

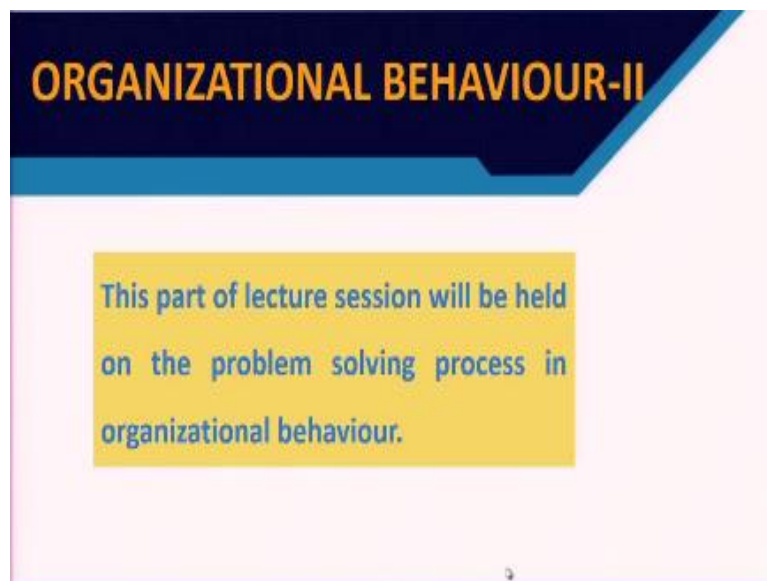
**Organizational Behaviour - II**  
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**Lecture - 42**

**Problem Solving Process, Decision Making and Comparison between Research Process and Problem Solving**

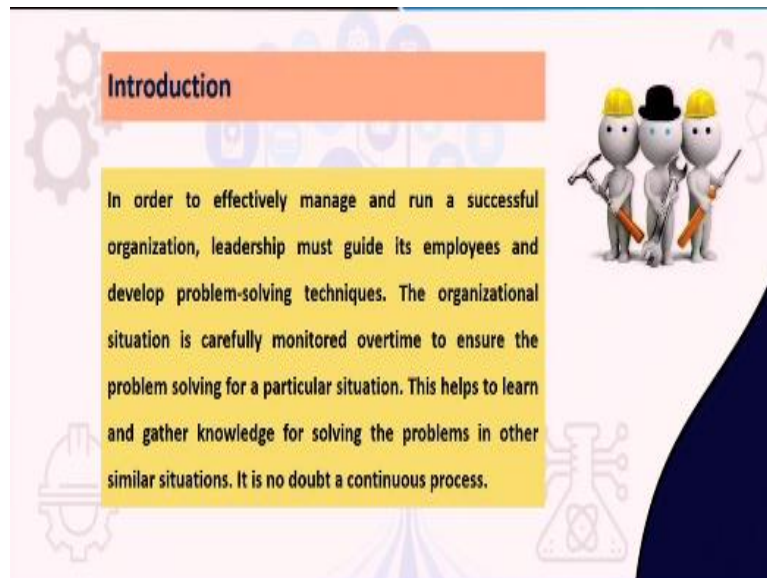
Welcome back. In the previous lecture we have understood about the problem, the concept of a problem, the ways the different ways of problem solving and the competencies of for better problem solving. In today's lecture, we are going to understand about the different processes of problem solving.

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This part of the lecture session will be held on the problem-solving process in organizational behavior.

