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### Lecture - 32 Decision Making (Contd.)

Welcome. Today we are going to continue with the rest of the portion of the discussion on decision making in organizations. In the last session we have come to know like what is decision making, what are the different types of decisions like programmed decisions and non-programmed decisions, how to go for rational decision making, how to go for bounded rationality model of decision making. And we discussed mainly decision making at the individual levels. Today, we are going to concentrate more on decision making at the group level and decision making at the organizational level, the constraints faced from the organization side may be in decision making process, how they affect the, how the constraints affect the decision making process and how do you try to overcome these constraints.

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- Group Decision Making
- Group decision-making is prevalent in organizations, especially in non-programmed problems.
- They help in decisions where the manager must seek and combine judgments.
- Complexity of non-programmed decisions requires specialized knowledge in numerous fields, which one person rarely possesses.



So, we will start our discussion with group decision making. So, group decision making is prevalent in more for non-programmed decisions. So, they are more used while people are making to; trying to make decisions regarding which may be there.

We have to generate multiple alternatives and we have to prioritize the alternatives and then come to solutions. And, it is more used in case of non-programmed decisions, whether it is uncertainty. And, we and we do not have clear part of how to reach particular solution. And then like, we have to find out the solutions from an... as many alternatives are there, which is better.

So, in those cases group decision making is more useful and it is used for that purpose in the organization. When we are thinking of like what are the steps of group decision making, there are four steps to it. First is the orientation stage in which the groups, group members becomes oriented to the problem at hand. Second, there is a conflict stage in which the group members after they come to know each other, then there is some time difference in opinion in people, debate about the alternatives that they are thinking of. So, this stage is called the conflict stage.

There is an emergence stage; that sense like, after a certain conflict is over, some groups, some solutions emerge, and from the various alternatives provided by different members. And at the last, which is called a reinforcement stage. In the reinforcement stage, the one of the solutions or a group of solutions in like, what is jointly decided by the group members that, it is reinforced by positive feedback for other group members.

So that is, these are the four stages of how decision making is done in the group. So, what are the strengths of a group decision making? If you have to understand that, in group decision making the first strength of group decision making or others, a strong point is that you come to know about the whole of the information may be about positive and negative about the certain problem on the certain issues which needs to be discussed. So, that that is very important; in the sense, it generate more complete information and knowledge like different members bring the different viewpoints. And from those, we get holistic idea about the problem at hand.

Next we can go for like, it is more diversity of views are there. When you are trying to consult, as many as group members were there; so diversity of views, we can get regarding a particular problem; getting a new angle of looking at a particular problem. Then, when many people are contributing in the decision making process what happens? Acceptance of solution also becomes easy in sense as people are participating in the decision making process.

So, they are, they know about the problem was about and how the solution has been reached and they can identify more with the solution which is being accepted and generally accepted. And, so all of them try to accept that particular solution because they have been involved in the decision making process. The weaknesses of group decision making rather or there could be sometimes conformity of pressures. Like big, and that happens when some person is very strong or the groups have a difference in status. And, it is generally the person, who is more high up in the power hierarchy or more in status. Generally they decide, and the people who are general intimate, shy, cannot speak in that way, they try to accept whatever has been decided by the dominant members. And, they either remain silent or do not participate in the decision making process. So, and to retain their membership in that group; could be conformity sometime is the pressure, like you have to conform if you, if you have want to retain yourself as a member of that group.

Then second is of course, like what we discuss is a sometimes group discussion get dominated by one or two members. And, that is how the whole process goes through like their views, become the view of the group. Then, as in a group all decide together; decide about certain outcome solutions and outcomes. It is the... there is no individual responsibility, defined responsibility as such. And this and that is called ambiguous responsibility. Responsibility gets diffused amongst the group members.

