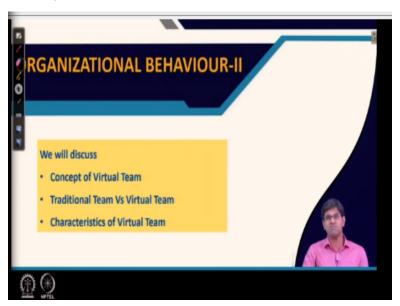
## Organizational Behaviour-II Prof. S. Srinivasan Vinod Gupta School of Management Indian Institute of Technology-Kharagpur

## Lecture-51 Virtual Team-Concept and Importance

Welcome to week 11 and module on virtual teams. In the first 2 weeks, we discussed about a group, teams, and we discuss the various aspects of group development stages, team development, how do we ensure the effectiveness in team as well as in group context. And today, from this module we are going to learn an important aspect of team, working with the team which is called virtual teams. In this module, we are going to discuss various aspects of virtual teams, talking about the development of virtual teams, how do we ensure effective functioning of virtual teams. And we will also try to understand some of the models of virtual teams.

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In today's lecture, we are going to start with understanding basic concept of virtual team, how do we understand the virtual team? And we will also compare the virtual team versus the traditional team and try to understand the characteristics of virtual team because it is important that we are in an era of technology development and virtual teams become invariable or inevitable part of most of the organizations.

Especially post pandemic situations, the virtual team become more of a reality, especially in a technology enabled organizations. And where even we have also seen that now this kind of virtual teams were effectively being used even in the educational setup, where PG level students or research students form a virtual team to work on some of the research problems or even the collaborative forms of working.

So, a virtual team becomes very important aspect. So, we will try to understand the concept of virtual team. What is this virtual team? And we will try to see how these virtual teams are different? Why we need to learn about this virtual team? So, that we become better managers, forthcoming or maybe in a current workplace, you wanted to manage your in existing work virtual teams.

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Let us try to understand the concept of virtual teams. See, the virtual teams are the group of individuals who are spread across different geographical areas, when you talk about a virtual teams, essentially we will be definitely talking about... yes, people are spread across different geographical regions.. locations and we are trying to connect them and work together, that is where we are talking about the basis of virtual team comes into picture.

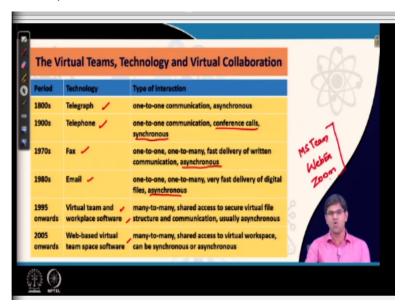
So, virtual team is a one which are geographically or organizationally or time dispersed workers and brought together through an ICT, where information telecommunication technologies to

accomplish one or more organizational task. It can be specifically for one task let us say only for this task, I want my people who were working in different locations. Let us say I, as an organization, I am running a company, where I have my company, let us say Chennai, Delhi, Kolkata and Bombay. So, now I found that yes, there are managers in each of these locations were really skilled at this particular task X. Yes, so now I do not want to bring them put them in the specific offices rather I what I am trying to see? I am trying to create virtual teams, though they are spread across or dispersed across a different location can be called as Chennai, Delhi, Mumbai or Kolkata.

But probably now what I am trying to do now? I am trying to engage them to connect through a ICT information communication technology platforms, where in most of us now we are using some examples can be MS Teams or probably we are talking about Webex platforms or we are also talking about zoom, these are all now information communication technologies.

Now even many organizations have developed their indigenous form of technologies, wherein they are able to connect their employees together to work for organizational tasks or a goals. So, essentially to understand virtual teams is nothing but employees operating from different locations, but they are connected through a technology enabled platform to work for an organization goal or a task, they are called virtual teams.

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Now, let us try to understand how these virtual teams have been developed over the period of time? Now, we cannot just simply think, ok, just because now the virtual teams are comes into picture, not really, if you look at historically to see how these virtual teams are conducted over the a centuries if you look at in the 1800s were probably they are still they had a virtual work teams.

Meaning that nobody was physically connected, but there are separated from different geographical locations. But despite that, they were connected or working on a common goal or a common task. How did they were connected in early mid 1800s were is a telegraph. Through telegraph they been communicating about the task, maybe if you look at the time taken to reach a message from 1 person or one team to another team through telegraph originally literally a larger. Probably it was one onto one communication, a synchronous; it is not a synchronous communication, which is asynchronous communication. Now, then there was also some development of course, as the technology was evolving and to become a telephone where the telephone is again one to one communication and there is also possibility of a conference call and synchronous.