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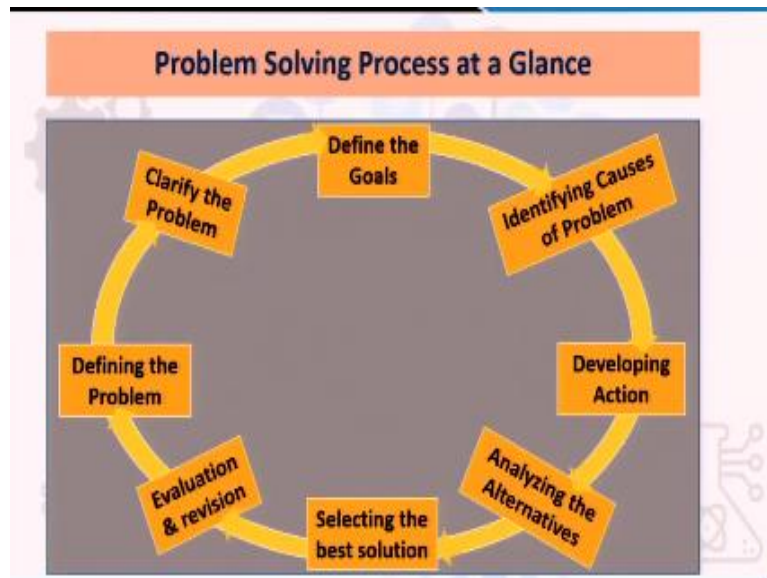


In order to effectively manage and run a successful organization, the leaders must guide their employees to develop the problem-solving techniques. The organizational situation is carefully monitored over time to ensure the problem solving for a particular situation.

Maybe they can understand the strength of the organizations towards efficiency lies in how better you are in understanding the problem and how better solutions you can see bring in for the problem, how effectively you are able to foresee the effect of the techniques that you are taking in problem solving. It is short term effect and the long-term effect. So, problem solving is a very important part of organizational behavior.

It helps the employees to learn and gather knowledge for solving the problems in other similar situations. And it is no doubt a continuous process.

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Now if see the process of problem solving **in** at a glance it is first is defining the problem, clarify the problem, define the goals, identify the causes of the problem, developing actions, analyzing the alternatives, selecting the best solution, evaluation and revision. So, defining the problem and defining the goal. So, these actually goes simultaneously.

You need to define the goal and you have to judge like where you are, your present state and your future state, your present where you are and your expectations of what you need to develop, what others are expecting. So, it is to be a parallel kind of processing. And the more it is like away from each other the less aligned it is, the more the problem is.

And then you have to find out where lies the problem so which comes to the cause of the problem and then developing an action, analyzing the alternatives, selecting the best solution evaluation and revision.

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**Problem Solving Process:**

**Defining problem**  
In this first step, there is a need to write down what exactly the problem entails, which helps to identify the real problem that is under study & needs an immediate solution.

**Clarifying the problem**  
To clarify how the problem affects the manager & his or her current situation & other people involved in the situation. The gravity of the problem & all the factors that are contributing to the problem are determined

So, the first step of course as we understand, so which is defining the problem. It is the first step in which there is a need to write down what exactly the problem tells, entails, which helps to identify the real problem that is under study and needs an immediate solution. So, it is very important that you articulate your problem properly and write it down.

So, once you are able to write it down and see it in front of you, like that gives an impression in your mind about like where the problem actually lies and helps in clarifying the problem. Clarifying the problem, it is a second step. To clarify how the problem affects the manager and his or her current situation and other people involved in the situation.

The gravity of the problem and all the factors that are contributing to the problem are determined like what is the as I told like the after effect of the problem, or even the problem-solving strategies that you are using. So, what is the effect of that both in short term and long term? How it is playing a facilitating role?

How maybe it is taking a role, which is having an adverse impact on others. These needs to be worked out.

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**Problem Solving Process:**

**Defining goals**  
In this step, the goals for solving the problem need to be defined clearly so that the situation needs an immediate solution may be taken into better consideration.

**Identifying causes of problem**  
There are various causes behind each of the situation which need to be identified and that an appropriate problem solving actions are required to be taken up.

Defining the goal. In this step, the goals for problem solving need to be defined clearly so that the situation needs an immediate solution may be taken into better consideration. Identifying the causes of problem. There are various causes behind each of the situation which need to be identified and that is appropriate problem-solving actions are required to be taken up.

So that you get to understand what are the causes of a particular problem. Developing actions. In this step, it is necessary to take actions on the basis of identified causes of problem and to undertake certain measures to correct it in correct timing and situation. Analyzing the alternatives.