So, these are the weaknesses of a group decision making process. Now if you have to tell like, whether it is more effective than individual decision making processes are not. So, it varies according to like what we mean by what is effectiveness. Like, if we talk of like, whether it is more accurate or not. Generally, this decision making process of group decision making is more accurate than others; like, if an average individual is making decision. But it is less accurate then a very accurate individual making a particular decision. If you talk of effectiveness in terms of speed, individual decision makings they are more speedy than group decision making. If we are talking of like creativity as a yardstick of effectiveness, then groups are more effective than or superior than when we talk of individual decision making. And whether it is, when it is acceptance of the final solution, obviously group is far superior than that of the individual; because if individuals decides separately and then it is very hard to come to a consensus. But and arrive at a particular solution and accepted like, but if the groups decide, then because people have participated in the decision making process, it is easy for them to accept.

When you are talking in terms of efficiency, then individual decisions are more efficient because take less time. And, people can think of their own solution and reach to a particular solution. Now when comparable quantities of diverse input is to be compared and then we have to arrive at a particular solution. Then, group decision is superior to individual decision making.

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Now in the decision making, we can see like because there are like pressures to conform. And, influence of a dominant personality type in the group. There is a "status incongruity". And, incongruity and framing effects are there. All these negative influences to open group discussion give raise to two phenomena in the group decision making, which is called group think and group shift. In group think, what happens? It is the phenomenon in which the norm for consensus overrides the realistic appraisal of alternative courses of action.

So, group members what they may do? Because this is pressure to conform may rationalize any resistance to their own thought processes assumptions they have made. So, they do not want to be out of the group. So, members what they do? They sometimes make direct pressures. They are sometimes pressurized directly, who are somewhat less powerful and like, they have to and the pressure is have to accept what the dominant members are telling. Next is members who have doubts; what they do is, they generally do not speak up and they keep silent. And, this silence is taken as a measure of

conformity. And, which is called an illusion of unanimity. Though the member is not speaking because he or she does not want to express the doubts in front of the others and come to member embarrassing position. Maybe, so they decide to keep silent and that silence is interpreted as acceptance of the solution. So, the this whole process is called group think.

There is another phenomenon which is arising, which is called group shift; which is the groups try to shift towards a particular way of looking at a problem. It could be first of all risky in nature or it could be like very conservative in nature. Now, whether a group is going to be risky in decision making, risky in nature, conservative in nature, it depends on the initial decision; how it starts and what way it takes. And generally, group shift is more towards the extreme of that initial decision making process how it starts.

So, why is... if you ask the question why people prone to take more risky decisions while in a group because in the presence of each other the inhibition is generally not there and people become comfortable with each other and then they try to take certain risk. And, they become bold and daring. Next is because the group's diffused responsibility, so people may try to taking particular risk. Then, group decisions. So, there is no individual accountability.... is a group accountability. So, individuals are more free to make certain decisions.

So... and generally what happens? By taking such extreme positions, people try to prove like they are permitted to a particular cause that they have taken up; so, all these processes may shift; approve decision making towards more being risky in nature.

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Next we will try to see some of the techniques, which are there when you are taking of decision making in groups; like brain storming and nominal group technique and then electronic mail is there, so Delphi techniques. These are some of the techniques of decision making in groups. So, before that we will just have a look into decision processes in a group. The groups do better in establishing goals and objectives because of a greater knowledge pool. Individual efforts are required in identifying causes and developing alternate solutions to a broad problem search in functions. Groups evaluate alternative solutions more effectively because the group's collective judgment. Groups accept more risk than the individual at the point of solution selection. The solution is more likely to be accepted. And, implementation and follow-up is usually made by individual manager, whether or not the decision is made by a group.

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- · Creativity in group decision-making.
- An atmosphere fostering group creativity can be created. Creativity is a process by which an individual, group, or team produces novel and useful ideas to solve a problem or capture an opportunity. Use lateral, not linear thinking.
- Creative decision makers share some common characteristics such as:
  - Perseverance.
  - Risk-taking propensity.
  - Openness.



