

**Organizational Behaviour - II**  
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**Lecture - 44**  
**Problem Solving and Creativity in Team**

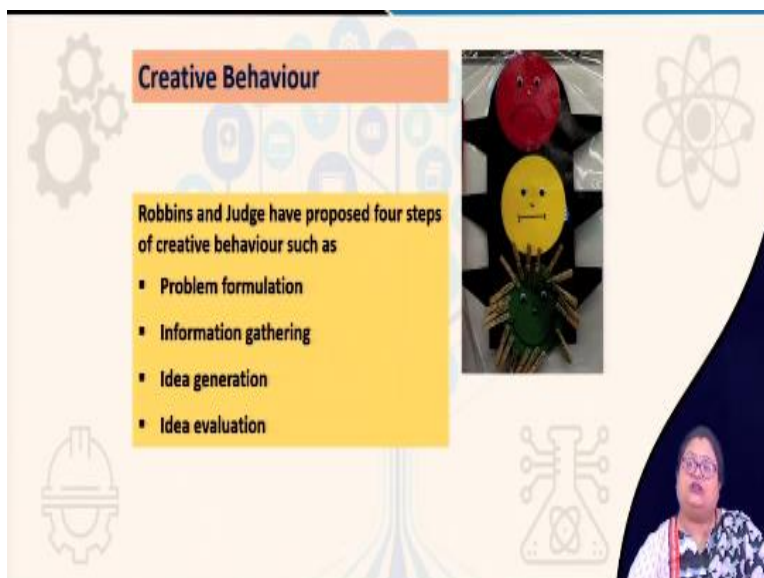
Welcome to the lecture sessions on problem solving and creativity. In today's lecture we are going to discuss on problem solving and creativity in teams.

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This part of lecture session will be held on the problem solving and creativity in team.

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Robbins and Judge have proposed four steps of creative behavior such as problem formulation, information gathering, idea generation and idea evaluation.

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The slide is titled "Creative Behaviour" in an orange header. It features a yellow text box with two bullet points. The first bullet point is "Problem formulation: It begins with the behaviour designed to solve a problem or creating an opportunity by any form of act of creativity." The second bullet point is "Information gathering: Information gathering is essential to identify innovation or creativity when knowledge is required to make possible solution to a problem". To the right of the text box is an illustration of three stylized faces (red, red, green) with different expressions. The background includes faint icons of gears, a lightbulb, a hard hat, and a beaker.

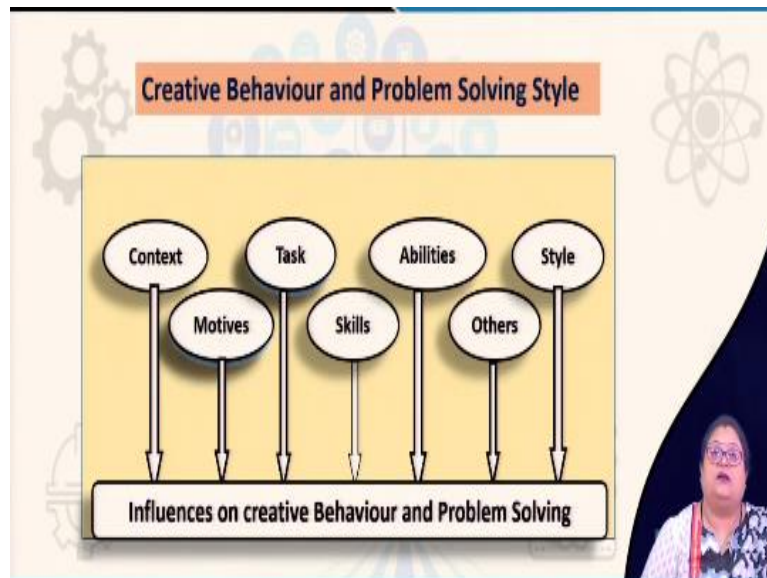
Now what is problem formulation? It begins with a behavior designed to solve a problem or creating an opportunity by any form of art of creativity. The stage of information gathering has like it is essential to identify innovation or creativity when knowledge is required to make possible solution to a problem.