As per surrounding circumstances, the information gathered and strength and weakness of each alternative, considering all alternatives which will address the salient discrepancies. So, it is always better to have more choices, more alternatives, so that you can choose from them. But again, this is with the caution, like if you have too many things to choose from, maybe it leads then again to leads to decisional dilemma, because which way then to go for so that it is the most beneficial one.

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**Problem Solving Process:**

**Selecting the best solution**  
In this step, decision is taken to identify the best solution of the problem in consideration of its value on the consequences likely to result from the selection of best course of action.

**Evaluation and revision**  
In this step it is to ensure that necessary evaluation is done from time to time and every possible shortcoming is addressed properly.

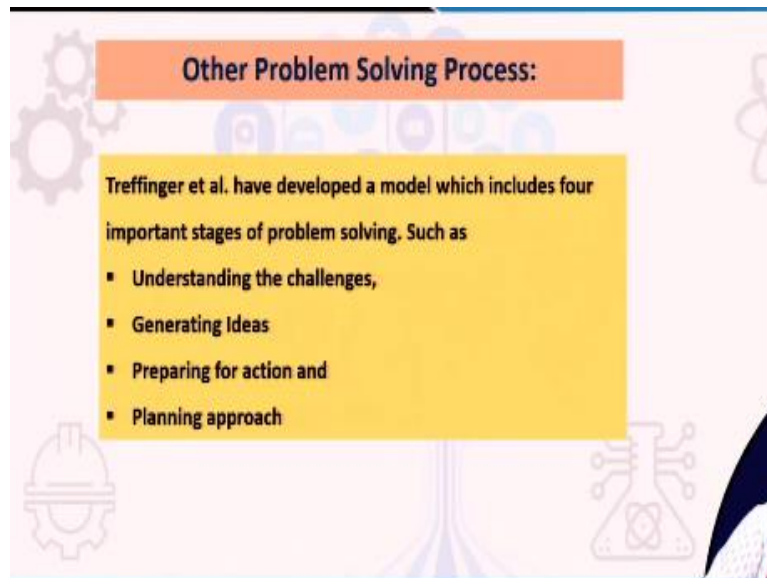
That is why it comes to the next point, which is selecting the best solution. In this step decision is taken to identify the best solution of the problem in consideration of its value on the consequences likely to result from the selection of the best course of action.

So, it is very important, like if you are having many things to choose from, then which is the best solution and that stick in to your best solution for which like the what is the impact of it, what is the consequence of it, which like you take after that has been implemented, how it is going to affect the person who is implementing it, the organization or for others. So that tells about the worth of the alternatives of the solutions thought of.

And obviously, we try to like minimize the negative effect and maximize the desired effect and control for the undesired effects. So taken together you have to judge which is the best solution given the need of the situation and other constraints which may be there. Evaluation and revision. In this step, which is to ensure that necessarily evaluation is done from time to time and every possible shortcoming is addressed properly.

So, when this is done, then because if we have done something then we get feedback about how it is like not like what needs to be improved on. In evaluation and revision, we revisit everything, try to solve it and try to like increase our competencies to like overcome the shortcoming and then try to again go for problem solution.

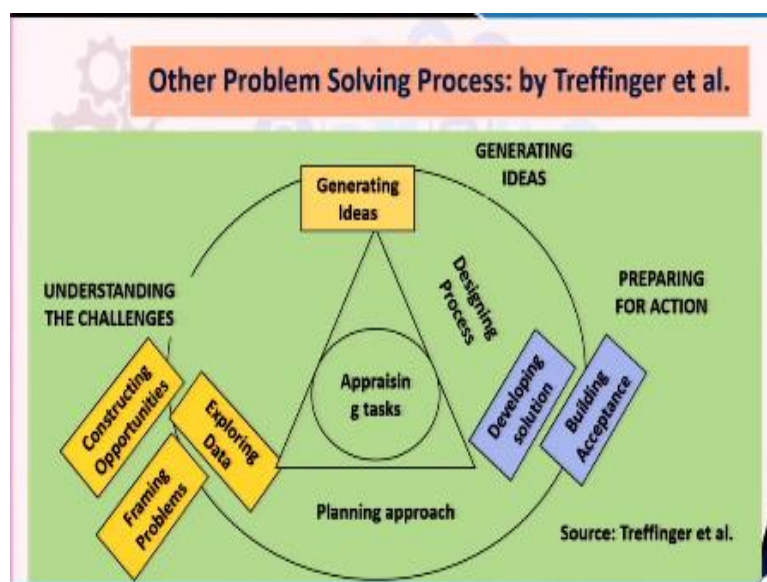
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The other problem-solving processes like given by Treffinger again, like there are four stages of problem solving which of course is understanding the challenges, generating ideas, preparing for action and planning approach. So, it is very important again then we understand the challenge and the problem, then we generate ideas for it, and then we find out how these ideas can be executed, okay.

