

Module VI : Decision making

Chapter I : Decision making: The essence of Manager's Job

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# Chapter I

## Decision Making: The Essence of Manager's Job

### A. Decisions

Decisions are choices from two or more alternatives.

J. F. Yates defines the term in his book "Decision management: How to Assure Better Decisions in Your Company" in a following way: A decision is a commitment to an action that is intended to yield satisfying states of affairs for particular parties, called the beneficiaries of that action.

### B. What is Decision Making?

- (i) Decision making is the study of identifying and choosing alternatives based on the values and preferences of the decision maker.

Making a decision implies that there are alternative choices to be considered, and in such a case we want not only to identify as many of these alternatives as possible but to choose the one that best fits with our goals, desires, lifestyle, values, and so on.

- (ii) Decision making is the process of sufficiently reducing uncertainty and doubt about alternatives to allow a reasonable choice to be made from among them.

This definition stresses the information gathering function of decision making. It should be noted here that uncertainty is *reduced* rather than eliminated. Very few decisions are made with absolute certainty because complete knowledge about all the alternatives is seldom possible. Thus, every decision involves a certain amount of risk.

## C. **Kinds of Decisions**

What separates one decision from another is the difference in the information set available to the decision maker before each decision is made. The information set corresponding to a decision is the set of all observations available to the decision maker prior to making that decision.

There are several basic kinds of decisions.

### (i) **“Decisions whether”**

This is the yes/no, either/or decision that must be made before we proceed with the selection of an alternative. Should I buy a new TV? Should I travel this summer? “Decisions whether” are made by weighing reasons pro and con.

It is important to be aware of having made a “decision whether”, since too often we assume that decision making begins with the identification of alternatives, *assuming that the decision to choose one has already been made.*

### (ii) **“Decisions which”**

These decisions involve a choice of one or more alternatives from among a set of possibilities, the choice being based on how well each alternative measures up to a set of predefined criteria.

### (iii) **Contingent decisions**

These are decisions that have been made but put on hold until some condition is met.

*For example, Ram has decided to buy that car **if** he can get it for the right price; Mohan has decided to write that article **if** he can work the necessary time for it into his schedule.*

Most people carry around a set of already made, contingent decisions, just waiting for the right conditions or opportunity to arise. Time, energy, price, availability, opportunity,

encouragement--all these factors can figure into the necessary conditions that need to be met before we can act on our decision.

*Further, the decision can be classified in three types, based on the type of structure or nature of the task:*

1. Structured Problems

- Routine and repetitive with standard solution.
- Well defined decision making procedure
- Given a well-defined set of input, a well defined set of output is defined

2. Semi-structured Problems

- Has some structured aspect
- Some of the inputs or outputs or procedures are not well defined

3 Unstructured Problems

- All phases of decision making process are unstructured

Simon, on the other hand, classified decisions as programmed and non-programmed decisions

Simon distinguished between programmed decisions and un-programmed decision. A programmed decision is one in which a programme i.e. a set of rules, regulations, formulae exist in the mind of the decision maker or on paper which gives the solution as soon as it is applied to a problem. For example, relief may have to be granted to a citizen when his income falls below a certain level. All that is to be done to take a decision is to find out the income of the applicant. This is a simple case. There may be more complicated set of conditions. But, the decision can be programmed if the fulfillment of concrete conditions completes the decision making process. However, there may be decisions which cannot be taken according to set rule and regulations. The decision maker has to add his won

judgment before a decision can be arrived at. For example, taking an investment decision requires exercise of individual judgment although there is a lot of data supplied to help the decision maker. How much force to sue in a law and order situation? Looking to the circumstances, the magistrate has to make a judgment. Although there are some guidelines of the subject, but they are never sufficient to complete the decision making process. Usually there are very few decisions which can be classified as completely programmed or completely un-programmed. Most of the real life solutions require decisions which are a mixture of the two. It is obvious that the programmed decisions are amenable to mechanical analysis on computers while un-programmed decisions are not. In case of the mixed decisions, that part can be taken over by computers which is programmable.

### ***C.I. Barnard categorizes decisions into logical and non-logical***

*Logical decision* making involves conscious thinking and reasoning, and the process is expressible in words or other symbols.

*Non-logical decision* making is not capable of being expressed in words, or as reasoning, and is made known only by the action itself.

### ***F. Yeats categorizes decision into four types***

- **Type 1: choice decisions.** In choice decisions, the decider is faced with two or more discrete, specified alternatives and must choose a subset from that pool, perhaps just one of those options.
- **Type 2: accept/reject decisions.** In accept/reject decisions, the decider is presented with one option only and must either take it or leave it. An investment illustration: “Should we replace the Number 5 press?” Accept/reject decisions are a special case of choice decisions in that the decider actually has two options, taking the offered alternative or refusing to do so.
- **Type 3: evaluation decisions.** In evaluation decisions, the decider must commit to a course of action based on an assessment of the worth of some entity, that is, on an

evaluation. A bidding example: “Should we, as our analysis says, submit a quote of Rs.35 Crore on that highway rehabilitation project?” A performance appraisal illustration: “Should I give Rita 8 out of 10 this year?”

- **Type 4: construction decisions.** In construction decisions, the decider must use available resources to try to assemble the ideal alternative, subject to particular constraints. A budgeting illustration: “Our total available funds come to Rs. 50 Crores. The proposed budget for sales is Rs.7 Crores, for manufacturing Rs.22 Crores, [and so on]. Is this the budget we should approve?” A negotiations example: “Here’s where we are. . . . Have we finally come up with a package that both sides can live with?”

*Decision making is a nonlinear, recursive process*

That is, most decisions are made by moving back and forth between the choice of criteria (the characteristics we want our choice to meet) and the identification of alternatives (the possibilities we can choose from among). The alternatives available influence the criteria we apply to them, and similarly the criteria we establish influence the alternatives we will consider. Let's look at an example to clarify this.

*Suppose someone wants to decide, Should I get married? Notice that this is a “decision whether”. A linear approach to decision making would be to decide this question by weighing the reasons pro and con (what are the benefits and drawbacks of getting married) and then to move to the next part of the process, the identification of criteria (supportive, easy going, competent, affectionate, etc.). Next, we would identify alternatives likely to have these criteria (Rita, Geeta, Saloni, Julie, etc.). Finally we would evaluate each alternative according to the criteria and choose the one that best meets the criteria. We would thus have a scheme like this:*

***“decision whether” ... select criteria ... identify alternatives ... make choice***

*However, the fact is that our “decision whether to get married may really be a contingent decision. "I'll get married **if** I can find the right person." It will thus be influenced by the identification of alternatives,*

*which we usually think of as a later step in the process. Similarly, suppose we have arrived at the "identify alternatives" stage of the process when we discover that Rita (one of the girls identified as an alternative) has a wonderful personality characteristic that we had not even thought of before, but that we now really want to have in a wife. We immediately add that characteristic to our criteria. Thus, the decision making process continues to move back and forth, around and around as it progresses in what will eventually be a linear direction but which in its actual workings is highly recursive.*

#### **D. Problems of Decision-Making**

There are a number of problems in decision-making, which is a very complex process. Some of the problems are discussed below:

##### ***Involvement in Routine***

From the studies conducted on decision-making, it has been found that the executives tend to use a large part of their time in making routine decisions. Prof. March of Carregie Institute of Technology has conducted a lot of research on business decision-making. He made the subjects perform simple administrative jobs involving three kinds of activities.

- a. routine kind of communication to subordinates
- b. intermediate planning
- c. general planning.

They were told that the three activities were equally important. The workload was varied also. March observed two important results.

- a. When workload was light, more time was spent on routine activities although everyone knew that equal time should be devoted to each activity.
- b. At peak loads almost all time was spent on routine. An executive, who wants to be an effective decision maker has to avoid involvement in routine.

### ***Which problem to Solve?***

The question would not arise if the problems were limited and resources adequate to solve all of them. In real life situations, this is rarely the case. For example, in making a national plan, choices have to be made between building of dams, construction of railway lines, promotion of industries, organization of agricultural research and extension etc. At a lower level, a Chief Executive may have to decide whether to meet the trade representatives or to attend a conference or to meet the officers of Government. An administrator, therefore, has to learn to set priorities. The latter ones keep changing according to the importance of the problems at hand.