- Tolerance for ambiguity.

So, what we find in this thing? Discussion is like some mix up of group effort and individual effort in the process of decision making. And, when we are talking of creativity in decision making, group decision making and like these all the four processes of decision making in groups. Like nominal group technique or when we are talking about Delphi technique, when we are talking about brain storming. So, what we look into is to creative solutions. And, creativity in group decision making is where we look into novel ideas to solve a problem or capture an opportunity. And, it depends on some characteristics like personality characteristics like perseverance, then risk-taking propensity, openness, tolerance for ambiguity. These are the certain personality qualities that are required for creative decision making.

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And, the techniques that we will be discussing are like brain storming; one of the major important parts of organizational decision making. So, brain storming is like implemented by a set of rules. So, here we are allowed to state any ideas that come to your mind with extreme, like whether it is very extreme of nature. And then, each of the ideas which belonging to the group are visited and the solutions are built up on that. So, that that idea. So, people should interact with the others and try to find out new ideas there. One idea leads to the formation of other idea. And in that way, the whole discussion goes on. And, this process is called the brain storming.

So one, about one of the cautions like question point that we have to maintain over here. We have to generate ideas; we have to think more and more ideas. But we are not to evaluate ideas, like we cannot pass on judgment like this is a very good idea, this is bad idea, this is a like... so, sort of idea. So, these evaluations are not possible. The only factor of this brain storming ... is to generate alternatives; relevant alternatives as many as possible from the different members present in the discussion group or the brain storming group.

So, what are... like if you are not cautious about, like not evaluating ideas, but only just helping to generate ideas what may lead to is a block; which is called a production block. In the sense, when many people are talking simultaneously together we are not able to hear or not able to answer properly to a particular solution, which could be there and

because these whole thing have blocked the thought process. And, gradually what happens? It will block the sharing of ideas also.

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Next important technique for creativity is of course, the Delphi technique. So, it involves soliciting and comparing anonymous judgments based on certain problem or set of sequential questionnaires. So, it involves no face-to-face interaction between the judges. And, questionnaire is sent to participants via email and surveys and responses summarized by analysis. Participants receive a written summary again by e-mail, along with the second questionnaire for reassessment. And, participants independently evaluate their earlier problem that, and their responses that they have suggested. So, analysts typically go with tabulated results as the decision after the second or third round. So, these round and round of taking suggestions and arriving at a particular way of decision, and particular decision goes on and on until a like quite satisficing solution is reached to.

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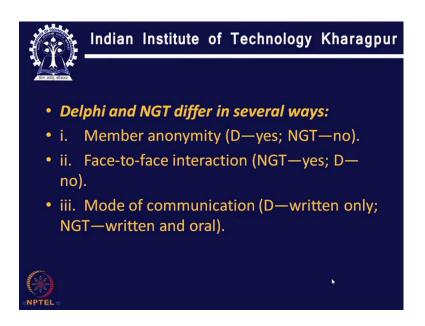
- c. Nominal group technique
- i. A group (7-10 members) sits around a table, but do not speak.
- ii. Each writes ideas on a pad of paper.
- iii. After five minutes, each member presents an idea in round robin fashion until all ideas are presented (a recorder writes all ideas on chart before the group). No discussion.
- iv. Structured discussion occurs; each idea receives attention.
- v. After discussion, each member votes (privately) by ranking alternatives. The group decision is the mathematically pooled vote outcome.



Nominal group technique is a technique in which the members collectively come, they sit around the table, but there is no... they do not speak. So, though in sort of the group situation, they try to maintain individuality; so, each of the members writes on the pad of the paper, like the ideas coming to his or her mind. Then all the ideas are like each individual is given a chance to speak and present his or her own views. And, during this time no discussion is allowed. Others... all have to listen to what the particular person is speaking about. Then, is structure... After that, the whole round of discussion is over. Then, the structure discussion takes place and each idea receives the attention. So after discussion, so each member votes by private vote privately by ranking alternatives.