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The slide is titled "Creative Behaviour" in an orange header. It features a yellow text box with two bullet points. The first bullet point is "Idea generation: It is the process of creative behaviour which takes place to develop possible solution of a problem from relevant information and knowledge." The second bullet point is "Idea evaluation: It helps to assess the impact of the ideas generated for a potential solution to identify the best solution." To the right of the text box is an illustration of a blue silhouette of a person's head with a lightning bolt and a red heart above it. The background includes faint icons of gears, a lightbulb, a hard hat, and a beaker.

Idea generation. It is the process of creative behavior which takes place to develop possible solutions of a problem from relevant information and knowledge. Idea evaluation, it helps to assess the impact of the ideas generated for a potential solution to identify the best solution.

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Now how the creative behavior and problem-solving style are related to each other. Now the context motives the person is having the task which the person is solving his or her skills, abilities, the styles and other like important factors determine like how like these are the factors which influences a creative behavior and problem solving.

So, context as an effect, motive as an effect, different types of tasks, creativity are different in different kinds of tasks. The skills required, abilities, and the style, all these have an effect on the creative behavior and problem solving.

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The slide is titled "Creative Behaviour and Problem Solving Style". It contains the following text: "Treffinger et al. have defined problem-solving styles as consistent individual differences in the ways people prefer to plan, carry out focusing activities, in order to gain clarity, produce ideas, and prepare for action. An individual's natural disposition towards change management and problem solving is influenced in part by mindset, willingness to engage in and respond to a situation as presented, and the attitudinal dimensions of one's personality." The slide features a background with gear and atom icons.

Treffinger et al. have defined problem solving styles as consistent in individual differences in the ways people would prefer to plan, carry out focusing activities in

order to gain clarity, produce ideas and prepare for actions. An individual's natural disposition towards change management and problem solving is influenced in part by the mindset.

Willingness to change in and respond to a situation as presented, and then the attitudinal dimensions of one's own personality. So, it is very important like the we understand our mindset first, like whether and also the willingness whether people are willing to engage in the activities and like they are ready to respond to a situation. So, and because these are the attitudinal dimensions of personality, which defines creative behavior and problem solving.

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The slide is titled "Ingredients for a Creative Team" in an orange header. Below the title, a yellow box contains the text "Team members should have -" followed by a bulleted list of five items. To the right of the text is a vertical stack of three smiley faces: a green one with a wide smile, a yellow one with a neutral expression, and a red one with a frown. The slide also features faint background graphics of gears and a lightbulb.

**Ingredients for a Creative Team**

Team members should have -

- Domain-relevant skills
- Creativity-relevant skills
- Task motivation best to have intrinsic motivation
- Must resist evaluating ideas and encourage freedom while discouraging conformity.
- Trust is essential when asking to contribute to the creative process.

Now what are the ingredients of a creative team? The team member should have like domain relevant skills. They should be nurturing creativity which is relevant to all skills. Then task motivation, like it is best to have an intrinsic motivation. So must resist evaluating ideas so that let it be flourish in evaluating later on give this place for the idea to generate, come up, then you may go on evaluating it about how good it is or how bad it is.

And must encourage freedom while discouraging conformity. The trust is essential when asking to contribute to the creative process. So, in order to be creative, we understand that give lot of mistakes. But if there is a trust, interpersonal trust, mutual sense of respect. And we know like we will not be punished for making mistakes. So that is where the importance of trust comes in.

I trust you as a representative of the organization and they know like it is nothing is going to bring major like harm to me or major like I have to like answer or punished for the maybe the some of the errors that I have committed. Then the fear of getting punished or reprimanded that sometimes stops creativity. So, it is very essential to have trust amongst the members when specifically, you are contributing to a creative process.