#### **(i) Propriety of Decisions**

This is the problem of deciding as to what is the right decision. This subject to the conflict between observing the form or carrying out the spirit? Whether the emphasis should be on following strictly the rules and procedures, or, some other criteria are to be applied? The correct view appears to be that rules and procedures are meant to systematize the work and to improve efficiency and not to be used as criteria for judging the propriety of a decision. The real test is whether the decision promotes general interest, is in accordance with the spirit of the constitution and laws and can be justified on moral ground. In view of the conflicting demands on the administrator, these are not the easy criteria to meet.

#### **(iii) Bias**

Elimination of bias from decision-making is part of the general problem of rationality in the decision-making. Bias is a vague term difficult to define precisely. It means a swaying influence or undue leaning to one side. It may take the forms of prejudice, which is a mental preference again without adequate reasons. It comes as a built-in part of an individual's personality i.e. a part of psychological and cultural makeup. It is not a conscious or deliberate phenomenon in the sense that decision-maker may not even be aware of it. Bias has nothing to do with

unethical conduct like favoritism, nepotism etc., which are all deliberate acts. Bias in the decisions can be judged by observing whether the decision has deviated from norms and whether such deviation can be justified before an independent person on objective rather than subjective grounds. Bias may be caused or aggravated by several factors like:

- (a) Insufficient or incorrect awareness of public interest.
- (b) Strict adherence to rules shows a bias for red tape.
- (c) Bias can result from inheritance.
- (d) Influence of environment-like education, training etc.
- (e) Caste, religion etc., may also cause bias.
- (f) Fear on the part of the administrator e.g. the reaction of the boss may force an administrator to take action against his independent judgment.
- (g) Too much of discretion may aggravate the play of bias, although it may not be the cause of it.

Elimination of bias may, however, not be an end in itself. Not all bias is bad. In fact any policy, being an act of deliberate choice, does introduce an element of bias e.g. policies like abolition of Zamindari, introducing socialistic pattern of society, imposition of ceiling on land holding etc., introduce a strong element of bias. Administrators having natural or acquired bias favorable to these policies cannot be said to be bad officers.

However, the other kinds of biases need to be eliminated. Some conscious efforts that can be taken to eliminate or atleast reduce such biases are indicated below:

- (a) No one should deal with cases in which he or his kinsmen have any personal interest.

- (b) Adequate awareness of public good can be created by proper training and by establishing good traditions.
- (c) Adequate representation be provided to different castes/religions wherever possible, in decision-making processes. For example, in selection board, representatives of backward castes etc. may be included.
- (d) By having rules of conduct etc., avoid situations in which administrators can derive present or future benefits from clients e.g. prohibition of Government servants or their families from taking employment within two year of retirements.

There are thus methods to eliminate undesirable kind of bias. However, as already stated above, desirable kind of bias towards public policies may be promoted by various means.

## **E. The Components of Decision Making**

### ***The Decision Environment***

Every decision is made within a decision environment, which is defined as the collection of information, alternatives, values, and preferences *available at the time of the decision*. An ideal decision environment would include all possible information, all of it accurate, and every possible alternative. However, both information and alternatives are constrained because time and effort to gain information or identify alternatives are limited. The time constraint simply means that a decision must be made by a certain time. The effort constraint reflects the limits of manpower, money, and priorities. Since decisions must be made within this constrained environment, we can say that *the major challenge of decision making is uncertainty*, and a major goal of decision analysis is to reduce uncertainty. We can almost never have all information needed to make a decision with certainty, so most decisions involve an undeniable amount of risk.

The fact that decisions must be made within a limiting decision environment suggests two things. First, it explains why hindsight is so much more accurate and better at making decisions than foresight. As

time passes, the decision environment continues to grow and expand. New information and new alternatives appear--even after the decision must be made. Armed with new information after the fact, the hindsighters can many times look back and make a much better decision than the original maker, *because the decision environment has continued to expand.*

The second thing follows from the above point. Since the decision environment continues to expand as time passes, it is often advisable to put off making a decision until close to the deadline. Information and alternatives continue to grow as time passes, so to have access to the most information and to the best alternatives, do not make the decision too soon. Now, since we are dealing with real life, it is obvious that some alternatives might no longer be available even if too much time passes; that is a tension we have to work with, a tension that helps to shape the cutoff date for the decision.

Delaying a decision as long as reasonably possible, then, provides three benefits:

1. The decision environment will be larger, providing more information. There is also time for more thoughtful and extended analysis.
2. New alternatives might be recognized or created.
3. The decision maker's preferences might change. With further thought, wisdom, maturity, you may decide not to buy car X and instead to buy car Y.

## **F. The Effects of Quantity on Decision Making**

Many decision makers have a tendency to seek more information than required to make a good decision. When too much information is sought and obtained, one or more of several problems can arise.

- (1) A delay in the decision occurs because of the time required to obtain and process the extra information. This delay could impair the effectiveness of the decision or solution.
- (2) Information overload will occur. In this state, so much information is available that decision-making ability actually

declines because the information in its entirety can no longer be managed or assessed appropriately. A major problem caused by information overload is forgetfulness. When too much information is taken into memory, especially in a short period of time, some of the information (often that received early on) will be pushed out.

*The example is sometimes given of the man who spent the day at an information-heavy seminar. At the end of the day, he was not only unable to remember the first half of the seminar but he had also forgotten where he parked his car that morning.*

- (3) Selective use of the information will occur. That is, the decision maker will choose from among all the information available only those facts which support a preconceived solution or position.
- (4) Mental fatigue occurs, which results in slower work or poor quality work.
- (5) Decision fatigue occurs, where the decision maker tires of making decisions. Often the result is fast, careless decisions or even decision paralysis--no decisions are made at all.

The quantity of information that can be processed by the human mind is limited. Unless information is consciously selected, processing will be biased toward the first part of the information received. After that, the mind tires and begins to ignore subsequent information or forget earlier information.

## **G. Decision Streams**

A common misconception about decision making is that decisions are made in isolation from each other: you gather information, explore alternatives, and make a choice, without regard to anything that has gone before. The fact is, decisions are made in a context of other decisions. The typical metaphor used to explain this is that of a stream. There is a stream of decisions surrounding a given decision, many decisions made earlier have led up to this decision and made it both possible and limited. Many other decisions will follow from it.

Another way to describe this situation is to say that most decisions involve a choice from a group of pre-selected alternatives, made available to us from the universe of alternatives by the previous decisions we have made. Previous decisions have "activated" or "made operable" certain alternatives and "deactivated" or "made inoperable" others.

*For example when you enter a store to buy a VCR or TV, you are faced with the pre-selected alternatives stocked by the store. There may be 200 models available in the universe of models, but you will be choosing from, say, only a dozen. In this case, your decision has been constrained by the decisions made by others about which models to carry.*

We might say, then, that every decision (1) follows from previous decisions, (2) enables many future decisions, and (3) prevents other future decisions. People who have trouble making decisions are sometimes trapped by the constraining nature of decision making. Every decision you make precludes other decisions, and therefore might be said to cause a loss of freedom. If you decide to marry Rita, you no longer can decide to marry Saloni. However, just as making a decision causes a loss of freedom, it also creates new freedom, new choices and new possibilities. So making a decision is liberating as well as constraining. And a decision left unmade will often result in a decision by default or a decision being made for you.

It is important to realize that every decision you make affects the decision stream and the collections of alternatives available to you both immediately and in the future. In other words, decisions have far reaching consequences.

## **H Concepts and Definitions**

### ***Information***

This is knowledge about the decision, the effects of its alternatives, the probability of each alternative, and so forth. A major point to make here is that while substantial information is desirable, the statement that "the more information, the better" is not true. Too much information can actually reduce the quality of a decision.

### ***Alternatives***

These are the possibilities one has to choose from. Alternatives can be identified (that is, searched for and located) or even developed (created where they did not previously exist). Merely searching for preexisting alternatives will result in less effective decision making.

### ***Criteria***

These are the characteristics or requirements that each alternative must possess to a greater or lesser extent. Usually the alternatives are rated on how well they possess each criterion. For example, alternative Toyota ranks an 8 on the criterion of economy, while alternative Maruti ranks a 6 on the same criterion.

### ***Goals***

What is it you want to accomplish? Strangely enough, many decision makers collect a bunch of alternatives (say cars to buy or people to marry) and then ask, "Which should I choose?" without thinking first of what their goals are, what overall objective they want to achieve. Next time you find yourself asking, "What should I do? What should I choose?" ask yourself first, "What are my goals?"