So, what happens is the group decision is a mathematically pooled vote outcome. So, though it is a group situation, there individuals function independently as interpersonal communication is restricted during decision making process. Each members work independently, they give their feedback independently. Each member produces his or her idea to the group and no discussion takes place, until and unless all the ideas have been presented and recorded. So, group discussions clarity and evaluation theme; in the sense like in order to get clarity and to rank order them, these the decision makers again function individually and then try to rank it order, rank order the situation according to their own preference, which again gets discussed, then ultimately the solution which is getting most of the preferences get selected.

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Electronic meeting is something where may be ten, fifteen people come together, they sit in front of the computers and they start to give the feedback in the or their comments on the computers which get flashed on the bigger screen. And like, from there they try to arrive at a conclusion, they arrive at a solution regarding the problem at hand. So, what has happened is, here if you can understand there is a lower of, low interpersonal communication because which is coming and sitting in front of computer, giving the feedback and that feedback is shown everywhere and someone makes changes which is anonymous and again we have to revisit; this process goes on till something, some good solution is reached.

So, what we may feel over here is these less of face-to-face interactions, then may result in reduced member satisfaction. And, as compared to the face-to-face group and may be is not a good processor decision making. Now, when you talk of Delphi and nominal group technique in differs. So, one is the membership anonymity; in a Delphi group it is yes and in nominal group techniques it is no. face-to-face interaction; Nominal group technique is yes, then Delphi is no. Mode of communication; Delphi is written only; nominal group technique is written and orals. This is how you can classify these two methods, though they appear to be very similar, overlapping similar. So, this is how you try to differentiate.

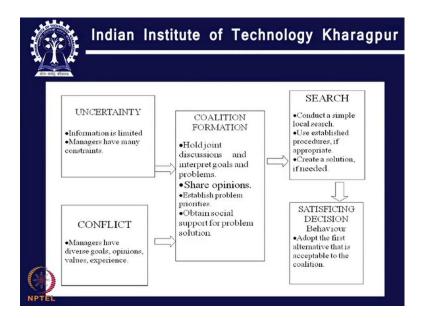
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Then we have... after we are talking of decision making at the group levels and may be some of the important issues regarding what could be the problems of group decision making like group think, group shift. And, what are the different types of decision making techniques like, if we are talking about the creative decision making. The next thing that we will move up to or discuss over here is organizational decision making process. So, here what we are more considering about is, like if organization is a unit, there is a system and some decision has to be made. And, like who is responsible for it, who tries to capture that emotion first, how... like, then what are the processes. Like if your... organization as a whole has to decide something.

And, it has to be decided at a certain level. Then beyond this group decision making, which is functionary at the group level, at the organization level, some decision has to be made regarding the policy of the organizations, strategic measurements of the organizations. Steps to be taken sort of... So, what is the different decision making process? There are four; like they are talking about Management science approach, Carnegie model, like it is an Incremental decision making and Garbage can model.

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So, if uncertainty is there, like managers have many constituents. And conflict is managers have diverse goals, opinions, values and experience. This come together in coalition formation like hold joint discussions and interpret goals and problems. They share opinions and obtain social support for problem solution. And leading to search, user establishes procedures if appropriate, create a solution if needed. And satisfying decision in the sense, which is one of the processes where you choose the first alternative, which are acceptable offering that way. So, where took place, the which type of decision process is very important when we are talking of organization's perspective in mind.

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#### **Contingency Decision-Making Framework**

- The use of a decision-making approach is contingent on the organization setting.
- Two characteristics of organizations that determine the use of decision approaches are
- Problem Consensus
- Technical knowledge about the need to solve the problem



If you are talking contingency decision making from framework, so this is the decision making approach which is contingent on the organization setting. So, two of the characteristics of the organization that determine the use of decision approaches are problem consensus; where people come to consensus about the particular problem or a group of problem that needs solution.