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Enhancing the team's creativity. Creativity can be enhanced by being Synectic that is connecting facts with each other, connecting the efforts with each other. Using metaphors or analogies to make the familiar strange and strange familiar. Elaborate the problem definition. Ask questions especially five WH questions.

The devil's advocate which contradicts the each other and look at all sides of the solution so that if you are contradicting each other while thinking we are coming up with maybe better solutions. Generate more alternatives like influence like fluent and flexible.

Like defer the judgment, you should not be judgmental at the first let the let it be a free flow of thought, free activity, so that people are willing to contribute and maybe try to combine unrelated attributes. So that will help to be more creative in nature.

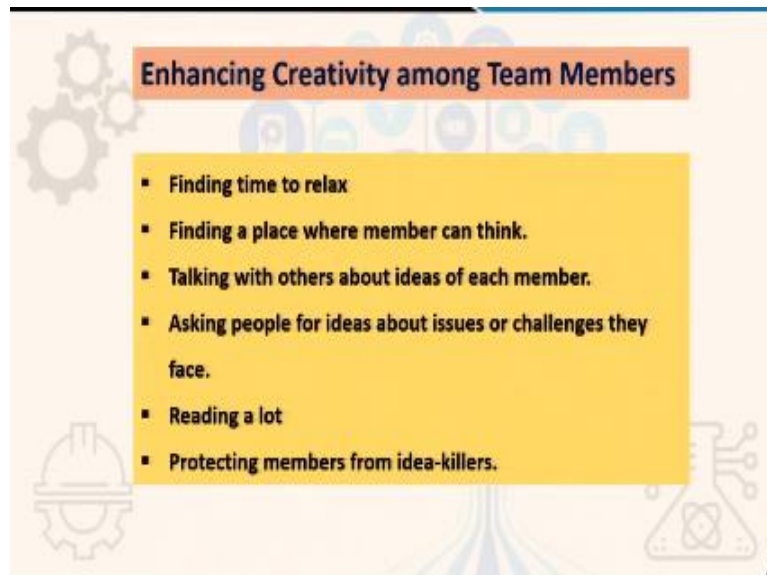
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The techniques of team creativity. Like brainstorming, free sharing of ideas, building on ideas, evaluating and prioritizing ideas, important to separate the generation of ideas from the evolution of the ideas, nominal group technique added to brainstorming. Individual written ideas that are contributed and evaluated in a team setting.

So, this is very important like we go for brainstorming and there is a free sharing of ideas and you also come up with a, blend the group technique with an individual technique like the nominal group technique and is added to brainstorming. So, and then individuals are also expressing their ideas and like they are evaluated in a team setting.

So, these also like make people more morally charged up to become more creative, as like if people feel like their efforts are truly recognized and been given importance, they may try to be more creative in nature or like contribute more positively to the cause of the organization.

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What are the like ways of enhancing creativity amongst team members? It needs to have a finding time to relax. Finding a place where each member can think. Talking with others about ideas of each member. Asking people for ideas about issues or challenges they have faced. Reading a lot and protecting members from the idea killers. So, it is very important like your brain should be relaxing.

You should find time to relax so you can find a place of, very quiet place where people can like if they are having some ideas, they can just go over there and think on their own. Like then just talking with others some inside like they which they may ask you and they will find okay this side I never explored. So, talking with ideas, talking with others many ideas may generate.

So, like asking people for ideas, they have faced and how they have overcome the situations, reading a lot and of course like protecting members from like, those kinds of situations, which like kill their ideas. They do not like want to venture into being more creative. So, they do not want to try it out also because of this fact, like there are some idea killers like who maybe by giving some evaluative judgment at the start itself will try to make you less enthusiastic, encouraged about moving forward with your ideas.

