

## Reasoning Aptitude

### Decision Making and Problem Solving

2011 onwards, the CSAT or Civil Services Aptitude Test has been introduced in place of the hitherto CS (Preliminary) Examination in order to screen the candidates for the elite All-India Services.

The main reason behind this is that the 21st century's challenges before the bureaucracy are much different from the last century. This shift has brought about a greater emphasis on the 'aptitude' of candidates rather than their subject knowledge or domain area. It is argued that specialists or experts in any particular subject might not necessarily be good civil servants. As a result, we now have CSAT which is more inclined towards assessing one's aptitude rather than knowledge alone.

A decision is often referred to as the act of making up your mind about something, or a position or opinion or judgment reached after consideration. And when people ordinarily consider their own definition of decision making, it is typical that they consider that somehow it is a thinking process, with lots of mental activity involved in choosing between alternatives. But this doesn't include the way some people make decisions. You may have heard people saying: I have a gut feeling; I know in my heart, I can say it because of some common sense. So how do we explain this? Some people use their intuition, others prefer a rational model, and of course, they will have lots of reasons as to why this is better. There are decision trees, decision maps, a variety of decision matrix and so on. There are so many, in fact, it would be easy to be indecisive about which one to choose!. And then of course there is the search for the best decision. This quest is often a major factor for people being indecisive and not making any decision at all.

It is recommended by many that while making decisions you should list all the options as well as your criteria in order to sort out the best path to take. And there are many decision making tools and techniques designed for this purpose, decision trees, decision matrix, decision risk matrices, spreadsheet and database analysis programs and so on. This is the idea behind rational decision making.

And basically the idea here is to make sure that you're making the best choice and avoiding negative consequences. At the same time, it is often where people waste a lot of time, worrying about what will happen and trying to predict the future.

### Evaluate Different Criteria

Few people consider all the available information all-at-once in a "whole form" way. This is considered in relation to the outcome they want. Based on the experiences they have had, they choose a course of action. If they think it will get the intended outcome, they go ahead.

If they don't think it will achieve the outcome (or if they try it and it seems that it won't succeed), they discard it and choose a second course of action. If they believe this will achieve the outcome, they go with it.

Of interest is the fact that there is no comparison of options or weighing up of the pros and cons. These people know how to evaluate a decision in a different way, using different criteria than is currently being taught in most institutions.

## Making Decision Efficient and Effective

Now, what if you took this kind of decision making and applied in the personal aspect so that your whole decision making process is based on who you are, and the results of your decisions become a manifestation of yourself outwards into the world.

What happens is that who you are determines what you do, and what you do strengthens your sense of being yourself. This then creates a feed-forward loop that is self-reinforcing over time. Decision making becomes easy and evident given three case studies or situations by UPSC.

## Rational Decision Making

Rational decision making models involve a cognitive process where each step follows in a logical order from the one before. Hence, it is based on thinking through and weighing up the alternatives to come up with the best potential result.

There are different types of rational models and the number of steps involved, and even the steps themselves, will differ in different models.

Some people assume that decision making is equivalent to problem solving. Some decisions however are not problem oriented and we have taken this into consideration when describing the general outline of a rational model below.

## Steps in a Rational Decision Making Model

- Define the situation/decision to be made.
- Identify the important criteria for the process and the result.
- Consider all possible solutions.
- Calculate the consequences of these solutions versus the likelihood of satisfying the criteria.
- Choose the best option.

## Pros & Cons

A rational decision model presupposes that there is one best outcome. Because of this it is sometimes called an optimizing decision making model. The search for perfection is frequently a factor in actually delaying making a decision. Such a model also presupposes that it is possible to consider every option and also to know the future consequences of each. While many would like to think they know what will happen, the universe often has other plans.

It is also limited by the cognitive abilities of the person making the decision; how good is his memory, how good is his imagination. The criteria themselves, of course, will be subjective and may be difficult to compare. These models require a great deal of time and a great deal of information. And, of course, a rational decision making model attempts to negate the role of emotions in decision making.

## Sound Decisions- or Not

Suppose you've decided something, but are they good, sound decisions? Because in IAS exam every decision making question has four options, all of them are correct, how do you evaluate them, what's important. Well, the most obvious thing is whether the choice you made actually had the desired effect. This aspect is sometimes overlooked. And it can be overlooked when there are consequences or effects, that may not have been considered before the decision, that are now significant. And sometimes because of these it is considered to be a bad decision. Any decision will have consequences. Many of these can be anticipated. Some consequences would never be anticipated 'in a million years'.