A component of goal identification should be included in every instance of decision analysis.

### ***Value***

Value refers to how desirable a particular outcome is, the value of the alternative, whether in rupees, satisfaction, or other benefit.

### ***Preferences***

These reflect the philosophy and moral hierarchy of the decision maker. We could say that they are the decision maker's "values," but that might be confusing with the other use of the word, above. If we could use that word here, we would say that personal values dictate preferences. Some people prefer excitement to calmness, certainty to risk, efficiency to esthetics, quality to quantity, and so on. Thus, when one person chooses to ride the wildest roller coaster in the park and

another chooses a mild ride, both may be making good decisions, if based on their individual preferences.

### ***Decision Quality***

This is a rating of whether a decision is good or bad. A good decision is a logical one based on the available information and reflecting the preferences of the decision maker.

The important concept to grasp here is that the quality of a decision is not related to its outcome: a good decision can have either a good or a bad outcome. Similarly, a bad decision (one not based on adequate information or not reflecting the decision maker's preferences) can still have a good outcome.

*For example, if you do extensive analysis and carefully decide on a certain investment based on what you know about its risks and your preferences, then your decision is a good one, even though you may lose money on the investment. Similarly, if you throw a dart at a listing of stocks and buy the one the dart hits, your decision is a bad one, even though the stock may go up in value.*

Good decisions that result in bad outcomes should thus not be cause for guilt or recrimination. If you decide to take the scenic route based on what you know of the road (reasonably safe, not heavily traveled) and your preferences (minimal risk, prefer scenery over early arrival), then your decision is a good one, even though you might happen to get in an accident, or have a flat tire in the middle of nowhere. It is not justified to say, "Well, this was a bad decision."

In judging the quality of a decision, in addition to the concerns of logic, use of information and alternatives, three other considerations come into play:

- a. The decision must meet the stated objectives most thoroughly and completely. How well does the alternative chosen meet the goals identified?
- b. The decision must meet the stated objectives most efficiently, with concern over cost, energy, side effects. Are there negative consequences to the alternative that make that choice less

desirable? We sometimes overlook this consideration in our search for thrills.

- c. The decision must take into account valuable byproducts or indirect advantages. A new employee candidate may also have extra abilities not directly related to the job but valuable to the company nonetheless. These should be taken into account.

### *Acceptance*

Those who must implement the decision or who will be affected by it must accept it both intellectually and emotionally.

Acceptance is a critical factor because it occasionally conflicts with one of the quality criteria. In such cases, the best thing to do may be to choose a lesser quality solution that has greater acceptance. The inferior method may produce greater results if the inferior one has greater support. One of the most important considerations in decision making, then, is the people factor. Always consider a decision in light of the people implementing it.

A decision that may be technologically brilliant but that is sociologically stupid will not work. Only decisions that are implemented, and implemented with thoroughness (and preferably enthusiasm) will work the way they are intended to.

## **I. Some Decision Making Strategies**

As you know, there are often many solutions to a given problem, and the decision maker's task is to choose one of them. The task of choosing can be as simple or as complex as the importance of the decision warrants, and the number and quality of alternatives can also be adjusted according to importance, time, resources and so on. There are several strategies used for choosing. Among them are the following:

### *Optimizing*

This is the strategy of choosing the best possible solution to the problem, discovering as many alternatives as possible and choosing the very best. How thoroughly optimizing can be done is dependent on

- a. importance of the problem
- b. time available for solving it
- c. cost involved with alternative solutions
- d. availability of resources, knowledge
- e. personal psychology, values

Note that the collection of complete information and the consideration of all alternatives is seldom possible for most major decisions, so that limitations must be placed on alternatives.

### ***Satisfying***

In this strategy, the first satisfactory alternative is chosen rather than the best alternative. If you are very hungry, you might choose to stop at the first decent looking restaurant in the next town rather than attempting to choose the best restaurant from among all (the optimizing strategy). The word *satisfying* was coined by combining *satisfactory* and *sufficient*. For many small decisions, such as where to park, what to drink, which pen to use, which tie to wear, and so on, the satisfying strategy is perfect.

### ***Maximax***

This stands for "maximize the maximums." This strategy focuses on evaluating and then choosing the alternatives based on their maximum possible payoff. This is sometimes described as the strategy of the optimist, because favorable outcomes and high potentials are the areas of concern. It is a good strategy for use when risk taking is most acceptable, when the go-for-broke philosophy is reigning freely.

### ***Maximin***

This stands for "maximize the minimums." In this strategy, that of the pessimist, the worst possible outcome of each decision is considered and the decision with the highest minimum is chosen. The Maximin orientation is good when the consequences of a failed decision are particularly harmful or undesirable. Maximin concentrates on the salvage value of a decision, or of the guaranteed return of the decision. It's the philosophy behind the saying, "A bird in the hand is worth two in the bush."

Quiz shows exploit the uncertainty many people feel when they are not quite sure whether to go with a maximax strategy or a maximin one: "Okay, Mrs. Sharma, you can now choose to take what you've already won and go home, or risk losing it all and find out what's behind door number three."

*Example: I could put my Rs.10,000 in a genetic engineering company, and if it creates and patents a new bacteria that helps plants resist frost, I could make Rs.50,000. But I could also lose the whole Rs.10,000. But if I invest in a soap company, I might make only Rs.20,000, but if the company goes completely broke and gets liquidated, I'll still get back Rs.7,000 of my investment, based on its book value.*

*Maximax would be to invest in a genetic engineering company;  
Maximin would be to invest in a soap company.*

## **J. Theories of Decision-Making**

As already mentioned, the decision making involves the choice of a particular course of action from among a number of competing alternatives. Theories of decision-making are concerned with the question as to how such a choice is made. In this section, we will consider the two main theories namely, the Rational Theory and the Incremental Theory. We will leave the treatment of the third theory viz. Behavioural Theory developed by Herbet Simon to the next section.

### ***The Rational Theory***

According to this theory the decision making first isolates the problem for decision and then identifies various alternative solutions. The costs and benefits of all the alternatives are then worked out and compared with each other. The best alternative is chosen according to the decision criteria decided in advance. On the face of it, this appears a very simple model assuming the decision-making to be a rational person as it assumed in the study of Economics.

## *Criticism*

- (i) The theory assumes that the problems are all known to the decision maker. But, it is not a fact. The problems for decision require a great deal of investigation to isolate. The apparent problem may not be the real problem. The point may be easily understood by a simple example which is not from the field of administration. If a person is having high temperature it may not be cured merely by drugs meant for bringing down temperature. The cause may be hepatitis, urinary infection, bacterial infection or even tuberculosis. The right remedy can be found only after finding the real cause and this may require detailed investigations.
- (ii) Another facile assumption of the theory, on the pattern of rationalist economic theory, is that all the alternative solutions of the problem chosen are known to decision-maker. It is further assumed that all the consequences of the alternative solutions are also known to the decision-maker and that he can instantly compare their costs and benefits. Anyone familiar with administrative solutions knows that this is not true. Alternative solutions and their consequences have to be estimated. There are many limitations on this process e.g. time available for making a decision; the costs of gathering information, availability of relevant information etc.
- (iii) Even if all the alternatives and their costs and benefits are known, it may not be possible for the decision maker to reach a conclusion on account of the conflicting values that may be applicable to the situation, for example, if a new steel plant has to be established, should not be established on economic consideration in the vicinity of places where raw materials are available? Or should it be established in a backward area so that more jobs may become available to the deprived section of the people inspite of the increased costs? There may thus be a conflict of values which may make the task of decision maker very difficult.
- (iv) Certain alternatives may not even be available to the decision maker in view of the decisions already taken and executed. For example, system of educational administration cannot be easily altered radically in view of the costs already incurred.

### *Incremental Theory*

The above mentioned criticisms of the rational theory are to some extent answered by the Incremental Theory. According to instrumentalism approach the various processes of decision-making like the selection of the problem and analysis of various alternatives etc. are not very clearly demarcated. The decision-maker considers only a few alternatives for dealing with the problems. These differ only marginally (or incrementally) from the existing policies. The change takes place slowly. The problem gets redefined and another incremental decision is taken, it is a continuous process in which decision is generally by consensus. For that reason it is easy to implement.