Like how we need to work on it, and then what should be your plan of attacking the problem. So, these four stages could also be taken as important stages of problem solving.

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Other problem-solving approaches by Treffinger et al. So, if you see over here, so this is generating it starts with like generating the ideas, exploring the data, developing solution, building acceptance. So, and like constructing opportunities, these are very important things. Now where do we start with? We start with understanding the challenges. In understanding the challenges how do we understand the challenges?

We understand the challenges by framing the problems, constructing the opportunities and exploring the available data. So, there we go for like generating ideas. And in generating ideas what we see like we try to work on the different alternatives that we can go for, like addressing the challenges.

And after that, we go for preparing action in which what is done is developing the solutions and building on the acceptance like whether people are accepting it, not accepting it, if they are giving any feedback. So that is taken again in the planning approach and it helps in like exploring more data or constructing opportunities and redefining or framing the problem.

This whole circle is like all the points are related to each other. You can see these are the three corners of the triangle like appraising the task at hand and so that like it leads to a better problem solving. You have to understand the solution. We have to understand the challenges, we have to generate ideas for alternatives for like addressing the challenges.

Then we need to not only ideas, the ideas need to be translated into actions like if these are ideas these are our strategy of attack, then how do we go for it and once you have done for it, then we need to implement it and take the feedback to see how it can be improved again. So, the total cycle is taken to be the problem-solving process.

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**Other Problem Solving Process: by Treffinger et al.**

➤ **Understanding the Challenge**

It includes a systematic effort to define, construct, or focus the problem solving efforts. It includes the three stages of constructing opportunities, exploring data, and framing problems. These help problem solvers develop an understanding of the current situation

The slide features a background with faint icons of gears, a lightbulb, and a person's head. A small inset video of a woman is visible in the bottom right corner.

We will try to elaborate on it of the processes so that we get a better idea of the discussion. The first is understanding the challenges. So, what do we, it takes of a systematic effort to define, construct or focus the problem-solving efforts. It includes the three stages of constructing opportunities. Three stages like constructing opportunities, exploring data and framing the problems. These help problem solvers to develop an understanding of the current situation.

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**Other Problem Solving Process: by Treffinger et al.**

➤ **Generating Ideas**

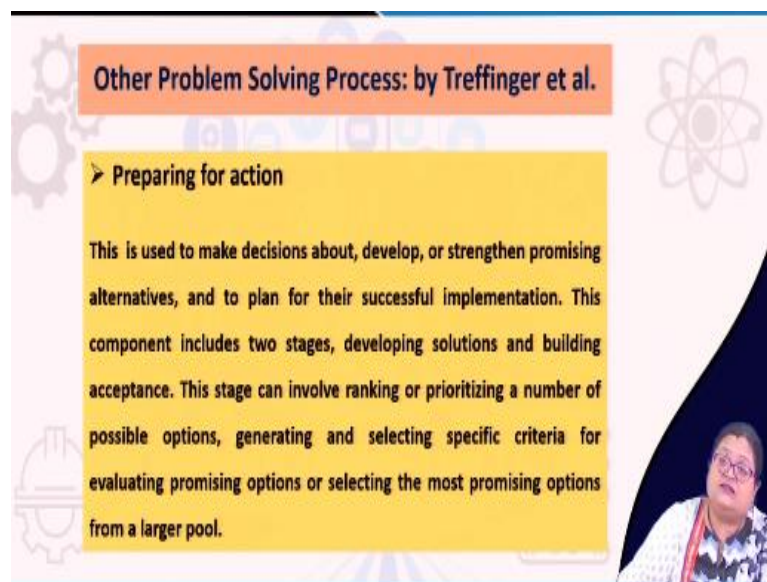
This stage includes coming up with many, varied, or unusual options for responding to a problem. During the generating phase of this stage, problem solvers produce many options, a variety of possible options, novel or unusual options, or a number of detailed or refined options.