But people expect to be able to predict the future and know what is going to happen. Where did they learn that, is it a wonder?

These unexpected consequences may take up so much time and attention, the fact that the decision actually achieved the outcome is often forgotten. With new information to hand, attempts are often made to rework, revise or remake the old decision. But of course it's a different decision at this stage. The time is different, the information is different and the choices are different.

## What is the Intention?

To know if you're making sound decisions, you simply check if the desired outcome has been satisfied. This, of course, means knowing what the desired outcome is. It may sound obvious, but frequently people are making choices based only on their perceived outcomes. They may pay scant attention to what they are actually trying to achieve. And this means there is little, if any, sense of satisfaction or completion for them.

For example, someone has a certain amount of money to spend. They can afford brand x or brand y of Mp3 players and they have been indecisive for some time about which one to go for. What they actually want is music in their home and a home stereo system would be much more appropriate for that. If they considered what they actually wanted, they would be making a different decision, namely, the sound decision would be to save the money now instead of spending it.

So to sum up, in order to know how to evaluate a decision, first you need to know what you wanted to achieve. To know if you have made a sound decision, you simply ask if you have actually achieved it. If you have, then you have made an effective, good decision. You may not have liked the consequences and may choose not to repeat it, but nevertheless, the decision was effective. Of course, the more explicit your outcome, the more effective you can make your decisions. Better decision making skills will allow you to improve your own ability to make sound decisions.

## **Do the Right Thing**

All IAS aspirants want to do the things right. In fact, it is one of the major reasons for delaying decisions. They want to get them right.

Many experts insist that it is much more important to do the right thing. Most people really do know what the right thing is. But because it's difficult, disagreeable or uncomfortable, they choose not to make that decision. They choose something different. The consequence is misery. Only the amount and duration varies.

## **The Best**

Here's another great barrier in decision making to help you delay some more: The desire to make the best decision. In truth, there really is no way to know which is the best decision. Every decision will have consequences, so what people end up doing is comparing the consequences. This is all well and good, but it makes for an unclear decision. It doesn't actually get anything done.

It's much more useful to consider whether a particular decision will be effective or not, within the frame you choose. People in critical situations quickly learn this decision making skill, what is the demand of UPSC.

## **I Need to be 100% Sure**

Again, this is a great one for delaying making that decision. And, of course, it's a myth that you can be 100% sure with people. Humans are complex, dynamic creatures. Life itself is messy and unpredictable. And the future, well, that's an unknown quantity.

## **Give it Lots of Thought – Not**

Most of the decision making models and processes available are organised around assessing and understanding the issues at hand. The idea is to build your decision making skills so that you are not engaged in decision making without critical thinking, but rather you reason and think your way to making good decisions. Occasionally, it is suggested that you actually use your intuition. But not, however, at the expense of logic and rationality.

To develop your decision making skills, this concept is one to pay attention to. There is an idea that we actually make our decisions emotionally, and then justify it with reasons and explanations, even excuses. An example would be making a decision to buy something that you cannot really afford, but somehow you find a reason that it would be useful to you.

## Not Making a Decision

It is sometimes thought that by not making a decision, you cannot go wrong. The difficulty here, of course, is that not making a decision is often a very poor decision. And not making a decision may actually be a decision to not take action. A classic example is where all the evidence is that there's a career change needed, but nothing happens. Another example might be not making those decisions that are needed to keep yourself organized. Delayed decisions are a primary cause of disorganization.

It's usually much more effective and useful to make a decision, act, assess as you go along, and change the decision later if indicated. This is obviously easier if the other tips and decision making skills mentioned above are in place.

## What Reduces Uncertainty in Decision-Making Situations? The Answer is Information

Knowledge about the past and the present can be used to help make projections about the future. A modern executive's access to the data needed to make important decisions may be as close as the nearest computer terminal. Indeed, computer technology has aided greatly to managers ability to make decisions quickly, using the most accurate and thorough information available.

Many decisions also are based on the decision maker's past experiences and intuition. This is not to say that top managers rely on subjective information in making decisions (although they might), but the organisation's history of past decisions-both successes and failures-is often given great weightage in the decision making process. In other words, when it comes to making decisions, people often rely on what has worked in the past.