### *Critical Evaluation*

Obviously incremental decision-making cannot result in big changes. The process is essentially very slow, but has several advantages over the rational decision-making process.

- (a) Firstly, the process avoids violent changes, which may at times give rise to social and political instability. The method is ideal in pluralist societies like America and India where it is difficult to find radical (through rational) solutions acceptable to all.
- (b) Secondly, the incremental decision-making process reduced the risks and costs of decisions which have often to be taken under conditions of uncertainty.
- (c) Thirdly, the problems of data collection, analysis of alternatives etc. remain within manageable limits so that impossible burdens are not placed on the decision makers.

Very often the existing situation itself suggests a simple remedy without much analysis. In short in place of very rational decision which may not be easily found out, the instrumentalism provides for a practical solution which may be modest but may at least work and work expeditiously.

The incremental decision-making process has, however, also been criticized by many.

- (1) It has been said that the process, being based on consensus, tends to favour the most powerful and privileged sections of the population.
- (2) It is incapable of producing bold initiatives favoring the poor and the down trodden.
- (3) Nor can it make for big and decisive changes.

The decision makers, therefore, utilize both the methods depending upon the circumstances of the decision, or even parts of a decision may be tackled by different methods.

### ***Herbert Simon on Decision-Making***

Herbert Simon attached the classical theory of organization based mainly on structural approach. He said that the so called principles of organization were mere proverbs, and often lead to contradictory and inconsistent results. He, therefore, tried to study the question in another way, viz, by observing the behaviour of the managers in the organizations. He found in his analysis that the main job of the managers is to take decisions. So much so that Simon went to the extent of using “decision-making” as synonymous with “managing”. He felt that in an organization the managers, who are in senior positions, have to perform the crucial decision making functions. Actually decisions are being taken at lower levels, middle level and the senior levels. At lower levels only about basic work processes decisions are taken while at the middle level, major operating decisions are taken. On top level managers take decisions to provide purpose and objective to the organization and to monitor its performance. Simon said that decision making is mainly concerned with making choices out of the available courses of action. However, he felt that only the final act of making the choice is often taken as decision making. But according to him decision making is a whole (and quite complex) process comprising several activities culminating in the final choice. Simon classified these activities into three main heads – viz. finding occasions for making a decision; finding possible

courses of action; and choosing among courses of action. He called these phases as intelligence activity' design activity and choice activity respectively. He found that time devoted to these activities varied considerably. Managers and executives spend a large part of their time surveying economic, social, political and technical environment to identify new opportunities for the organization. They probably spend still more time in developing designs and possible course of action where a decision is required. Finally they spend a small part of their time in choosing among alternative actions already developed to meet an identified problem and already analyzed for their consequences. Thus a major part of the time of the executives and managers is spent in intelligence activity and design activity while only a small part is spent on choice activity which is mistaken as "the decision-making".

In his famous book "*Administrative Behaviour*", Herbert Simon developed his ideas on the decision making process. A very brief account of his ideas is attempted below:

- a. In first point made by Simon is that every decision consists of a logical combination of facts and values. Facts mean existence or occurrence of something tangible and concrete which can be verified by anyone. On the other hand value is a matter of preference. For example, when one says he likes classical music, he is making a value statement. More statement of facts does not constitute a decision. It does involve a question of preference. Hence a decision involves a number of fact statements and value statements.
- b. Taking a cue from economists, Simon started with the assumption that decision-making, which meant making choices, was intended to be a rational process. This rationality implies these characteristics. First of all the decision maker should know the problem and various alternative solutions. This is an important precondition, for, what one will choose if he is not even aware of the alternatives. Secondly, all the consequences of each alternative must be known. And, thirdly, the criteria for making a choice must also be predetermined. When all the alternatives and their consequences are known, a rational choice can be made by applying the pre-determined criteria. Simon, however, argued that such a rationality is not visible in actual

human behaviour and appears to be inconsistent with human capacity of processing and analyzing information. The theories of rational choice had already pointed out that the choice is constrained by several factors like time, cost, technology etc. The distinctive contribution of Simon is that, in addition to these external factors in the environment, the constraints on choice also come from some properties of human beings as problem solvers and processors of information. He said that human memory and computing power were limited, His resources stimulated many others. They collectively developed the idea of what has come to be known as the theory of “bounded rationality”.

Simon brought to bear the Behavioural approach to the concept of bounded rationality. He focused on the three main aspects:

- (a) In the traditional theories of rationality, the alternative choices were supposed to be given. On the other hand, Simon said that alternatives were to be discovered through search and usually only a limited number of alternatives were considered.
- (b) Similarly, the consequences of the various alternative choices were also taken as given by the traditional theories. Simon said that even the consequences of the alternative choices had to be found through some kind of a search.
- (c) Traditional theories assumed the decision-makers, while, making a choice, optimized. It means that they waited until they found the best alternative according to the choice criteria laid down by them. Simon, however, suggested that most of the decision makers only “satisfied”. The alternatives are considered sequentially. The decision maker chooses the first alternative that is good enough.

## **K. Decision Making Styles**

A huge variety of classifications of decision making style and examples are available. While some of the classifications may be considered true classifications, others are more accurately a description of the decision making model being used.

***One classification includes the following:***

- analytical
- conceptual
- impulsive
- procrastinating
- flexible
- proactive
- fatalistic
- dependant
- normative
- Behavioural

***To decide or not to decide***

This is an interesting categorization of different types of decision making styles:

- Agony
- Impulse
- Escape
- Compliance
- Play it Safe
- Procrastination

***A mixed bag***

Another classification includes the following categories:

- Rational
- Intuitive
- Dependent
- Avoidant
- Spontaneous

The first two here, rational and intuitive, are much more a description of models than decision making style.

***Overlay of styles***

Myers Briggs developed a model which is used as a personality indicator. The four categories, or dichotomies, are extraversion/introversion, sensing/intuition, thinking/feeling and judging/perceiving. Testing indicates whether an individual is an

introvert/sensing/feeling/judging or  
extrovert/intuitive/feeling/perceiving category and so on.

By extrapolating how individuals will function in groups or relationships based on their Myers Briggs category, it's also possible to predict their decision making style. And examples include a logical analytical style for someone who is in the thinking/extrovert//sensing/judgment category. Whereas someone who is introverted/intuition/feeling/perceiving may procrastinate or be dependent in their decision making.

### *The most popular Models*

Decision making models can be divided into

- Rational
- Intuitive
- Others

Of these groups, by far and away the most popular decision making models are those of the rational category.

Rational models have a series of **sequential steps** that involve a **thinking process** where various options are rated according to potential **advantages and disadvantages**. The highest scoring option is considered to be the optimum one.

There are many adaptations of this idea and some of these include multiple step decision making processes, decision matrix analysis and SWOT analysis, Pareto Analysis, Critical Path Analysis and Decision Trees.

### *Why so popular?*

The most popular decision making models are popular for several reasons. In our culture we give great importance to thinking and less to the wisdom of our physical systems. The rational models are all about cognition and understanding and we like understanding. We like to believe we can get a handle on life, the universe and everything. We want to know the future, so we can settle back and relax. The

most popular decision making models give us the illusion that we are doing just that!

They are also the most popular decision making models because they are **easiest to teach and to learn**. They are the commonest models in our teaching establishments and until recently were the model of choice in the armed forces, although they have realized their limitations and are now introducing intuitive models.

## L **Description of Decision Styles**

### *Agony*

Agony- to "over-think" a decision. Spending large (possibly excessive) amounts of time weighing out all possible options before deciding on one. Agonizing over a decision requires that a person places great time and importance on the decision.

*When is it best to use this style of decision making?*

Agonizing over a decision that has great importance to you or has serious consequences is likely an appropriate way to handle the decision. People often agonize over their career choices, serious relationship issues, or problems with family. When a decision could seriously affect other people in your life or could have long term effects on you, it may be appropriate to use this style of decision making.

*When is this style inappropriate?*

Agonizing over a decision that has little importance or consequences appears as though it may waste a lot of useful time and energy. Everyday decisions such as what meals to eat or what social activities to participate in should not become time consuming situations that you agonize over.

### *Impulse*

Impulse- to make a decision based on your first reaction. Impulsive decision makers spend little to no time considering their options. They simply react to the circumstances in front of them.

