

Working In Contemporary Teams

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Lecture - 04

Factors affecting virtual teams

Welcome back to this course on Introduction to Contemporary Teams and Virtual Teams. I am Dr. M.P. Ganesh from IIT Hyderabad. I am one of the co-instructors for this course.

And this is our fourth lecture. I will quickly summarize what happened in our previous classes. So, we looked at the outline of this particular chapter. We looked at the difference between teams and groups.

The primary difference being interdependence and synergy. We also looked at how different teams can vary in terms of their autonomy, in terms of selecting their goals, assigning tasks between the team members, deciding how to do a certain task and things like that. We also looked at what is meant by contemporary teams. So, contemporary teams is nothing but present day teams or newer forms of teams. So, when we say present day teams or newer forms of teams, what has changed to create this kind of newer forms of teams or what are the kind of challenges which these teams face? So, we looked at these are some of the factors which are contributing to the challenges in newer forms of teams.

We also looked at some of the kinds of contemporary teams. Among these, we will be focusing more on distributed teams, cross cultural teams, startup teams, human robot teams and agile teams. So, if you see one common element in all these teams are they use more and more technology for communication. They also include lot of diversity within the team. They also operate in a context where the environment is very complex.

What I mean to say is there are different stakeholders who are involved in these teams and also one important difference or one important commonality in all these teams and how they are different from earlier teams is these teams cross lot of boundaries. When I say boundaries, it can be time boundaries, it can be distance related boundaries, it can be relational boundaries, it can be cultural boundaries, social boundaries and things like that. We saw what do these terminologies mean in our previous lectures. So, these are some of

the challenges we saw. One important challenge being managing cohesiveness in the group, cohesiveness in the team which may affect communication, team dynamics, knowledge sharing and things like that.

So, there is one group of elements which are soft elements like how do they manage communication, how do they manage conflict and things like that. Another angle involves how do they manage hard issues or objective issues like performance, impactfulness, things like that. We also looked at virtual teams in terms of why there is more and more organizations which use virtual teams. So, the primary reason being globalization and technology, affordability of technology. If you look at the advantages of virtual teams, it has a lot of advantages for both employees and organization.

One important advantage which is common for the employee and the organization is it reduces the time in terms of travel, it reduces the cost in terms of relocation, it reduces the discomfort in terms of working in a setup which may not be comfortable for the employee. So, especially when employees work in their own preferred spaces, they feel they have more control over what they are doing. So, we looked at the definition of virtual teams. Even though when we talk about virtual teams, we look at only geographical and technology usage as something which differentiates a face-to-face team and a virtual team, there are various other factors which can be used to differentiate between a face-to-face team and a virtual team. So, broadly these factors can be looked at from the idea of dispersion.

So, when members are dispersed, it can be either physical dispersion, time zone difference of dispersion, organizational differences or even generational differences, cultural differences. So, all these factors can create more virtualness or can be used to differentiate between a virtual team and a face-to-face team. We also looked at in our previous lecture that virtualness is becoming part of every team. So, earlier we were trying to differentiate between what is a virtual team and what is a face-to-face team. But now, because more and more teams start using technology for communication and there is also other forms of dispersion which have become more and more common among these teams, virtualness is not just about classifying virtual teams and face-to-face teams.

It is about virtualness as a quality which exists in all teams. So, instead of looking at teams as virtual teams and face-to-face teams, it makes more sense to look at virtualness as a characteristic found in all teams. Some teams might have high levels of virtualness, some teams might have low levels of virtualness. And how do we measure virtualness? Obviously, one popular criteria we use is the kind of, the level and kind of technology used for communicating within the team. What kind of technology media team members use and how frequently they use these media tools to communicate within them.

So, that is a very common criteria. Apart from that, locational differences, time zone differences and also relational differences. When you say relational differences, it can be whether there is an overlap between different teams. So, what I mean to say is, are team members part of different teams at the same time? And also, do they belong to different departments? Do they belong to different organizations? Do they belong to different cultural subgroups? So, if all these qualities are more among members, then it means the virtualness within the team is very high. We also looked at the nature of the media tool because when you say technology tool usage in the team, it is not just about how frequently or how to what extent you use a particular tool.