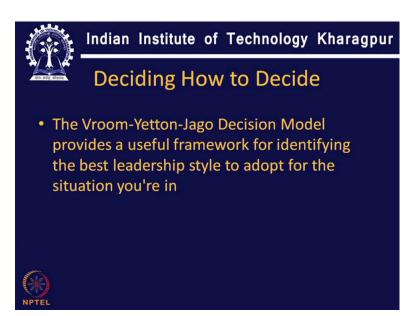
And, second is the technical knowledge; so, about the need to solve particular problem. So, these two that how to arrive a consensus regarding a problem and how to decide on the technical problems which are required to solve, technical knowledge which are required to solve the problem. These are the major two things which determines, which of the decision approach should be taken and which will be rather a better one.

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So, what we can look into like the different decision making tools. And, we have a list of tools like Flow charts, Run chats, Pareto chats, Fishbone diagrams, scatter diagrams, Pie chart, then Tree diagram, Interrelationship digraph, matrix diagram, six hat thinking. These are, these are many more we will add to like the different decision making tools. And, it is like because in the short span, it is not possible to cover the details about all the all the different things listed in. It is useful if the learners like try to learn it from there, on their own part like regarding what is this, what is flow or flow chart, what is a run chart and tree diagram and all these things. So, I can refer to the net to find out like how like how this decision making takes place at the group level.

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Next important phase is while we are deciding on how to decide. In deciding how to decide, Vroom-Yetton-Jago decision making model provides a useful frame of identifying the best leadership style to adapt to the situation one is in. So, and it takes from of many of like branching sort of model, while we are talking of the decision making and the situation we are in.

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A systematic approach to decision making is that uncertainty; like, many facts may not be known to us. Complexity; in the decisions are very complex in nature. Then high-risk consequences; like the impact of the decision may be significant. So, whatever you decide may mean a lot to particular person; his or her life. So, these are the impact of the decisions. Alternatives; so each one, each has its own set of uncertainties and consequences. And last the interpersonal issue is it can be difficult to predict how other people will react.

So, these are like some of the, some of the ways or some of the steps which are involved in systematic decision making to... systematic decision making in the organization. So,... to follow this step very carefully which is uncertainty, complexity, high-risk consequences, then alternatives and... alternatives and is taking care of the interpersonal issues like being trying to be share about how others are going to react to the decision taking.

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There are like six steps to make an effective decision; like create a constructive environment, generate good alternatives, explore these alternatives what are there, choose the best alternative, choose your direction and communicate your direction, and take action. These are the six defined, well defined steps of making an effective decision. But these are the steps to be followed. And, not these steps become more meaningful when we decide, when we try to think of the organizational issues in the decision making.

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### **Step 1: Create a constructive environment**

- · Establish the objective
- Agree on the process Involve the right people
- Allow opinions to be heard
- Make sure you're asking the right question
- · Use creativity tools from the start -



So that, before going to that we will try to see each of the steps in a bit detail. The step one is creating a constructive environment. So, what is done in that case is establishing the objective, then how to treat a right people. So, how to hear opinions made and how to ask a proper question and how creativity can be used as a tool from the start itself. These are the four ways of looking into the problem while we were going for a creative cons... creating a constructive environment.

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**Step 2: Generate Good Alternatives** 

- Generating Ideas
  - Brainstorming
  - .
  - Reverse Brainstorming,Charette Procedure
  - Crawford Slip Writing Technique
  - \_ .
- · Considering Different Perspectives
  - Reframing Matrix
  - Concept Fan
  - Appreciative Inquiry
- Organizing Ideas .
  - Affinity Diagrams



When you are talking of generate good alternatives, there are different ways, different processes available. Even if you search it in net you will find so many tools of group decision making. Maybe we will not go to the details of it over here because this is large pool of information that you can see from the internet. What we are trying to see, make it possible for you. Here is you see the different like how general, good alternatives get generated and what different techniques you can place under these alternatives.