*When is it best to use this style of decision making?*

Situations of emergency or crisis often require people to use an impulsive decision making style to handle the situation. For example, jumping in a lake to save a drowning person would be an impulsive decision. There is no time for thinking over a decision and weighing all possible options in many emergency situations. It is often best to act impulsively to solve the problem.

Impulsive decisions may also be appropriate in social situations. Depending on your definition of fun or enjoyment, you might like to act impulsively (but responsibly) with friends. For example, an unexpected day trip to the beach might be an unplanned, spontaneous decision that would be considered impulsive.

*When is this style inappropriate?*

Impulsive decision making is inappropriate when there are major life decisions to be made. Career choices, academic choice, family issues and relationship issues should generally not be situations during which you act impulsively. It is also important to be aware of other people's feelings and not to act impulsively by saying or doing something that may hurt someone unnecessarily.

### ***Escape***

Escape - Avoiding a decision or creating a false answer to temporarily solve a situation is escaping from making a decision.

*When is it best to use this style of decision making?*

It is rarely a good choice to use this style of decision making. Normally, people are not put in situations that would permit them to use this style. But, it can be an appropriate method of decision making if you are put in an uncomfortable or dangerous situation. For example, some persons in a group began using drugs and offered them to a person who did not use drugs. The person was embarrassed to simply "say no". He did not want the pressure of explaining why he did not want to share. So, he simply responded, "I have a cold and I'm on medication, so I can't". Uncomfortable situations such as these can often be a good time to utilize the escape method of decision making.

*When is this style inappropriate?*

It is inappropriate to escape a decision that is inevitable. If you have done something you do not want to face or you are avoiding the truth in some way, this is not a good style to choose. Escape would be inappropriate if you have to face reality and are attempting to avoid that.

### ***Compliance***

Compliance- is to allow someone else to decide for you. As opposed to taking responsibility/ownership for the decision, compliant people allow others to make decisions for them.

*When is it best to use this style of decision making?*

Compliance may be appropriate when you are making decisions in areas that you do not feel you have enough information about. Consulting with someone who is more knowledgeable or has expertise in a certain area would be a good idea if you don't feel comfortable enough to make a decision on your own.

Relationships and family situations that are not of great importance to you may also be good situations to use compliance. Allowing others the option to make choices could be a very effective way to increase the strength of a relationship. If you are in a relationship with someone and you always get exactly what you want, that is not fair to the other person. It may be beneficial for both parties in a relationship to use compliance and allow the other to make decisions on occasion.

*When is this style inappropriate?*

It is not appropriate to use compliance as a way of avoiding responsibility for your actions or decisions. Important life decisions should not be ones that you allow other people to make for you. For example, allowing your parents to decide what college you transfer to or what subject you major in is not appropriate.

### ***Play it safe***

Play it safe- is to always go with the situation that involves the least amount of risk. Playing it safe is normally the option that would be most socially acceptable, the "norm" and would allow a person comfort rather than risk.

*When is it best to use this style of decision making?*

Playing it safe is normally the best option when there is a dangerous risk involved in the decision to be made. For example, if you are considering experimenting with a drug that is known to be very harmful or possibly fatal, the best thing to do is to "play it safe" and abstain from using the drug.

It is best to choose safe options in situations where the consequences may be too difficult for you to handle. For example, if you are not good at swimming, the best thing to do would be to swim in shallow area or avoid swimming.

*When is this style inappropriate?*

Playing it safe can become a negative experience if a person always chooses to play it safe. Often, the most rewarding experiences and opportunities come from situations that required taking a risk. For example, if you are worried about leaving your hometown to pursue a career that has always interested you, it may be to your benefit to take a risk and try to reach a goal or dream.

### ***Procrastination***

Procrastination- to simply delay the decision. Procrastinators refuse to actually make a decision. Often, they delay so long that the options that were once available then become unavailable. For example, a student who is considering joining another college but fails to send her applications to any other college by the desired deadlines would be considered a procrastinator. By not sending these applications, the options that may have been available to her no longer exist. Her decision has been made because her lack of action has only left her with the option of remaining at the existing college.

*When is it best to use this style of decision making?*

Procrastination is generally not a good style of decision making. While there are few situations that would best be handled by procrastinating, it is possible that a person may procrastinate or delay a decision because he or she has chosen to wait until he or she is more ready to make the decision.

*When is this style inappropriate?*

Procrastination is not an effective decision style for any decision that has urgency or a timeline. It is not effective to continually delay a decision that will inevitably have to be made. For example, a student who delays registering for classes until last day of registration has lost many options for scheduling and has lost the convenience of having registered early. Delaying decisions generally makes the ultimate decision more difficult.

Someone who is in the flexible category has the ability to move between different categories and may do so based on the circumstances or situation.

**Another classification of Decision Making Styles offers following styles:**

***Authoritative***

The authoritative decision making style is useful when the leader possesses all the **necessary information** and has the **required expertise** to make the best decision. He/she makes the decision and the subordinates are then informed of what the decision is.

This style is useful when the leader is the expert, and when a fast decision is required. The leader takes **sole responsibility** for the decision.

The authoritative decision making style is least useful when there is expertise available elsewhere that the leader could call on to make a more effective decision. Nor is it useful if it becomes the only decision making style used by **power driven individuals**.

### *Facilitative*

The facilitative decision making style indicates a **joint effort** between leaders and subordinates, both providing input to make a shared decision. It is important that subordinates have access to the information required to make the decision. They should also have some degree of **expertise and/or motivation** to ensure the best decision is made.

Responsibility for this decision is shared and this style can actually be very **empowering to subordinates**, unlike the authoritative decision making style which can have quite the opposite effect. The facilitative style is useful when the risks of a poor decision are minimal and the benefits of including the subordinates are significant, such as arranging timetables, or benefit programs.

### *Consultative*

Consultative decision making is said to occur when the leader asks for **advice and opinions** from his subordinates, and makes the decision himself. As in the authoritative decision making style, responsibility remains with the leader.

If the subordinates have expertise or information that will help make a more effective decision, **a wise leader will ask for it**. But unless the subordinates understand that that's what is occurring, it can lead to upset or disappointment.

### *Delegative*

Delegative decision making, as the name implies, is when a leader passes responsibility for the decision making and the decision to one or more subordinates. It may even be all the subordinates.

Again, the pros and cons are determined by the expertise and knowledge of those actually making the decision. The style obviously comes into its own as the organization gets **larger**, and means the leader does not necessarily have to make all the decisions.

## *Flexibility*

A good leader will **move easily between the styles** depending on context. It takes quite a degree of awareness of self, as well as an **understanding of the limits** of your own expertise, to be flexible in this way.

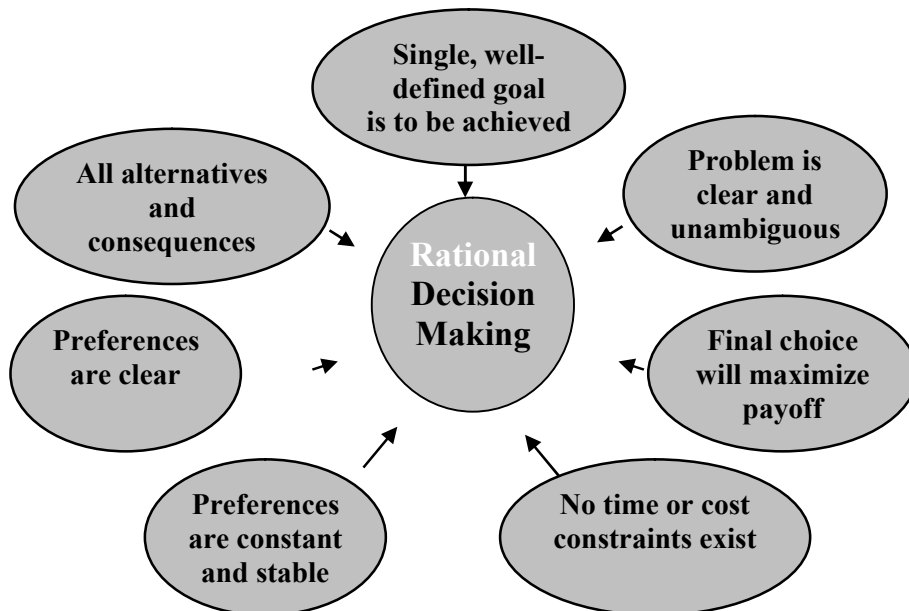
## **M. Decision Making Models**

### *Rational decision making models*

Rational decisions are consistent, value-maximizing choices within specified constraints. The managers are assumed to make rational decisions.