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The skills of expert for problems, team problem solving. Communication skills. This skill includes techniques that help members share information and perspectives by working hard to understand one another and working hard to be understood also. Members with controversial or divergent views are not ignored or blocked because everybody has the right to share their ideas. They communicate their thought processes.

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**Skills of Expert for Team Problem Solving**

**Synergy Creation Skills:**

This involves techniques that equip members to expand their thinking by generating many ideas, building on those ideas, and evaluating ideas to create synergistic solutions. These skills are essential as they encourage teams to expand their thinking first to harness all of the divergent opinions, instead of jumping to any one solution prematurely

The slide features a light blue background with faint gear and lightbulb icons. On the right, there is an illustration of two men in business suits; one is holding a briefcase and the other is holding a glowing lightbulb. In the bottom right corner, there is a small inset video of a woman with glasses speaking.

Synergy creation skills. This involves techniques that equip members to explain their thinking by generating many ideas, building on those ideas and evaluating ideas to create synergistic solution. These skills are essential as they encourage teams to expand the thinking first to happen. First thinking is the first to harness all the divergent opinions, instead of jumping into one solution like prematurely.

So, as it was discussed earlier also like you should be open to experiences. You should be open to learn from any forum that is available. And you should be able to like draw the analogy between whatever you are learning and the problem that you are going to solve.

So, whenever we are talking of the synergy creation skills, these are essential as they encourage teams to expand their thinking first to harness all of the divergent opinions, instead of jumping to any one solution permanently before reading through and finding out which is the best. Like if we have not taken data from everyone, then it is very important to wait and not to come to conclusion very quickly. You should not be jumping to any solution prematurely.

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**Skills of Expert for Team Problem Solving**

**Disciplined use of problem solving process:**

The team members become disciplined in using a systematic process for analyzing data, creating options, and evaluating and selecting preferred solutions. these factors overlap, but together they account for the kind of problem-solving ingenuity that leads teams to innovative solutions.

The slide features a background with faint icons of gears, a lightbulb, and a flask. On the right, there is a green rectangular icon showing a group of stylized human figures in red and white. A small inset video of a woman is visible in the bottom right corner.

Disciplined use of problems solving process. The team members become disciplined in using a systematic process for analyzing data, creating options and evaluating and selecting preferred solutions. These factors overlap, but together they account for the kind of problem-solving ingenuity that leads team to innovative solutions.

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**Techniques for Team Problem Solving**

**Generate promising ideas:**

This technique is to cast a wide web to capture good ideas. Innovative teams are always on the alert for interesting ideas. They study markets, businesses, and industries that are the same as and different from their own to examine just what works, how and where lies the new ideas. They see old ideas as the primary fodder for new ones.

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Generate promising ideas is one of the techniques for team problem solving. This technique is to cast a wide web to capture good ideas. Innovative teams are always in the alert for interesting ideas. They study markets, businesses and industries that are the same as and different from their own to examine just what works, how and where lies the new ideas. They see old ideas and as the primary fodder for new ones.

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**Techniques for Team Problem Solving**

**Norms for creativity:**

Each member's attitude toward innovation is just as important as the team's ability to foster a climate that accepts new ideas and agrees to control any knee-jerk negativity that may accompany new ideas. These teams nurture the creative spirit in members and protect partial ideas so that they can be adapted and built upon.

The slide features a background with faint icons of gears, a lightbulb, and a network diagram. An icon of a group of people is in the top right corner. A small video inset of a woman is in the bottom right corner.

The norms for creativity. Each member's attitude towards innovation is just as important as the team's ability to foster a climate that accepts new ideas and agrees to control any knee-jerk negativity that may accompany new ideas. These teams nurture the creative spirit in members and protect partial ideas so that they can be adapted and built on fully.

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**Techniques for Team Problem Solving**

**Use old ideas in new ways:**

Creative thinkers have the capacity to systematically use old ideas in new ways, new places, and new combinations. With this new insight, the team set out to find leaders in the field from whom they could learn. Some of their most valuable learning came from experts in surprising places.

