company cannot afford it. Despite the fact that bonuses have been issued every year since the company was founded, there are no organizational policies or laws requiring that employees receive a bonus; it has simply been a company tradition. The last thing you think about is how you would feel if your decision were broadcast on the news. Because of the dire nature of the situation, and because the fate of the business is at stake, you feel confident that this course of action



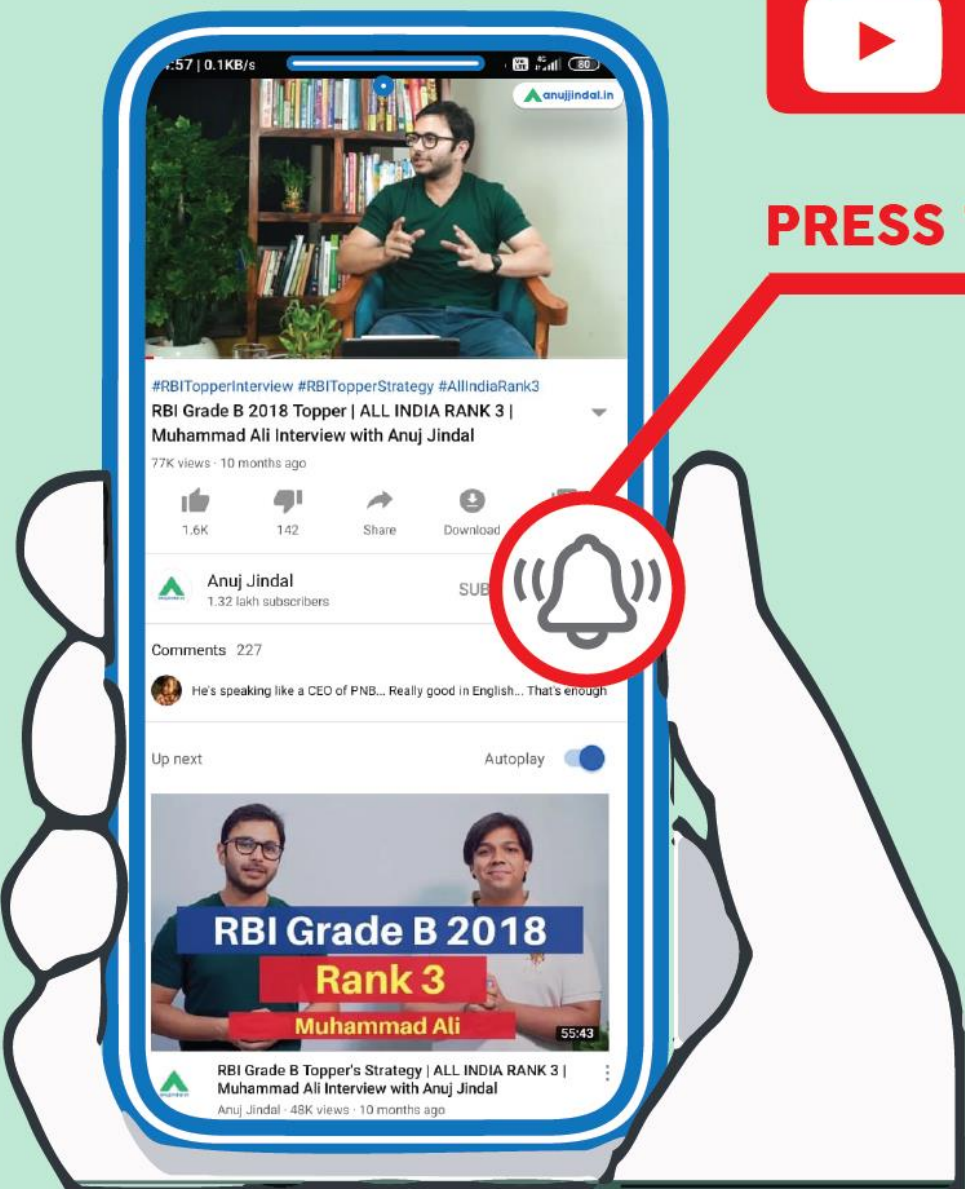
is preferable to laying off loyal employees. As long as the facts of the situation were reported correctly, you feel the public would understand why the decision was made.