So, like first is the generating of ideas which can be taken through brain storming, reverse brains storming or Charette procedure, Crawford slip writing technique; whatever it is, these are the four techniques undertaken to generate ideas. Considering different perspective is reframing matrix, concept fan, appreciative inquiry. So, these are the techniques, again which may tell you like how to be tolerant to the different perspectives. When you are talking of, when you are talking of the ideas from the part of the organization, they choose which is used more as affinity diagrams.

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Step 3: Explore the Alternatives

• Risk

Risk Analysis

- Implications
  - Six Thinking Hats
- Impact Analysis
- Validation

Starbursting

- Force Field Analysis,
- Plus-Minus-Interesting
- Cost-Benefit Analysis



And if you are talking of risk to be taken, then risk analysis is done. And, how implication is done by thinking hats, six thinking hats and we have to talk of impact analysis. So, how to validate it is like, you may can go for force field analysis, plusminus- interesting areas in the whole thing of the what is been presented and cost benefit analysis. These are the new ways of measuring the, measuring the validity of the particular case.

Like, it has been discussed and it is the problem. So, may be step by step we go and we try to find out how it is been validated, whatever we are solution we are providing.

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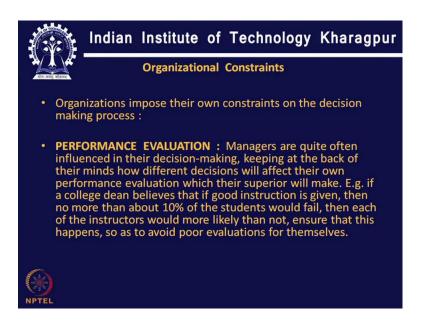
#### Step 4: Choose the Best Alternative

- Grid Analysis,
- Paired Comparison Analysis
- Decision Trees



When you are talking of choose the best alternatives, again the few techniques like grid analysis, paired comparison analysis, decision trees. And, all these may help us to choose the best alternatives among the three, four alternatives that are given over here.

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When we are talking of constraints in decision making, so these are the constraints which are imposed by organizations of the decision making process. First is the performance

evaluation. So, managers are quite often influenced by the decision making. They keep at the, keep at the back of the minds how different decisions will affect their own performance evaluation which their superior will make.

So, if a college Dean believes that if good instruction is given, then no more than over ten percent of the students would fail. Then each of the instructions would more likely than not, ensure that this happens; so, as to avoid poor evaluation for themselves. So, these things like what is the influence of some aspect of the organization phenomena in the decision making process. And, one of these is the performance elevation of which everybody is much concerned about and do not want to disturb it by thinking of something that is very great and different. So, that is called like formational constraint, which is performance evaluation.

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Then, next is the reward system. If the organization rewards innovations and risk taking, then they will tend to take such behavior. But if it is not, then they will be not taking risk. Formalisation; so, if there are too much of rules and regulations in the process, it will limit the decision making process. Time and cost deadlines; it is like if cost is the factor and time is factor, in the sense if a decision is too much costly or it involves too much of time, then such deadlines determine which types of decision making process we have to undertake. And, there are some historical precedents. In the sense, like if someone is very powerful is there in front and that their process of guiding, their ways of thinking

may direct, like which process to take in the... if they are taking some decisions in these type of group of problems that we are facing... generally those try to influence the present decision making process.

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There are cultural differences. Also, like different cultures have different value systems. So, they understand different things. They give meanings of different things in different ways. Like that concept of time is a different role of group, roles and the receiver, then interpretation of situations. So, whether to use an intuitive approach or a rational approach; people differ in cultures on this vary a person, if we are talking of a cross cultural group, then like in a multinational organizations. So, they are to be sensitized. They must be knowing these differences and how the culture affects and what needs to be done.