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Use old ideas in new ways. Creative thinkers have the capacity to systematically use old ideas in new ways, new places, and new combinations. With this new insight the team set out to find leaders in the field from whom they could learn. Some of their most valuable learning came from experts in surprising places.

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**Team Problem Solving Benefits**

**Benefits of Team Problem Solving**

- Variety of opinions and viewpoints represented and shared
- Quality of the process is as important as the quality of the outcome
- Minority views are heard
- Role of the Devils Advocate
- Potential for Innovation and Creativity

The slide features a yellow background for the text and a video inset in the top right corner showing a person wearing a red shirt and a headlamp, standing in front of a green chalkboard with various icons. A woman is visible in a small video window in the bottom right corner of the slide.

Now what are the benefits of team problem solving? Variety of opinions and viewpoints represented and shared. The quality of the process is as important as the quality of the outcome. Minority views are heard. Role of the devil's advocate. Potential for innovation and creativity. These are the benefits for team problem solving.

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**Team-Based Organizations and Innovation**

- Creativity must be rewarded and recognized.
- Management must model innovative thinking.
- Teams must be given time and resources to be creative.
- Tasks that are challenging and interesting result in more innovative outcomes.
- Create conditions to foster intrinsic motivation.

The slide features a yellow background for the text and a video inset in the top right corner showing a silhouette of a person thinking, surrounded by various icons. A woman is visible in a small video window in the bottom right corner of the slide.

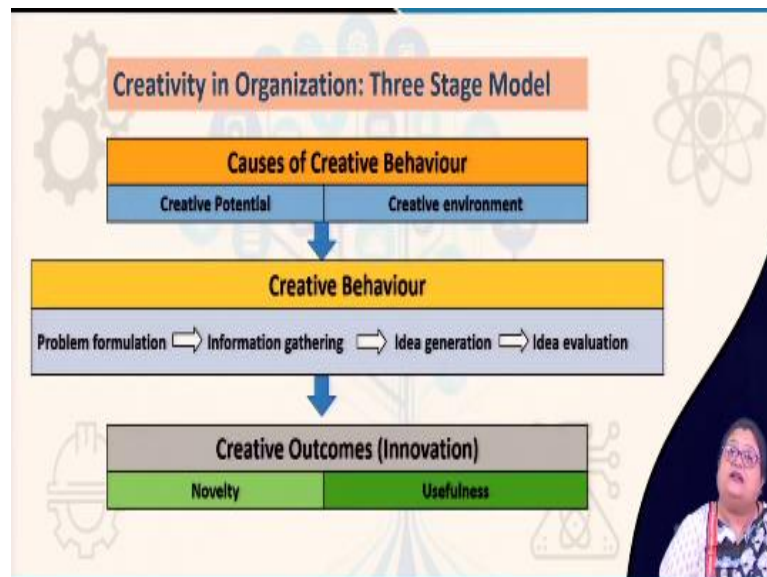
So, if we are to work for a team-based organization, and we have to connect it with the innovation, then what are the things that we need to do? In it, creativity must be rewarded and recognized. Management must model innovative thinking. Teams must be given time and resources to be creative. It is very important like you get your resources to be creative.

Tasks that are challenging and interesting result in more innovative outcomes. Create conditions to foster intrinsic motivation. So, the condition should be such, the climate should be such, like the people should be motivated to like do something on their own, to try out something new on their own and which will drive for intrinsic motivation.

So, because they will, that they could come up with the idea that they have been able to provide certain solutions to a visualized problem is itself very rewarding from inside. And so that is what it is written over here like create conditions to foster intrinsic motivation. Like we are working on a complex problem that itself is very motivating.

And if we get a proper solution by working in an innovative way, that is the extra things that we are getting maybe because the process itself has been very motivating.