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

### *Assumptions of Rationality*



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

### *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

The comparison is often performed by filling out forms or charts like Decision matrix, Pugh matrix, decision grid, selection matrix, criteria rating formats. A **relative importance** is given to each criterion and the options are scored against each of the criteria and the highest 'wins'.

### *Pros and cons*

A rational decision making 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 their memory? How good is their 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.

## **Vroom-Jago Decision Model**

### ***What's it for?***

The Vroom-Jago decision model is a rational model used by leaders to determine whether they should make a decision alone or involve a group, and to what extent the group should be involved.

This method was first proposed by Vroom and Yetton in 1973 and was later modified by Vroom and Jago in 1988. Subsequent studies have shown that the greater precision in situational assessment of the Vroom-Jago decision model allows for better discrimination in choosing a process.

In some business situations it's better for a leader to be the decision maker for the group. In others, it's best for the group to have some input or even make the decision. This model distinguishes five different situations and outlines an algorithm for determining which one to use.

### ***The 5 processes***

#### ***Autocratic I (A1)***

You as a decision maker use the information available to make the decision yourself.

#### ***Autocratic II (A2)***

You request information from members of your team. They may or may not know why you want such information. They neither define the situation, alternatives or final choice.

#### ***Consultative I (C1)***

You explain the situation to the individual members of the group but they do not get together as a group. You make the final decision.

### *Consultative II (C2)*

There is group discussion where you explain the situation and gather ideas and suggestions. Again, you're responsible for the final decision making.

### *Group II (G2)*

The group as a whole makes the decision. You as the leader present the situation and the group defines alternatives and reaches a consensus decision. The leader acts more as a facilitator in this process and allows the group to agree on the final choice.

### ***Which one?***

The Vroom-Jago decision model uses a series of seven questions, asked in order, to determine which of these five processes to use. This is a somewhat prescriptive process and allows a selection or option which is the most appropriate for your situation.

### ***The 7 questions***

- i. Is high quality important here or is a good solution absolutely critical?
- ii. As the leader, do you have enough information of your own to make a good decision?
- iii. Is the problem structured in that it is clearly defined, organized and has recognized solutions?
- iv. Do the members of the group have to accept this decision for it to work?
- v. If you make this decision yourself, are you sure the group will accept it?
- vi. Are the group members aligned with the same goals that you are trying to achieve?
- vii. Is disagreement likely among group members in reaching a decision?

The Vroom-Jago decision model is itself a decision tree and will only be as useful as the quality of information you input and how you approach the decision itself.

## *Multiple step decision making models*

### *The 9 step decision making model*

The 9 step decision making model is proposed by David Welsh in his book 'Decisions, Decisions'.

He calls it a *subjective expected utility maximization* process. A utility, he explains, is a technical term used by economists and philosophers to indicate happiness, pleasure or satisfaction. Subjective indicates that it's your pleasure, and expected because it is the satisfaction or pleasure that you don't yet have, but hope to get.

Using the 9 step decision making model allows you to consistently aim to maximize your pleasure, and will be better for you in the long run than making decisions in any other way.

#### *Step 1 - identify your objective*

What is it you wish to achieve?

#### *Step 2 - Do a preliminary survey of your options*

Besides the most obvious choices available to you, what other kinds of options can you think of?

#### *Step 3 - identify the implicated values*

What values are at stake here? If it's an easy or unimportant decision you may not necessarily do this step. But if the decision has a major impact on your wealth, your health or self-respect, then it's useful to be aware of it.

#### *Step 4 - assess the importance of the decision*

The importance of the decision will determine how much you invest in it in terms of time, energy and money. The importance is determined by examining the implicated values.

You may also have to consider the context here as well, a different situation or environment can mean that a decision that is often not very important can become very significant.

*Step 5 - budget your time and energy*

Having identified the main alternatives and the values, now decide on how much time and energy to spend making the decision itself. More important decisions are given more time and energy. He suggests that busy people and nervous wrecks made worse decisions than other people.

*Step 6 - choose a decision making strategy*

This step of the 9 step decision making model involves making another decision. The time and energy you plan to devote will affect the strategy you choose.

And because the strategy you choose may profoundly affect your decision it's important to choose an appropriate one.

*Step 7 - identify your options*

When you examine your options in more detail you may discover other options with different implicated values. He points out that occasionally you may have to go back to step three to five and make revisions.

Sometimes outside expertise may be able to provide options that you haven't thought of.

*Step 8 - evaluate your options about*

This is where you compare the options available to you. Again he suggests that seeking advice from an expert is often easier than making the decision on your own.

*Step 9 - make your choice - on time, on budget*

When you're finished doing the evaluation (only as much as it requires!), you make your choice. He notes that people may still have difficulty at this stage because they fear the consequences of making a bad decision.

## ***7 Step Decision Making Model***

This model was developed by Rick Roberts of the University of North Florida career service. It was designed for those who wanted a decision-making model to help with choosing a career path or deciding what to do about a job offer.

An important factor in the model is information gathering. It is suggested that the more information that's available, the easier it is to make decisions. So many of the steps are designed to do just this.

### *The 7 steps*

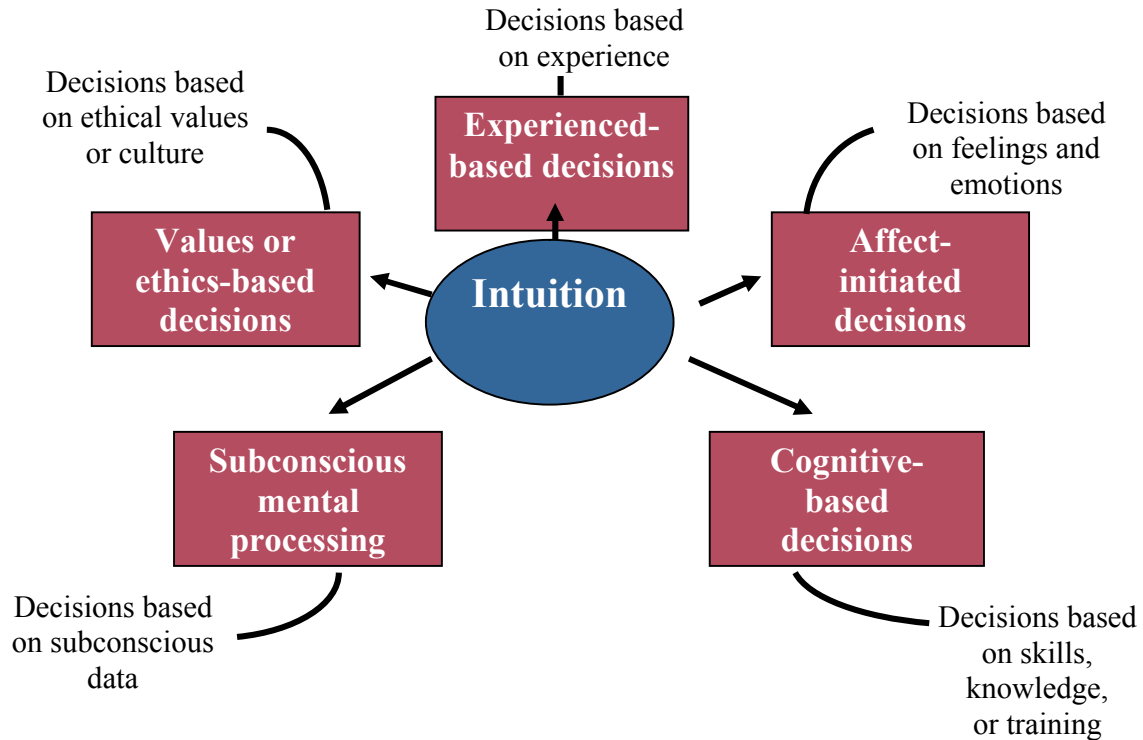
- ***Identify the decision to be made*** - exactly what are you trying to decide?
- ***Know yourself*** - what are your strengths, weaknesses, skills, values and interests
- ***Identify options*** - list the various choices so far
- ***Gather information and data*** - about each alternative
- ***Evaluate options that will solve the problem***, pros, cons and risks of each alternative
- ***Select the best option***- may be necessary to loop back and gather more information
- ***Develop a plan of action*** - and implement it!