It is about what kind of tool do we use. When you look at what kind of tool, there are many theories which explain the kind of tools. One important theory is richness, media richness theory. So, we can look at tools in terms of the level of richness they have. So, we looked at what are the conditions which can be used to understand whether a tool is rich or not.

So, media richness theory talks about how live you can communicate, which means whether you can immediately give feedback. And also to what extent this tool helps to communicate multiple diverse kind of tools, to what extent it facilitates multiple and diverse kind of tools. On the other hand, media, so in this, with using this criteria, probably video conferencing or face-to-face is high in media richness, maybe a chat message or electronic bulletin board or blog might be low in media richness. So, that means we should prefer face-to-face communication or video conferencing, but again, it may not always be true. So, that is what media synchronicity theory talks about.

It says there are some tools, even though they do not facilitate immediate feedback, they help you in rehearsing the communication. They help you to take back what is communicated already. So, these can be advantageous. So, you do not have to always look at a tool from a richness point of view, but even so called low richness tools can facilitate rehearsability and reprocessability. In that sense, they can be preferred.

And another theory, which is called social presence theory, it says, if a particular tool enhances the feeling that you are having a communication which has social and emotional cues. If that particular tool brings in social and emotional aspects of a communication, then it is a good tool. But again, what tool will do that, you cannot say face-to-face or video conferencing will always bring in social and emotional cues. This is true, but it may not be true in all situations because you may see people, even with very low richness tools, they are able to communicate more emotionally loaded content or social kind of communication. So, how is it possible? So, how is it possible for people to use low rich

or tools which are low in media richness, but they are able to bring in that social and emotional aspect of communication? It depends on how well they are suited to that tool or how well they get familiarized with that tool.

So, this theory called channel expansion theory says that any media channel or any media tool inherently it does not have a certain quality which is constant. What I mean to say is, if you say media richness or social presence, it is not like this tool has this level of media richness or this level of social presence. You can expand the usage of the tool, you can bring in even though it is not meant to communicate or not meant to be used for certain kind of communication, you can actually stretch it to a level that it can be used in social communication or emotional communication. So inherently what it means is, even if a tool is not suited for a certain form of communication, if you want you can actually make it into a different kind of a tool which serves a purpose which otherwise you have not thought about. A simple example is, let us say email.

Can you use email in a very personal kind of communication? Because when email was found, it was thought that email is more of an official kind of a communication. Even though email is considered to be a more professional kind of communication, now more and more people are using it for personal kind of communications also, even among family members people send emails. It is not necessarily, emails can be used only in official context. So this is what is channel expansion theory. A particular tool meant for certain kind of communication because it was felt that it has certain limitations, those limitations can be overcome when you expand the limits of that particular channel.

So what will help us to expand the limits of the usage of a certain channel? One, experience with the channel. If you are very familiar, very comfortable using that particular tool, then you can bring in personal connect. For example, initial days when people started using chat messages, there used to be something called SMS. In SMS, you cannot convey much of a personal kind of a message. Even chat messages are like SMS, just text message.

But when people started understanding that certain letters can be used as emoticons, like smileys or certain symbols can be used to communicate humor or sensitive emotional messages, they started using it. Things like LOL, which means laughing out loud, things like that. Very simple kind of creative changes, which can bring in a lot of flavor to the message. Why it happened? People became more comfortable with the usage of that particular tool. And second element which will help expand the limits of a channel is messaging topic.

If the topic is very familiar between the parties, everyone in the team knows the specific topic and they can relate to it. There is no limit in terms of the channel. If people are very

interested, team members, all of them are committed, they are very motivated in that topic, they are very attached to the topic, the medium tool is not relevant. Even if it is not rich, the tool is not rich, people will be able to, team members will be able to communicate very deeply. So familiarity with the topic, familiarity with the tool and also experience in the organizational context.