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Generating ideas. So, this stage of exploration where we come up with many or varied ideas, unusual options for responding to a particular problem. So, during the generating phase of the stage, problem solvers produce many options, a variety of possible options, novel or unusual options or a number of defined or refined options. So, it is like a free flow of thought is going.

There are no barriers, there are no restrictions and maybe people come up with as many numbers of solutions possible. And like some are very unique solutions and unusual options as we tell and there could be like detailed solutions, there could be only refined options given. But ideas may come up in many forms.

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**Other Problem Solving Process: by Treffinger et al.**

➤ **Preparing for action**

This is used to make decisions about, develop, or strengthen promising alternatives, and to plan for their successful implementation. This component includes two stages, developing solutions and building acceptance. This stage can involve ranking or prioritizing a number of possible options, generating and selecting specific criteria for evaluating promising options or selecting the most promising options from a larger pool.

Preparing for action. So, this is after idea generation. It is very important that it is translated into actionable terms, which is used to make decisions about develop or strengthen promising alternatives and to plan their successful implementation. This component includes two stages, developing the solutions and building acceptance. So, these are the two stages.

First you have to develop the solution and then build an acceptance for it. This stage can involve ranking or prioritizing a number of possible options, generating and selecting specific criteria for evaluating promising options or the selection of the most promising options from a larger pool. So, this can be used as a ranking process, where you have actually you have many solutions.

But again, you have to choose is based on what is the goal that you have to achieve. And then you find out like out of many, you reduce the option to very hand few selected alternatives which are very close to understanding your problem and addressing it. And then from that pool you choose the most promising one.

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**Other Problem Solving Process: by Treffinger et al.**

➤ **Planning approach**

This is considered as an integrated component, at the center of the problem solving framework (graphically and in practice). Planning approach functions as a management component, guiding problem solvers in analyzing and selecting “process” components and stages deliberately.

*(A small inset image of a woman is visible in the bottom right corner of the slide.)*

The planning approaches. This is considered as an integrated component at the center of the problem-solving framework which is graphically and in practice. Planning approach functions as a management component. Guiding problem solvers in analyzing and selecting process components and stages deliberately. So how you go about it. It is not only enough to identify a problem.

It is not enough again to generate ideas. What are to find out like what are the alternative ways that we can do things? But it is very important that we start implementing it in a proper systematic way. For that the planning approach is very important in the finding out how we need to work on the problem, the action component.

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**Problem Solving and Decision Making**

**General objectives**

- Understand the relationship between problem solving and project management
- Learn the steps that help to analyze a problem
- Learn a systematic problem-solving process
- Put into action the skills and ideas learned during the course
- Prepared for Life

*(An illustration of a person holding a magnifying glass is visible on the right side of the slide.)*

Problem solving and decision making. Now what are the general objectives of problem solving and decision making? The general objectives are to understand the relationship between problem solving and project management, learn the steps that helps to analyze the problem, learn a systematic problem-solving process and put into action the skills and ideas learned through the course and preparing for life.

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The slide features a title bar at the top with the text "Problem Solving and Decision Making Ethics". Below the title, a yellow box contains the heading "Ethics in decision making" followed by a bulleted list of seven points. To the right of the text is a graphic of silhouettes of people walking up a red staircase. In the bottom right corner, there is a small video inset showing a person speaking.

**Problem Solving and Decision Making Ethics**

**Ethics in decision making**

- It is not really immoral or illegal
- It is in the best interest of the organization
- No one will find it out
- It is protected as it benefits the organization
- Everybody does it
- It is made solely on the basis of its outcome
- It shows respect and protects basic rights of individuals

Now what are the decision-making ethics and how they are related to problem solving. The ethics of decision making is that it is not really like we are talking of it is immoral or illegal. But it is something which is could be based on how the normative theories are functioning within the context of situation or the nature of the message or the nature of things happening or the people that they are better interacting.