### *Pros and Cons*

The 7 Step Decision Making Model was designed for career decision making and so can be a bit cumbersome if applied to decisions that are not as significant. Not so useful for deciding between chocolate or vanilla ice cream, for example!

## ***Intuitive decision making***

Subconscious process of making decisions on the basis of experience and accumulated judgment is known as Intuitive decision making. It does not rely on a systematic or thorough analysis of the problem. It generally complements a rational analysis.



## N. Decision Making Tools And Techniques

Such things as visual aids and other helpful instruments are decision making tools, and the processes used to arrive at a decision are decision making techniques.

As such, decision making tools and techniques are not completely separate but can be used together in various combinations depending on what kind of result you are after.

Many of the tools available to help with decision making take the form of charts or diagrams that you fill in with the information available to you. These visual decision tools are mostly used by people who like to have some visual representation of what's happening so they can get a 'clear view' of the situation!

### ***Rules as tools...***

Rule-based decision tools allow novices to make decisions by putting information into a predetermined format.

### *A simple T Chart*

The idea here is to list the pros and cons of a particular decision, each list either side of the stem of a T. At it's simplest, if the list of pros is longer than the cons, go ahead. If the list of cons is longer, don't do it. Another variation would be to give each consequence a number depending on it's importance. The numbers in both columns are added and you go with the highest.

A decision making pros cons table might look like this:

#### *Should I buy a new laptop?*

| <i>Plus</i>        |    | <i>Minus</i>                     |    |
|--------------------|----|----------------------------------|----|
| <i>Work faster</i> | +2 | <i>Expensive</i>                 | -3 |
| <i>Plays music</i> | +4 | <i>Need to buy more software</i> | -3 |
| <i>Looks great</i> | +1 | <i>Heavy</i>                     | -1 |
| <i>Portable</i>    | +2 |                                  |    |
| <i>Total</i>       | +9 | <i>Total</i>                     | -7 |

### *PMI*

Edward de Bono added another dimension to the T Chart by adding a third column to the 'Pluses' and 'Minuses' - an 'Interesting' column. Other consequences, ideas or areas of uncertainty that are not yet judged to be good or bad are listed here.

Then each item, in all 3 lists, is given a plus or minus value based on it's relative importance. Again, each column is totalled. These 3 numbers are then added to determine the decision.

### *Decision making matrix/Grid analysis*

A decision making matrix is a visual representation of a complex decision. It is a common business decision making model. This has a variety of names including decision grid, problem selection grid, Pugh matrix and solution matrix. It is used to evaluate and prioritize a list of options against a list of criteria. The highest ranking option is the 'best' solution.

Where there are multiple possible outcomes and a whole host of factors to consider, grid analysis is useful. These decision making tools and techniques allow for a step by step comparison of each option versus each factor and a simple method of reaching a logical and rational decision.

### ***Operational Risk Management (ORM) Decisions***

Army and navy units use ORM, Operational Risk Management to make decisions that minimize risk and hazards in their activities while still allowing the completion of their missions.

### ***Decision Trees***

These are used to compare various options and predict the possible outcomes of each option. They are often used to try and work out the risks and benefits of the various options.

They represent the situation graphically in order to assess the net value of many possible outcomes.

### ***SWOT Analysis***

Strengths, Weaknesses, Opportunities and Threats are examined. They are often drawn in a 2x2 matrix, so that it reads like a list of advantages and disadvantages. While individuals can use it, it is more commonly used by organizations, and often alongside other models.

### ***Pareto Analysis***

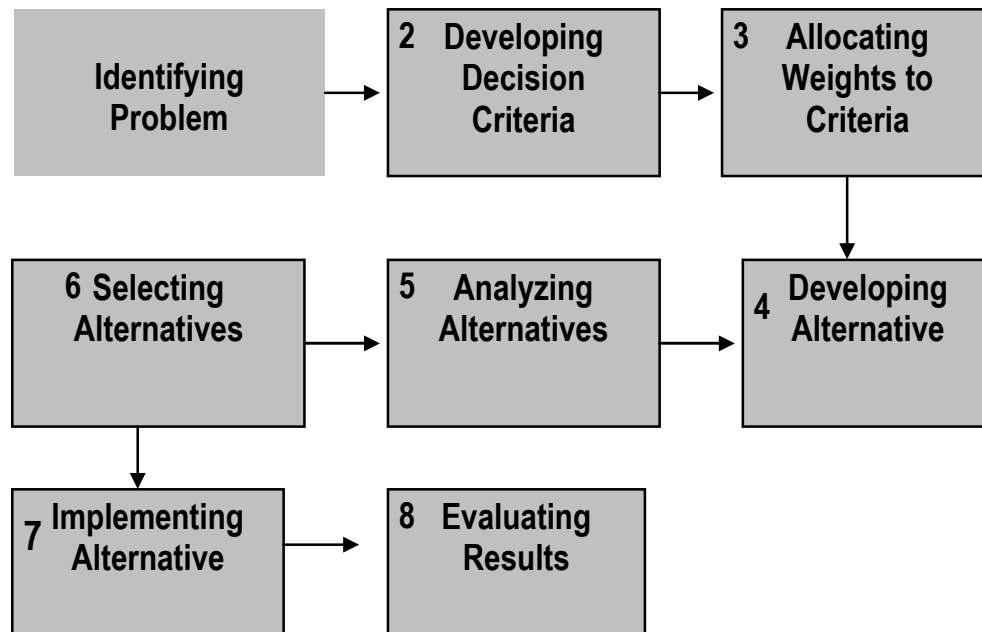
Working on the 80:20 principle, when there are many changes to be made in an organization, this analysis suggests where the initial changes should be made in order to get the maximum benefit as early as possible.

### ***Critical Path Analysis***

This is used where a project has many steps that are interdependent. It identifies tasks which have to be completed on time. This is useful where some tasks cannot be started until the initial ones have

completed and also gives an understanding of how soon each task needs to be completed so that the whole project will complete on time.

## O. Decision Making Process



### *Identifying Problem*

Problem means discrepancy between an existing and a desired state of affairs or the difference between what is and what it ought to be. It must be such that it exerts pressure to act.

### *Developing Decision Criteria*

*Decision criteria* - what's relevant in making a decision?

The following factors are relevant in making the decision:

- Price
- Interior comfort
- Durability
- Repair record
- Performance
- Handling

### *Allocating Weights to Criteria*

It involves determining the relative priority of each of the criteria. For example if the problem is to purchase a new car, the criteria and weights may be as under:

| Criterion        | Weight |
|------------------|--------|
| Price            | 10     |
| Interior comfort | 8      |
| Durability       | 5      |
| Repair record    | 5      |
| Performance      | 3      |
| Handling         | 1      |

### *Developing alternatives*

It involves listing the viable alternatives that could resolve the problem without evaluating them.

Make a list of all the possible choices you have, including the choice of doing nothing. Often a non decision is harmful as not choosing to turn either right or left while driving towards a bridge support is to choose to drive into the bridge. But sometimes the decision to do nothing is useful or at least better than the alternatives, so it should always be consciously included in the decision making process.

For example, in the above problem of buying a car the development of alternatives will include generating a list of possible vehicle manufacturers.

Also be sure to think about not just identifying available alternatives but creating alternatives that don't yet exist.

### *Analyzing Alternatives*

It means assessing the value of each alternative by making a value judgment of the feature.

This is the evaluation of the value of each alternative. Consider the negative of each alternative (cost, consequences, problems created, time needed, etc.) and the positive of each (money saved, time saved, added creativity or happiness to company or employees, etc.). Remember here that the alternative that you might like best or that would in the best of all possible worlds be an obvious choice will, however, not be functional in the real world because of too much cost, time, or lack of acceptance by others.

Also don't forget to include indirect factors in the rating. If you are deciding between machines X, Y, and Z and you already have an employee who knows how to operate machine Z, that fact should be considered. If you are choosing an investigative team to send to Japan to look at plant sites and you have very qualified candidates A, B, and C, the fact that B is a very fast typist, a superior photographer or has some other side benefit in addition to being a qualified team member, should be considered. In fact, what you put on your hobbies and interests line on your resume can be quite important when you apply for a job just because employers are interested in getting people with a good collection of additional abilities.