So what it means is, everyone is working in the same organization or they know the system well, they know that, okay, if this message is written, this is what the underlying message is. If this is what is said, this is what actually it means. Because many a times the messages which we communicate, if it is formal message, it means only one thing. If it is a very straightforward message, it means only one thing. And most of the formal messages are very straightforward messages.

But emotional messages have many underlying meaning, many ways of interpreting it. So for example, humor or emotional content, it is very subjective in nature. When I say subjective in nature, it means different people can interpret it differently. Only when you belong to that wavelength or that if you understand the context only, you can understand it correctly. So that is what happens when people are familiar with the organizational context.

They know, okay, this message says this, but actually this is what it means. And it brings in that emotional flavor to the message if people are familiar with the organizational context. And also experience with the communication, experience with communication with co-participants. You know the person well, you know the person's way of looking at things, you are familiar with their way of communication. That familiarity also expands the limits of the channel.

So inherently what it says is, if you are familiar with the entire aspect of communication, the tool, topic, the organizational context, your co-participants, if you have high levels of familiarity with them, you will be able to communicate emotional or social messages. For example, initially with someone whom you do not know, you will talk very formally, is not it? If you get familiarized with them, over a period of time, you become friends. Actually brings in friendship and that brings in more and more social content or emotional content. Because you trust them, you know that what they will perceive, you know that their way of looking at it, you know the context. So you become more and more, you share more and more emotional and social content.

So that is what happens in expanding the limits of a particular channel also. So one aspect is, the limits of the tool can be expanded. Another aspect is, it is not always preferable to use rich tools. We think that rich tools are preferable.

Not necessarily, it depends on the task. It depends on what kind of purpose you are using it. So depending on the purpose, you can choose the tool. So when I say purpose, it means what kind of task. For what purpose in terms of the nature of the task, you should decide what kind of tool or which tool to use. So there is this theory called task technology fit theory.

It talks about different types of tasks and different types of tools and how to match the task and the tool. So this would be useful especially if you are managing a team like this which has high level of virtualness. So when you say task, task means things which we do in work. For example, teaching is a task or writing a software program, coding is a task.

Counselling someone is a task. Organizing is a task. So these are tasks. So when you say task, task can be looked at from two aspects. One, I mean, this actually is a very famous theory in organizational structure and design.

So this theory is proposed by Daft and Lendl. So according to them, every task can be analyzed or every task can be looked at using two criteria, two aspects or we can call it two dimensions. The first dimension is analyzability, which means certain tasks are very easy to record. When I say record, you can create a manual to say, okay, this is how it should be done. You can very clearly say this is the process involved. For example, let us say if you want to write a program, software program, you have to write a program and get it tested.

So these are the steps involved. Highly analyzable, analyzable means you can break it down into smaller pieces and then you can have a very clear cut written down steps or manual for that. So by reading the manual, anybody can perform the task or anybody can get themselves familiar with the task. So this is analyzability. Another dimension is variety.

Some tasks are very simple. When I say simple, it requires only one particular skill or one particular aspect of doing it. You do only one thing. For example, let us say if you are in an assembly line, assembly line means a manufacturing plant where the parts of a car or any material moves. So you are doing one task in that assembly line, which is probably tightening one particular screw and putting oil in that.

So it is a very simple task. There is no variety in that. Compared to making an entire car, entire car making involves various different components, isn't it? So when there are many components, when the task is very complex, there are varied things in that task, then we can say the variety of the task is very high. We call it task variety. Analyzability is, is it

possible to create a manual? Is it possible to record and write it down in terms of what has to be done, what is done in that task? So looking at these two dimensions, there are certain tasks which are, if you look at the topmost left corner, there are certain tasks which are highly unanalyzable, which means you cannot write down. It's very difficult to note down the elements of that task because many of those things are very subjective or qualitative.