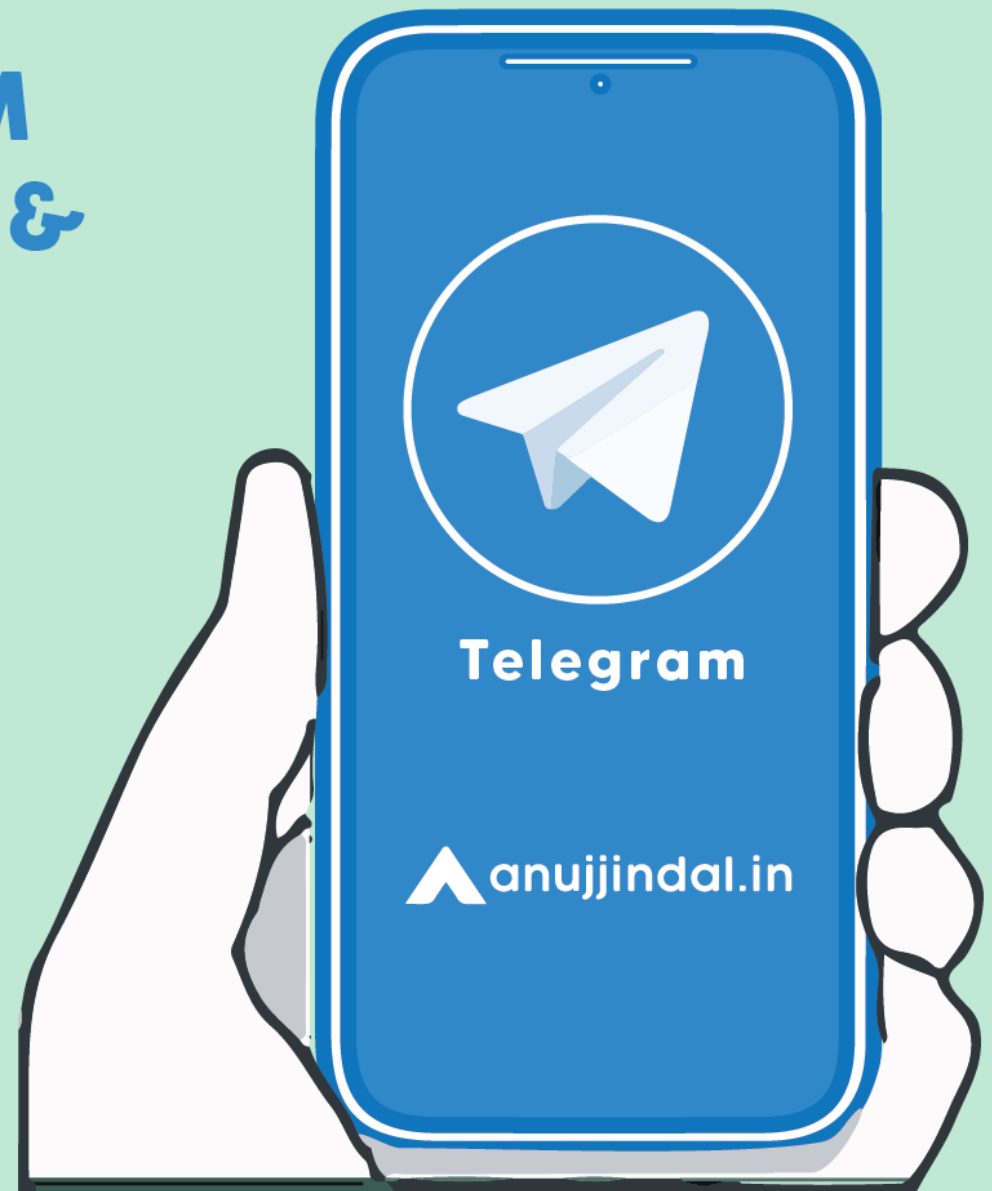
SUBSCRIBE



PRESS THE "BELL ICON" !



Join our
TELEGRAM
CHANNEL &
GROUP





HALL OF FAME



All Indian Rank 01

Rajendran S

SEBI



All India Rank 03

Ali

RBI



All India Rank 06

Aditya Sood

RBI



All India Rank 10

Sameer

RBI



All India Rank 11

Abhishek

RBI



Cleared RBI Grade B

Sanskar Vijay



Cleared RBI Grade B

Sanjay Meena



Cleared RBI Grade B

Yash Gupta



Cleared RBI Grade B

Ila Sahu



Cleared RBI Grade B

Argha Banerjee



Cleared RBI Grade B

Suchana Ghosh



Cleared NABARD

Vinay Verma



Cleared NABARD

Lal Chand Kumar



Cleared NABARD

Krishna Kumar Singh



Cleared NABARD

Anshu Goel



Cleared NABARD

Jatin Kumar



Cleared NABARD

Atul Yadav



Cleared SEBI

Abhishek Kumar



Cleared SEBI

Vishwanidh Singh



Cleared SEBI

Gopika Jayan



Cleared SEBI

Vasant Kesari



Cleared SEBI

Swetha Bodagala



NET with 98 Percentile

Anushka Keshri



JRF with 96.92 Percentile

Vaishali Jadon



NET with 89.27 Percentile

Srishti Gupta



JRF with 72 Percentage

Abhishek Mohanty



NET with 68 Percentage

Dinesh Mohan



JRF with 64.66 Percentage

Adhwaresh Pandey

ENROLL NOW !

 youtube.com/anujjindal

 [anujjindal.in](https://www.instagram.com/anujjindal.in)

Call us at : +91 9999466225