Part of the reason this strategy is often successful is because experienced decision makers tend to make better use of information relevant to the decisions they are making. Individuals who have expertise in certain subjects know what information is most relevant and also how to interpret it to make the best decisions. It is, therefore, not surprising that people seek experienced professionals, with high levels of expertise comes information relevant to assessing the riskiness of decision alternatives and how to reduce them.

## Top-Down Versus Empowered Decisions

Traditionally, in organizations the job of making all but the most menial decisions belonged to managers. In fact, organizational scientist Herbert Simon, who won a Nobel prize for his work on the economics of decision making, has gone so far as to describe decision making as synonymous with managing. Subordinates collected information and gave it to superiors, who used it to make decisions. This approach, known as top-down decision making, puts decision making power in the hands of managers, leaving lower-level workers little or no opportunities to make decisions.

Today, however, a new idea and practise has been developed. The idea of empowered decision making allows employees to make the decisions required to do their jobs without first seeking supervisory

approval. As the name implies, it gives them the power to decide what they need to do in order to do their jobs effectively.

The rationale for this philosophy of decision making is that the people who do the jobs know what's best, so having someone else make the decision may not make the most sense. In addition, when people are empowered to make their own decisions they are more likely to accept the consequences of those decisions. If the decision was a good one, they can feel good about it. If not, then they have learned a valuable lesson for the next time. In either case, people are more committed to courses of action based on decisions that others have made.

And such commitment can be important in keeping the organisation functioning effectively. Many different companies today are empowering their employees to make a wide variety of decisions.

## **Factors Affecting Decisions in Organizations**

Given how fundamental the decision making process is in organizations, it makes sense that it is influenced by a wide variety of factors. In fact, as we will see, organizational decisions are affected by all three levels studied in the field of OB—individuals, groups and organizations—as well as by an even broader consideration, national culture. We will consider each of these factors here.

## **Decision Style: Personality Variations in Decision Making**

Do all individuals go about making decisions the same way, or are their differences in the general approaches people take? In general, research has shown that there are meaningful differences between people with respect to their orientation toward decisions—that is, their decision style.

Whereas some people are concerned primarily with achieving success at any cost, others are more concerned about the effects of their decisions on others. Furthermore, some individuals tend to be more logical and analytical in their approach to problems, whereas others are more intuitive and creative. Clearly, important differences exist in the approaches decision makers take to problems.

## **The decision-style model identifies four major decision styles:**

### **Directive Style**

It is characterized by individuals who prefer simple, clear solutions to problems. Individuals with this style tend to make decisions rapidly because they use little information and do not consider many alternatives. They tend to rely on existing rules to make their decisions and aggressively use their status to achieve results.

Such is the management style in bureaucracy at higher levels, where bureaucrats tend to rely more on their position to achieve results.

## Analytical Style

By contrast, individuals with the analytical style tend to be more willing to consider complex solutions based on ambiguous information. People with this style tend to analyze their decisions carefully using as much data as possible. Such individuals tend to enjoy solving problems and love the process of brain storming. They want the best possible answers and are willing to use innovative methods to achieve them.

## Conceptual Style

People with the conceptual style tend to be more socially oriented in their approach to problems. Their approach is humanistic and artistic. Such individuals tend to consider many broad alternatives when dealing with problems and to solve them creatively. They have a strong future orientation and enjoy initiating new ideas.

## Behavioural Style

Individuals with the behavioural style may be characterized as having a deep concern for the organizations in which they work and the personal development of their co-workers. They are highly supportive of others and very concerned about others achievements, frequently helping them meet their goals. Such individuals tend to be open to suggestions from others and therefore, tend to rely on meetings for making decisions.

However most individuals in senior management tend to adopt all methods or styles as situation may require them to adopt despite having one dominant style. In fact, those who can shift between styles-that is, those who are most flexible in their approach to decision making have highly complex, individualistic styles of their own and it is essentially that ability to adapt which makes them successful.

In conclusion, research on decision styles suggests that people tend to take very different approaches to the decisions they make. Their personalities, coupled with their interpersonal skills, lead them to approach decisions in consistently different ways- that is, using different decision styles. Although research on decision styles is relatively new, it is already clear that understanding such stylistic differences is a key factor in appreciating potential conflicts likely to arise between decision makers.

## How are Individual Decisions Made?

Now that we have identified the types of decisions people make in organizations, we are prepared to consider the matter of how people go about making them. Perhaps you are thinking, "What do you mean? You just think things over and do what you think is best." Although this may be true, you will see that there's a lot more to decision making than meets the eye. In fact, scientists have considered several different approaches to how individuals make decisions. Here we will review three of the most important ones.