For example, let us say you work in a hotel, hospitality industry. So if guests come, you are in the reception. If guests come, you need to do certain things. You need to like, let's say you are handling customers.

You have to do certain things. All those things cannot be recorded. You cannot say, okay, you have to smile like this. You cannot mention like, you can write you can smile, but you cannot mention how much time you should smile or how do you define a smile compared to a frown. All those things are not possible, isn't it? So you cannot actually record it.

You cannot actually write it down. So these tasks are very subjective, very unanalyzable. You cannot document or clearly prescribe this is how it should be done. So these are unanalyzable tasks, but variety is very low. For example, like I said, the hotel reception, you are working in a hotel reception, you have to welcome them, say hi, welcome to our hotel, that's all.

Very simple task. Maybe give them a welcome drink. But recording it to say that this is how it should be done is very difficult. You cannot say, okay, you should smile for five seconds. You should handshake them if they are men. You have to fold your hands if they are elderly.

Those things are very difficult to write down. So if those are the tasks which come in the left hand, higher, left top most corner, you call it craft technology. Those tasks are like craft. Craft means you have to learn through your experience. You cannot write it down. So if the team involves those kind of tasks, you have to use rich media because rich media helps you to look at different cues.

It helps you immediately give feedback and receive feedback. Because there is no possibility of writing down and correcting, looking at the manual. Everything is learned through interactions. So for that you need rich media. For example, face to face meetings, telephone, sometimes you need to use telephone to understand, to get feedback and all those stuff.

So that is craft kind of technology, craft kind of task. If you look at the rightmost top,

which is highly analyzable, highly variety, it has high variety. For example, teaching. Teaching involves handling a class. You have to give immediate feedback.

You have to understand their cues, student emotions. You have to do various different things. Sometimes you need to give information. Sometimes you need to counsel people. Sometimes you need to discipline the class.

Sometimes you need to plan for the entire class. It involves very different tasks. If that is the kind of task which involves varied tasks and you cannot write it down, what has to be done. So those kinds of tasks are called non-routine tasks. Again, you need to use face to face meetings. You need to have special training program for people to train them, skill development programs.

So these kinds of teams which use extensive non-routine tasks, you need to train them on a regular basis. You need to bring them frequently face to face and you need to let them interact with each other and get familiarized with each other. So teams which handle these kinds of tasks, you should encourage them to meet frequently and interact with each other frequently. So the lower leftmost corner, it is very less in analyzability, less in variety.

Because everything can be written down, you do not need to meet also. You do not need to meet your team members. Read the manual, you understand what you have to do as a team member, you do it. So if that is the kind of nature of the task, you can just put everything in a website or just send email to everyone. Tell them these are the things we need to do.

Each one does this task at this time. So you do not need to use rich media. You do not need feedback also because there is a manual. If somebody has a question, you can ask them to go and look at the manual, look at the rule book. You do not need to have people to intervene and help you. Everything is clearly prescribed, very simple task. On the other hand, the rightmost lower corner, everything can be written down but high variety.

For example, if you are a hotel chef, every dish is a unique dish, but every dish has a very clear cut measurement. Every dish, everything you make has a very clear cut menu, very clear cut recipe. Then it is very easy. Again here, but every recipe is different, but for everything there is a recipe. Analyzability is very high, sorry, analyzability is low, but yeah, analyzability is low, but variety is high.

So for those kind of task, you can use again, writing down everything, database. There is a database, you can go and see what is the recipe, how to handle it, all those things. So there might be many variety, but everything is clearly written down. Like I said, there are

multiple tasks, but each of those tasks, there is a clear prescription. So if you have doubt, you go and look at the prescription.

You do not need people to help you. You do not need people to give you feedback. Even though the tasks are very high. But one thing you have to do is every time you need to add to the manual because task variety may increase. So every time the manual has to be revised so that you add to the instructions which are given. So depending on the nature of the task in the team, looking at these quadrants, you can choose as a manager, you can choose the right kind of tool and use that tool whenever it is required. So we are in the almost final section of this particular chapter in terms of virtual teams.