So, it is in the best interest of the organization. No one will find it out. It is protected as it benefits the organization. Everybody does it and it is made solely on the basis of its outcome. It shows respect and protects the basic rights of the individuals. So, it is very important like the decisions that are taken in the organization, specifically decisions related to people and task, it is very important like they have a strong ethical underpinning for it.

And it is guided by the values of the leader. It is guided by the ethical decision-making theories like utilitarianism, rights justice care and so that it helps you to like come to a solution which is equally accepted to or the equally beneficial to all the

stakeholders. So, ethics in decision making is a very important component of like the problem solving.

You cannot take a decision which is like which may appear to be beneficial to you for a shorter term, but on the longer term, it is maybe not so beneficial for the stakeholders involved in the business. So, in that case, we may not choose that path. So, it is very important like we study side by side problem solving and decision-making ethics.

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**Problem Solving and Decision Making Behaviour**

**Behavioural aspects:**

- Work well with others in problem
- Concerned with achievements of subordinates
- Receptive to advice and suggestions
- Avoid conflicting situation
- Seeks acceptance in the organization

The problem solving and the decision-making behavior how do you like demonstrate it in your behavior is work well with others in the problem, concerned with achievements of subordinates, receptive to advice and suggestions, avoid conflicting situations and seeks acceptance of in the organization. So, you have to be receptive, you have to be trustworthy.

You have to have a mutual sense of respect for each other. So, you have to like praise others for their achievements. So, and try to avoid conflicting situations where you find like from the task related conflict which is a healthy conflict, it is moving more towards the personal space. So, in those kind of conflict situations may be avoided and you seek to get your acceptance in the organization.

So, if these things are some of the aspects, which needs to be taken care of, like while we are talking of decision-making behavior.

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**Problem Solving and Decision Making Style**

**Brainstorming**

- Encourage all to participate – every idea is valuable
- Think outside the box
  - ✓ Beyond the obvious
  - ✓ Agree at the outset not to be critical of the ideas of others
- Piggyback Ideas – build on the ideas of others
- Remember the past...
  - ✓ Have you solved a similar problem (team or other group)
  - ✓ No need to reinvent the wheel

The slide also features a small illustration of several people standing around a large, colorful, multi-colored block structure. In the bottom right corner, there is a small video inset showing a woman speaking.

Problem solving and decision-making style. The first style is that of brainstorming. So, like we have learning style, cognitive style. So, every like decision making also there are certain styles. So, what is the relationship of the problem solving and decision-making styles? The first is that of brainstorming. In it everybody is encouraged to participate because every idea is valuable.

It is encouraging to think outside the box which is beyond the obvious like yes it will happen in this way. But can we think like the other ways what may happen? Agree at the outset, it is very important like we that we are mutual understanding and agreement that we have like we should not be critical of the ideas of others. We need to learn also from the ideas of the others.

So, it is very important again next, what we see like the piggyback ideas built on the ideas of others. And it is important to remember the past. That is like if you have solved similar kinds of problems earlier in other teams or groups or individually, what are the things that we did? What were the strength parts of it after it is like it has been implemented? What is the feedback?

What are the positives that we understood? What are the negatives that we understood? And what we can learn from the past. And there is no need to rethink again or reinvent again as we talk or reinvent the wheel. Rather, we can learn many things from our past experience.