### *Selecting Alternative*

If you are making an individual decision, apply your preferences (which may take into account the preferences of others). Choose the path to follow, whether it includes one of the alternatives, more than one of them (a multiple decision) or the decision to choose none.

And of course, don't forget to implement the decision and then evaluate the implementation, just as you would in a problem solving experience.

One important item often overlooked in implementation is that when explaining the decision to those involved in carrying it out or those who will be affected by it, don't just list the projected benefits: frankly explain the risks and the drawbacks involved and tell why you believe

the proposed benefits outweigh the negatives. Implementers are much more willing to support decisions when they (1) understand the risks and (2) believe that they are being treated with honesty and like adults.

Remember also that very few decisions are irrevocable. Don't cancel a decision prematurely because many new plans require time to work--it may take years for your new branch office in Kolkata to get profitable--but don't hesitate to change directions if a particular decision clearly is not working out or is being somehow harmful. You can always make another decision to do something else.

### ***Implementing The Alternative***

*Implementation* - conveying the decision to those affected by it and getting their commitment to it. Participation in decision-making process inclines people to support the decision. Decision may fail if it is not implemented properly.

### ***Evaluating Results***

Determine whether the problem is resolved.

## **P. Decision Mistakes**

### ***Human biases***

These are decision mistakes that occur as a result of cognitive biases. In other words, **distortions** in the way we take in information about the world, and in how we process that information.

### ***Herd instinct***

The bandwagon effect had been used to describe how people will follow what others in the group are doing. To some extent, it's driven by the desire to be socially accepted and the fear of rejection. However, it also means that many people don't actually make their own decisions.

### *Rose colored memories*

Choice supportive bias is the tendency to recall past decisions as being **better than they actually were**. This effect in memory means that when a past decision is considered, positive features are associated with the chosen option and negative features associated with the discarded options.

Rosy retrospection occurs when people rate past events more positively than they rated them when the event actually occurred. These are factors that allow people to repeat decision mistakes time and again.

### *Like attracts like...*

Another group of decision mistakes occur because of the *confirmation bias*, *mere exposure effect*, *deformation professionnelle* and *disconfirmation bias*.

*Confirmation bias*, as the name suggests, is seeking and sorting for information that confirms already held conceptions. More importance is given to information that **confirms what's already known**. It may occur because it seems to be more difficult for humans to process negatives than to process positives.

*The mere exposure effect* is a tendency for people to like things more simply because they are familiar with them.

*Deformation professionnelle* is the tendency to consider something within the framework of one's profession, ignoring a broader perspective.

*Disconfirmation bias* is where people tend to scrutinize very critically information which goes against their beliefs. This obviously ties in closely with the confirmation bias.

These ideas are interesting in terms of **persuasion and negotiation**. It seems that repeated input of contradictory information is required to change somebody's mind. The alternative, of course, is to start by giving them information that they accept and then creating a trail of logical chains to transition them to the new viewpoint.

The kind of decision mistakes that occur here are related to repeating the same decisions, using very narrow frames, and a refusal to consider 'out of the ordinary' alternatives.

### *Controlling the chaos*

The **illusion of control** and neglect of probability lead to their own group of decision mistakes. Neglect of probability is the tendency to disregard probability when making decisions. And illusion of control is of course the belief that people can control or influence outcomes when they obviously cannot. These decision mistakes mean that casino and lottery owners make a comfortable living!

### *Same old, same old...*

The status quo bias is the observation that people like things to **stay the same**. This is tied up with two other biases. Humans are loss aversive creatures. They much prefer avoiding losses than achieving gains.

And people also value something more when they own it than before they own it. For example, most people would find it perfectly acceptable to buy something at one price and sell at a higher price.

The status quo bias can lead to decision mistakes were people avoid decisions because they're afraid of consequences or adverse responses. Or they delay them for so long that they actually miss the opportunity.

### *How good are we?*

Named after the visual blind spot, the bias blind spot describes how people usually consider themselves better than average for their good characteristics and worse than average for the negative ones. In the original testing, the subjects even considered themselves less susceptible than average to this bias when it was explained to them!

In a similar vein, the self-serving bias is where people claim more responsibility for their successes than for their failures. It also ties in with the previous bias in that sometimes people consider that they perform better in areas that are related to their self-esteem. Any

resultant decision mistakes will obviously be explained away to keep the sense of identity intact.

### ***Compare and contrast***

The contrast effect occurs when something is increased or decreased in importance when it is compared to some recently observed contrasting object. These effects are ubiquitous with humans and also animals. A weighty object is considered heavier than normal when compared with a lighter one, for example.

Allied with this is the focusing effect when people place **too much importance on one aspect** of an event and then make decision mistakes in terms of predicting future outcomes. For example, many people consider they would prefer to live in a warmer climate because it's more comfortable and pleasant. But they don't consider the different insects nor the potentially dangerous animals and droughts they would have to contend with.

The third bias in this group is hyperbolic discounting when people **prefer more immediate payoffs** than later ones. This bias is amplified as both payoffs approach the present. The opportunities for con artists, get-rich-quick schemers and even moneylenders to generate decision mistakes are obvious.

### ***Ones we all know!***

A few of the more common biases causing decision mistakes and negative effects include:

*Omission bias* is where we judge harmful actions as worse or less moral than inactions or omissions that are equally harmful. The decision mistakes that this leads to are again indecisions and delayed decisions.

*Planning fallacy* is the tendency to underestimate the amount of time it would take to complete a task.

*Post purchase rationalization* is a tendency to convince yourself by rational argument that your purchase was actually good value, especially after investing a lot of time, money or effort in something.

Recent thinking suggests that many decisions are actually made emotionally and the rationalization is done to justify that. So the rationalization may actually be done pre-purchase.

*Selective perception* is where the expectation determines how we perceive the world. We see what we want to see. If you sort for problems that's what you'll find. If you seek out what works, that's what you'll get.

## **Q. Diversity in Decision Making**

### ***Why focus on diversity?***

Beyond moral and social reasons for implementing diversity initiatives, powerful arguments make the business case for diversity initiatives. Below are just a few reasons.

- i. Diversity initiatives and successful results attract quality employees. Organizations that have successful diversity initiatives attract quality talent with diversified perspectives and skills.
- ii. Diversity initiatives positively affect *the quality of an organization's workforce*. With salaries, benefits, training, and development comprising the biggest part of an organization's budget, maximizing return on investment (ROI) and competitive advantage are important. When employees leave because they don't feel valued or because they perceive the workplace to be hostile, time and money invested in employees are lost.
- iii. *Varied perspectives inform and enrich organizational decision making*. The variety of views expressed by an organization's workforce help leaders make informed and responsible decisions.
- iv. *Successful diversity initiatives protect the bottom line*. Organizations that don't have diversity initiatives may be more prone to employment-related lawsuits. Implementing diversity initiatives -- and encouraging employee compliance with established policies and standards -- may protect an organization from legal trouble and costly awards.

## *How can diversity in your workplace be incorporated*

Incorporating diversity in the workplace doesn't have to involve implementing major initiatives. Here are a few suggestions for incorporating diversity in your unit.

*Use nondiscriminatory employment practices.*

Hiring and promoting decisions should be fair to all involved.

*Think of diversity as more than just demographics.*

Diversity is more than the gender, race, physical or other limitations, or sexual orientation of an individual. Diversity includes the perspectives, talents, insights, and experiences of others.

*Seek out new perspectives.*

Create work teams that incorporate the diverse skills, creative talents, experiences, and viewpoints of the individuals on your staff. Encourage and support their full participation.

*Treat others respectfully.*

Your behavior and actions provide clues about whether you respect others. Here are a few suggestions: watch your words *and* your body language when communicating with others, acknowledge others' views and feelings in conversation, listen carefully to the feelings and attitudes behind the words, and create a climate of trust by making fair and unbiased decisions.

Incorporating diversity in the workplace will not only improve our workforce, it will improve our decision making and results.

*Advantages - diverse employees:*

- provide fresh perspectives
- offer differing interpretations of problem definition
- increase the likelihood of creative and unique solutions

*Disadvantages - diverse employees:*

- require more time to reach a decision
- may have problems of communication
- may create a more complex, confusing, and ambiguous decision-making process
- may have difficulty in reaching agreement