When you look at virtual teams, what affects performance? When you look at, the team has high levels of virtualness, what are the factors we need to be careful so that performance does not come down or performance is more? So one thing we noticed is task. We already saw, nature of the task. We also saw choosing the right kind of media and also team size. If the team size is very high, when people use various tools and they do not meet face to face, they have multiple differences, diversity, it becomes very tough.

There will be a lot of confusion. People may not share information. There might be problems in terms of conflict. So you should have a very right kind of size. Again, it depends on the nature of the task also. If the task is very routine and less variety, team can be very big.

Everybody does their own business. They do not need to interact. There is no need for interaction. There is no need for cooperation or collaboration. If the team size is high, if they are virtual also, not an issue. But if the virtual is very high, there is a lot of interdependency, the task is also very complex, then you have to be careful about the team size.

And also life cycle stage. Life cycle stage means, again, I am quickly introducing this concept. Every team undergoes four different stages. The first stage is forming. Forming means they all come together, they interact with each other, they understand each other, things like that.

Second is storming. Storming means once they meet, there might be differences, there might be problems within the team. So that is storming. Third stage is norming. Norming means when there is conflict, when there is disorder, when there is chaos, there is some pressure on them to arrive at rules and regulations, clear-cut norms, clear-cut distribution of work, clear-cut understanding of the goals.

So that is called norming. So initially forming, then storming. Storm means fights, conflicts, disturbances, and then some settle, settle, things settle down, rules are formed, which is norming, and then performing. Once that happens, people start performing. And then finally adjourning.

Adjourning means the team is dismantled. The goal is achieved, team is dismantled. So which stage the team is in will also affect the performance, especially if the virtualness is very, very high. In norming or storming stage, there might be a lot of confusions because already there is confusion in this storming stage. When virtualness is very high, it will add fuel to the fire. So that is why you have to be careful. You have to bring in people, make them meet face to face, clear all those differences or make them understand each other's viewpoint.

That will facilitate norming. Once norming comes, they are comfortable with each other. You don't need to have frequent meetings. Even if virtualness is high, it may not be a problem because they, going back to the channel expansion theory, they get familiarized. They know what they have to do.

They understand each other's perspective. So even if virtualness is very high, it does not matter. But earlier stages where there is storming or even initial stages of forming, you have to ensure that virtualness is managed well. Otherwise, it can lead a lot of problems and the team may not move to the next stage. And another important element which you have to be very careful in virtual teams or when there are high level of virtualness is trust. Trust means to what extent people believe in others, to what extent they are willing to take risks in terms of letting the other person do their own job. Or in other words, to what extent every team member believes that the other person will not fail or will not take advantage of them.

So trust is like taking a risk because you completely believe in them and let them do what they want to do in a team. Otherwise, you have to bring in rules, you have to write down everything, all those stuff. So when people trust each other in teams, they help each other. If they trust each other, they will share information more.

If they trust each other, they will be very comfortable in having differences of opinion. Otherwise, differences of opinion will become conflict. If people in a team do not trust each other, differences of opinion or different viewpoints will be considered as conflict or personal enmity. So trust is very important in moving in towards performance, especially during norming stage. When storming is very high, people have to build more trust and that will lead to norming.

So when high levels of trust is there, you do not need to worry about virtualness. So again, I am going back to the channel expansion theory. When people get used to each other, trust level increases because they know that, okay, this is what I can expect from this person and I can trust this person. This person is reliable. So I can take this risk of passing on the information or collaborating with them and things like that.

So in virtual teams, trust is something which is very, very important. So as a manager, building trust leads to better management of virtualness. But again, it depends on which stage are they in, what is the size of the team, what kind of media they are using initially, what is the nature of the task, all those things. For example, if the task is very routine, there is no need for trust itself.

Everything is clearly written down. Everybody has to do what they are told in the manual. So there is no question of trust. And the final most important thing is communication style. Again, it is related to culture also. In some cultures or in some organizations, people are very straightforward.