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**Problem Solving and Decision Making Style**

**Consensus**

- Discussion results in an agreement without a vote
- Potential solutions are assessed and evaluated to make sure that they align with the vision of success
- Must agree to abide by the group decision

**Multi-voting**

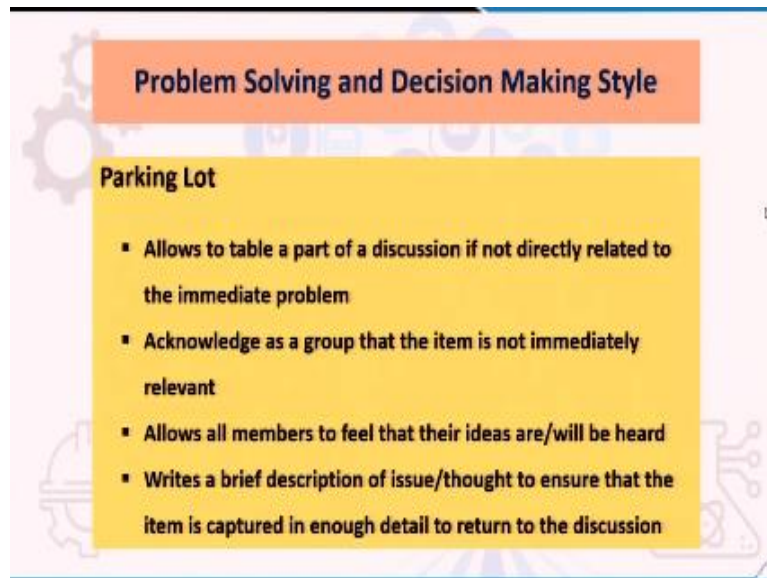
- With many potential solutions this can help reduce the list to a manageable size
- Each member has equal votes
- Cast votes – total scores

Second decision making style is that of consensus, which is like discussion of the results in an agreement without a vote. Potential solutions are assessed and evaluated to make sure that they align with the visions of success. Must agree to abide by the group decisions. So, when you are talking of consensus, it comes to a group morale, where everybody agrees to a common point of decision.

Like we will go by this group rules and group norms and we are not going to like perform below it or move beyond it so that this consensus is maintained. And it is coming to an agreement without voting. Multi-voting. This happens when there are number of solutions as we have already told like, whenever we are talking of problem solving and generating solutions, sometimes it may happen like too much of solutions present maybe acting as baffling state.

Because we do not know which will become the best solution. So, it is very important like if there is beyond a level that we can control kind of potential solutions then maybe we need to reduce it and in managing this size multi-voting helps. So then, if each member has equal scores, and whatever is a cast votes with relation to the total scores will define like which is the solution which is getting your prominence from all people.

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Parking lot. Allows to table part of discussion if not directly related to the immediate problem. So, it is very important sometimes in the course of discussion, something may come up which may not be related to the immediate present problem, but it may have a seed in it like how from the experience how similar things are solved in the past or it could be a seed for future development and problem.

So, allows to table, so it is very important like you are allowed to speak or bring to the front certain agenda, which are not directly related to the immediate problem at hand. But if you can see the connectivity, you will find out connection with the present problem, about the things that you are discussing, which may not be visible to all. But if there is a visionary leader and you can visualize the connectivity, maybe you can understand.

You will be understanding how these two presently unconnected facts meaning can get connected in future and appear to be strong enough which may affect the organizational effectiveness. Acknowledge as a group that the idea is not immediately relevant. Allows all members to feel that their ideas will be heard. Write a brief description of issue thought to ensure that the items are captured in enough details in return to the return to discussion.

So, you have to write it down like we are repeating whatever idea is coming to your mind or whatever you are going to decide on is very important you make a habit of



writing it down the brief description. So that like, the person who is to judge you to give a decision or to help you to coach you, however you can define.

The person can if you are writing it down can understand a level of the thought processes that are going in your mind with respect to whatever problem you are thinking and the person can guide you in that regard.

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<b>Comparison between Research Process and Problem Solving Process</b>	
<b>Research Process</b>	<b>Problem Solving Process</b>
State a research question or problem	Problem definition
Define the purpose or the rationale for the study	Problem analysis
Review related literature Formulate hypothesis & define Variables	Generating possible solution(s)
Select a method to test hypothesis	Analyzing the best solution
Select a population, sample and conducting a pilot study	Selecting the best solution
Collection and analyzing the data	Implementing the solution

What are the comparisons between a research process and the problem-solving process? The research process it starts with stating of a research question or a problem. And the problem-solving process starts with a problem definition. In research process, define the purpose of the rationale for the study. And in problem solving process it is going for problem analysis.