We all like to think that we are "rational" people who make the best possible decisions. But what exactly does it mean to make a rational decision? Organizational scientists view rational decisions as ones that

maximize the attainment of goals, whether they are the goals of a person, a group, or an entire organization.

## What Makes your Approach Effective

Decision making is a process of first diverging to explore the possibilities and then converging on a solution. One of the touchstones of a decision making is its successful implementation. "Nothing succeeds like success," sums up the essence of a practical formula or theory. Between decision and implementation, theory and practice, law and enforcement, a proper bridge is both a psychological as well as a practical necessity. In the ultimate analysis, a lot depends upon the quality of leadership, the degree of commitment and the inspiration it provides in social interaction. There is nothing like programme neutrality or political neutrality.

It really means a commitment to the socio-economic objectives of the State. Faith in the people, faith in the programme and faith in the future are ultimately the foundation for a course of action. This robust attitude enables one to find the positive traits in our society. There is no virtue in merely taking quick decisions. What matters is whether the decision is implemented or not. It is also necessary to weigh the costs and risks entailed in not making a decision as against taking a wrong decision. The work of a good leader is not only to take good decisions but to ensure that good decisions are taken. A decision is correct if it works, and is not likely to result in problems for tomorrow. Further, somebody must implement it and, therefore, it has to be participative; and in this the citizen cannot be left out as a bystander. Behind a paper in our offices there is a man and the decisions that we take affect him. If the full potential of the people is to be unleashed, the goals of decision-making on the one hand and the quality of life of our citizen on the other will have to be covered.

## Decision maker should take the following steps to make effective decisions. They are as follows:

**Determine whether a decision is necessary:** There are necessary and unnecessary decisions. The former are crucial for the ongoing success of the organisation and require close monitoring, and in some instances, some adjustments. The latter only waste time, money and other resources. Before making any decision, look at the opportunity cost of each decision you're about to make and weigh the risk.

**Classify the problem:** This involves establishing whether the events are common within the organisation and throughout the industry, are unique to your organisation but uncommon throughout the industry or they are unique and first having appearance problems. Classifying the problem will help you identify which approach to use to formulate the solutions. Generic problems require a generic approach, one which is based on standard rules and principles. Unique problems require a different approach to the norms.

**Define the problem:** This involves asking questions like, "What is this all about, what is key about this situation and what is pertinent?" Defining the problem will help you get to the root of the problem and find the right diagnosis.

**Decide on what is right:** This stage involves making compromises. Not every individual within the organisation is going to like and benefit from the new decisions. For example, let us imagine you have decided to invest in a piece of machinery that will boost productivity and quality, at the same time reduce the number and cost of manual labour hours. It is possible that some people are going to lose their jobs.

Therefore, this group is more likely to oppose the decision. As a manager, are you going to give in or not? Giving in, will be an indication of wrong compromise, as this does not provide the solution to the problem's definition.

**Get others to buy the decision:** At the start of the decision making process, long before the final decision is made, you should solicit the opinions and recommendations of those who are going to be affected by the decision. Their input is very invaluable and will later help you keep the ship on course.

**Build action into the decision:** A decision will only become effective once implemented. There is a difference between planning and implementation. So many organisations continue to hope for the best but never put their plans into action. At this stage, someone capable should be assigned the responsibility and given a deadline to carry out the action.

**Test the decision against actual results:** Feedback is very necessary for continuous learning. By comparing the expected results against the actual results, it allows you to identify new and problem areas and take corrective action.

An effective decision is one which mobilizes the vision, energies and resources of the organisation thereby helping the organization to achieve the desired outcomes.

A decision occurs when a solution to a problem is selected for implementation.

## **Decisions can be made either formally or informally:**

Formal decisions are relatively complex, non-routine, and generally non-repetitive. Policies, procedures, criteria, and methods for making such decisions may not always exist since the problem faced may lack precedent. Creativity may play a key role in such decisions.

Informal decisions are more repetitive and routine in nature. Policies, procedures, criteria, and methods often exist to assist managers in making such decisions.

Decision-making is the process of identifying and selecting from among possible solutions to a problem according to the demands of the situation. For example, decision-making in the area of vendor contracting might address how to deliver a service, which bidder gets a contract, how to ensure that a contractor meets his obligations, or whether to pay the contractor in large or small bills.