If they want to communicate the message, they will directly go to it. In some organizations or in some cultures, people give a lot of importance to the background information. They may not be very direct. They may tell you many things and then come to the point.

So communication style can be direct, indirect. In direct kind of communication style, people are up to the point. They will tell them, okay, Point 1, Point 2, Point 3 ! If it is indirect or if it is context specific, context oriented, so task oriented is very direct. Context oriented is people will tell you a story.

Okay, I will give you a background. This is what it is. Now, this is what we have to do. So that is like very indirect, very context oriented kind of a style. If someone is very used to context oriented style, for them to see a direct task oriented communication as something which is harsh. For example, in some organizations, even meeting people talk about so many things. How are you? I had a, how was your vacation? Last week this happened in my home.

Five years ago this happened and then they will talk about what they want to talk about. It is not wasting time. They are like giving a lot of background information. They are giving a lot of context related information. On the other hand, some cultures, they come and say, okay, team, let us talk about this.

So these are the things we have to do. Everybody understands? Great. Okay. So if

somebody is used to very context oriented communication, indirect communication, they may find it, find the other style to be very, very impolite or very shrewd. It can be other way around also. You are used to very direct communication, but somebody comes to you and talks so many things, you will be like, why is this person talking all these things, which is not relevant? Or is he hiding something? Or is this person trying to avoid the responsibility of saying something? So these problems can happen. So direct, indirect, context specific, task specific, this is one way of looking at communication.

Another way of looking at communication style is relationship oriented and task oriented. In some communication styles, people give more importance to what others will feel, what others will think, whether it will be accepted or not. In some styles, in some contexts, people will be very direct. They may not, they don't care about what others feel, what others will think. This is what is the fact I'm telling you this. So again, if people belong to other style and they encountered one particular style, which is not their style, it may lead to lot of communication conflicts.

But again, it depends on how much trust they have among each other, how much familiarity they have with each other, what kind of media tools they use and things like that. So the point here is these factors influence what extent virtual teams will perform or to what extent virtualness may not be a problem. And also within these factors, they may interact with each other. Like I said, if trust is more, even if team size is more, it is okay.

If the life cycle stage is at a norming stage, even if the communication style is different within the team, it is okay. So within these factors also, they interact with each other and individually also they influence performance in virtual teams. So if you are a manager, you have to take into consideration all these factors when you decide what has to be done to improve the performance of virtual teams. So whatever I have said, I will put it in one model. So communication coordination is very important to improve performance in any team.

Especially in virtual team, communication becomes a challenge because there is distance, there is dispersion among team members. And what are the other factors to influence? Task related characteristics, task interdependence, what media you choose, how much trust you have, how people communicate, individual team members, cultural background, their own personality. For example, if people are very extroverted, they are very open, they are easily trusting each other, then it will help. At the same time, the team has members who don't easily trust others, they don't talk much, they are very closed in terms of communicating, that may create some kind of a challenge. And also like I said, virtualness, there are certain factors which will lead to communication and coordination related challenges.

And ultimately, performance in virtual teams is not necessarily achieving the goal. It can also be how good are people in making decisions? How efficient and effective? How quickly they finish the task? How impactful are they in finishing the task? And also creativity. So all these factors lead, you have to be careful as a manager, so that communication coordination happens in the right way and the right kind of performances achieved. It's not as simple as the picture says, you get used to these challenges. This model will give you some guideline to think about, so that when you actually are in real life virtual team, these points you can remember and say, okay, this is what I saw there and I can relate to it now in this particular team stage, why people are fighting more, maybe this is a forming or storming stage, why people are not trusting, maybe there is no familiarity with each other, why now people are willing to take the risk because they are used to each other, there is trust.

So all these are very softer issues you can keep in mind, I mean they will make more sense if you remember this model. So I will stop here. In the next chapter, in the next class, we will talk about specific things you can do to manage a virtual team so that performance increases. So we will meet in the next class.