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So, before we arrive at the question, maybe we will just try to visit once again into this model; which is generally... it is very important when we are talking of group organizational decisions processes like how to deal with uncertainty, how to deal with the conflict and how to arrive, which is more important is how to arrive at a satisficing decisions; because decision, it is not possible like to arrival at a decision, which is like all are going to accept it. And, it is going to like for when we talking of rational decision making; like search for all the alternatives possible and then try to arrive at a particular solution because those processes are very time consuming.

So, what happens in organizational decisions and in group decision making, like it is a mixture. Mixture of like the different techniques known, different tools are used, mathematical tools are used or like to more recent tools like thinking hats, then fishbone diagrams ... model or Pareto analysis. Some something is used along with the creative and intuitive decision making; things which helps to arrive at a decision. And, it is solution which is, we cannot tell like it is the best like optimum solution with no errors in it. But we try to minimize the error as much as possible and try to arrive at the solution which is more rational as well as intuitive which is, which take less of time, which is more effective and may be suits the... takes care of the constraints and suits the need of the organization for their short term and the long term prospective. So, it is like mixture of everything, like when you are talking of individual decision making, group decision making and Organization processes.

Sometimes it takes care of this garbage can models also. Like, we try to get from store house of knowledge which is there. Maybe we reach. Earlier cases we do not find it to be relevant. But for the present decision, we try to draw the analogy and try to decide from those aspects like... And sometimes, it is what we can tell like it is a mix of both rational way of decision and intuitive way of decision.

If there is a balance between these things, and like we take both the left brain way of deciding and the right brain way of deciding, we try to keep a balance in all these things. And, use the relevant tools available. There are lots of tools of decision making, which are there. And, we can use or search medias. Like, we can use electronic medias, we can used for... we can give at... find out the searches for the different techniques which are there. And, find out like which technique is best suitable for the purpose for the decision that we are making at present; because each of the decision making techniques and tools which are there have a growth with pros and cons. So, it is not that that one process is like full proof with no error part of it. We have to do a mix and match of the technique which are there and use them in a proper way to reach a particular solution; solution which is mostly accepted by all and which serves the purpose of the organization in a much better way.

So with that, we will move to the questions like what are the different types of the decisions, in this connection describe the managerial decision making in the organization, describe the decision making processing in the organization, what are the behavioral influences of decision making, in this connection describe the different decision making styles, compare the individual decision making and the group decision making processes, what is creativity in group decision making, describe the various decision making processes, creativity decision making processes.

So, what are the different types of the organizational decision making, like in this connection describe the contingency frame for using decision models. So, what is the systematic approach for decision making, so and in this connection describe the use of different tools for decision making, systematic decision making, and we have to discuss about the constraints on decision making and the cultural differences in decision making.

So, by answering these questions and discussing based on like the discussion done over here and practicing them, while like practicing a creative way of decision making and systematic, following the systematic processes of decision making. According to that, define steps like search for a problem, search for the available alternatives, genera... find out what are the positives and negatives of the alternatives, compare the alternatives, then arrive at particular number of solutions, find out which solution is best, find out how it can be implemented, what are the constraints faced at the organization level while implementing it, which type of individuals are more comfortable with what type of decisions, how individual variables affect decision making processes in the terms of the personality, values, attitude, etcetera, perceptions.

If you take care of all these factors and what are the mathematical tools of decision making, how to make a creative decision, how to encourage people to make creative decision making. For that, like what tolerance we should show; like tolerances for ambiguity, like what are the time constraints. And, based on time constants do we go for creative solution or we go for rational solutions.

Taking all these factors in mind, we have to know how to decide based on a particular context, on the particular situation and time frame. So when this is done, we think we can arrive, we can know, what is the proper technique of decision making and we can decide properly which will lead to enhance individual group and organizational performance.

Thank you.