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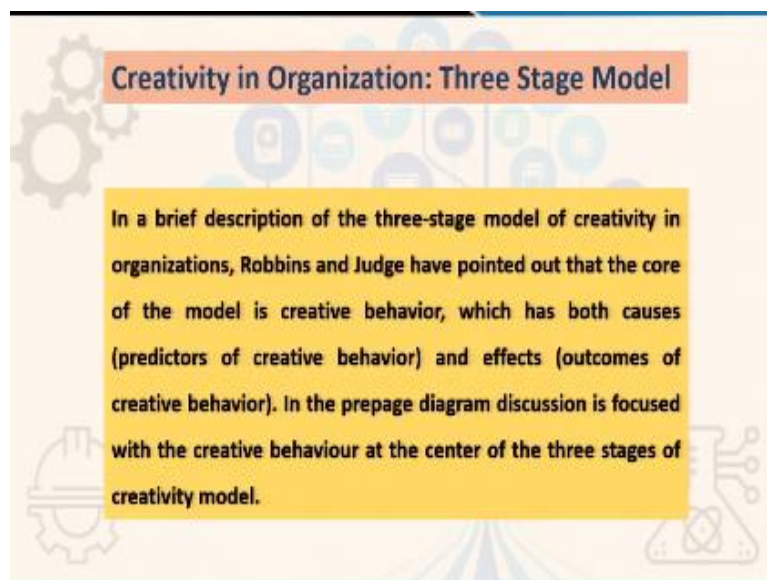


The creativity in organizations. It is a three-stage model. The causes of creative behavior or creative potential, and creative environment together they give rise to creative behavior, which is a four-stage process like problem solving, information gathering, idea generation, and idea evaluation. Together, like if you are doing a creative behavior, of which these are the very connected subcomponents in it, it is going to give rise to certain outcomes.

And in creative, when it is called creative outcomes, it is also known as innovation. And for that, it is not only the newness, the novelty, but also the usefulness together defines whether outcome has been innovative enough, creative enough to generate the outcome, which are not only original, but also useful.

So, these two are the very important components of creativity in organization. If your idea is original, but it cannot be used anywhere, maybe that does not get defined as a creative outcome.

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So, Robbins and Judge have pointed out that the core of the model is creative behavior, which is both causes predictors of creative behavior and effects outcomes of creative behavior. In the diagram that we have discussed in the earlier page, we have seen like how we have placed the creative behavior at the center of the three stages of the creativity model.

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## REFERENCES

- Bhattacharyya, D.K. (2012). Principle of Management, Text and Cases, Pearson, New Delhi
- Charles, W.L. Hill and Steven, L. McShane. (2008). Principles of Management, Published by McGraw-Hill/Irwin
- Stoner AF. Principle of Management, Pearson, New Delhi.
- Ellen A. Benowitz. Clifford Quick Review Principle of Management, Hungry Minds, New York, NY 10022
- Team Problem Solving for Pros, [https://us.sagepub.com/sites/default/files/upm-assets/5022\\_book\\_item\\_5022.pdf](https://us.sagepub.com/sites/default/files/upm-assets/5022_book_item_5022.pdf)

So, these are the references that we have referred to in preparing the slides.

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## CONCLUSION

This part of lecture session has given clear picture on the team problem solving with an aim to make aware all learners about it and enhance their level of thinking and perception on all these aspects of creative problem solving in team..

In the next session of the lecture we will focus on Creativity and its various issues. Enjoy learning, thank you all.

So, this part of the lecture session has given clear picture of the team problem solving with an aim to make aware all the learners about it and enhance their level of thinking and perception on all aspects of creative problem solving in team. In the next session of the lecture, we will focus on creativity and its various issues. Till then, thank you to all. Stay tuned with us, follow us, follow the lectures.

And we hope we will be getting at the end of this lecture sessions which is the last lecture session on creativity and problem solving, we will get a comprehensive idea about problem solving and creativity and how it is like used in the organization and what are the issues related to it. Thank you.