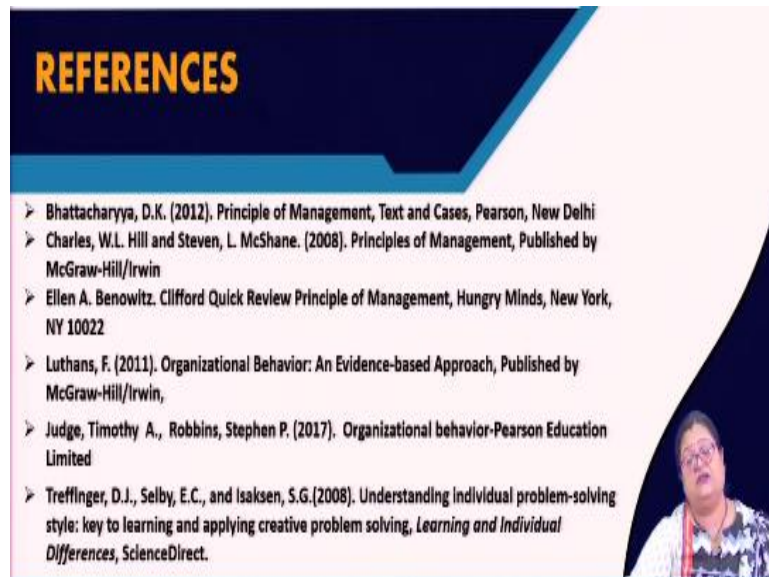
In the research process, it is a review of related literature formulate hypothesis and define the variables. And problem-solving process is generating possible solutions. In research process, it is select a method to test the hypothesis and problem-solving process is analyzing the best solution. In research process select a population sample and conducting a pilot study.

And in problem solving process, the focus is on selecting the best solution. In research process, it is a collection and analyzing the data and in problem solving process it is implementing the solution. So, on reading this, do you feel like research process and

problem-solving process are disconnected or the research process and the problem-solving process are connected to each other?

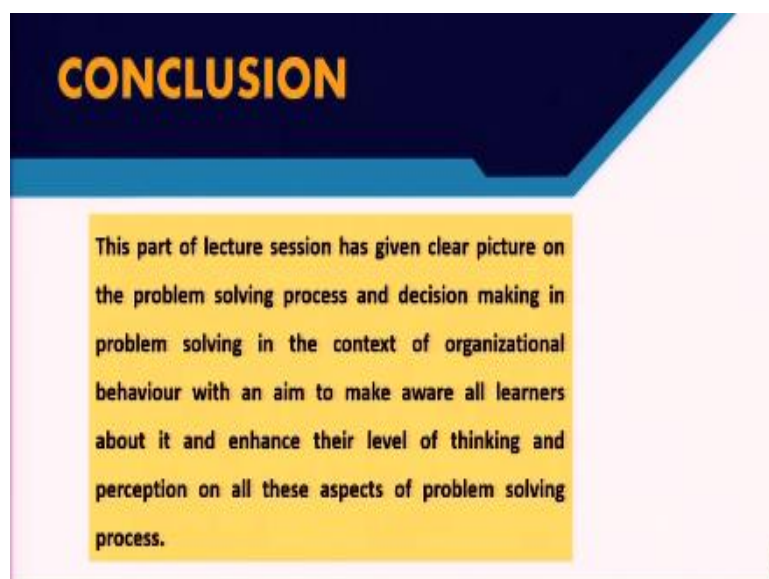
And like one cannot be effectively solved without the other? And both are very closely related to each other? What is your idea? Do share with us in the discussion platform and we will try to answer your queries over there. Till then, goodbye to you.

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Before we end, we will show you the references that we have used for developing this lecture sessions.

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And we hope like this part of the lecture session has given clear picture on the problem-solving process and decision making in the problem solving in the context of

organizational behavior with an aim to make all the learners aware about it and enhance the level of thinking and perception on the aspects of problem-solving process. In the next lectures we will continue with the discussions on problem solving and creativity. Please stay tuned with us. Thank you.