Synchronous, we are having an immediate response were able to understand and work together in a synchronized manner, not then I sent a message, then I need to wait till you receive and then send back me a message, where it is an instant way of interactions become more synchronous in nature. Then, we also found the development of fax structure where it is also one to one or to one to many in fast delivery of written communications.

But again it is an asynchronous, meaning that we are not connected continuously mean to receive or send informations immediately, not instantly. But where was a fax where I sent you informations and you will also collaborate work on the same thing but probably not connected instantly. Then comes an email where again where people are collaborating, where one on one communications one too many. And it is very fast you can send it to so many people instantly but again it is an asynchronous, not a synchronized one of where we are talking about a telephone communication. Now comes the only period the technology development has actually enhanced lot of communication developments, where we see virtual teams or workplace software where

we have talked about MS Teams or Webex as an example where, I think most of us are using it

now.

Let us say zoom as a platform, where it becomes workplace where you share informations,

collaborate, work on the same let us say I am working on a PPT development, I want to present a

project where we see that multiple people are collaborating, interacting on the same workplace

platform, where they are also sharing informations, sending documents, working together and

collaboratively doing performing things.

So, this is how if you look at over the centuries, where we say that virtual team was existing even

before this kind of rapid technological advancement but in a different form. And now with an

advent of technological development, virtual teams becomes more of a inevitable or important

aspect of many organizations. Because organizations have identified that, yes, I have a different

skill set or really skilled but located in different locations.

Now that virtual team is actually giving an advantage for an organization. Yes, now you do not

need to worry about where your skilled employees are sitting eventually you can build a team.

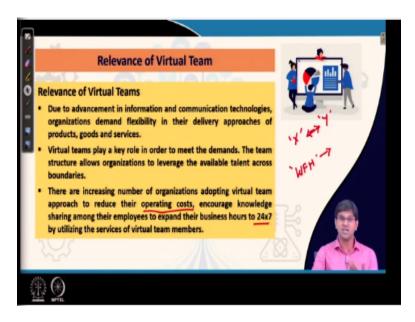
And you will be able to facilitate your team members to work towards a task because you do not

have a constraint of my people are in a different location. Now through ICT technology you are

able to connect people and enable them to work on a task or a goal of an organization.

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Now let us understand why this virtual team becomes relevant. As I was just was discussing that because advent of information and communication technologies, organizations actually demanding more flexibility in terms of in a delivering the product or development of a service or enabling the services. For example, you working in a company called X and your client is Y, where maybe with the technological advancements you are able to quickly interact with your clients, facilitate a product or deliver a service or maybe try to resolve certain issues coming up. And virtual teams become a key role in order to meet the demands because there is lot of demands coming up for an organization. So, virtual teams as I said become more of an advantage for a company to embrace the opportunities growth to by tapping the lot of opportunities are available.

Then, now many organizations started to adopt a virtual team approach to reduce a operating cost. When I see work from home where if you just imagine prior to the pandemic outbreak, despite the fact that many organizations were using these or availing this kind of an opportunity for their employees that yes, you avail work from opportunity where you work from your home but you still continue to deliver for my organizations.

And with this way company were saving lot of this operating cost. When you talk about setting up an physical office setup and providing the necessary resources and providing the other technological support, meaning that the cost is really high. I need to pay for the fixed cost and

the recurring cost for managing all those expenses. If I higher up and a huge a tall structure of an

organization, I want to house 2000 employees at a workplace.

Now, if I have an opportunity this, yes, I have a platform where I can still hire these 2000

employees, but let them work from the home. Probably what I want to save is that operating

costs. I do not want to hire place, provide or build a physical infrastructure, technological

infrastructure and providing the other fixed cost or the recurring cost on me, and it is one of the

advantages for a company.

And next one is about knowledge sharing, because people are connected virtually; they are able

to know enable more knowledge sharing between their employees or members who are in the

team. Then it also provides an opportunity to expand their business hours to 24, 7 meaning that,

yes, I am able to know how teams in different locations or different regions, different places in

the world, wherein that, yes, the time zones are different, with this way, I am able to run my

company 24, 7 meaning that, say I have a team who were working in India, operating in India.

So, I have a team who will start working from 10 am to 6 pm in the evening, probably after that,

I can have a team in a different country, probably some of the European countries or maybe

North American countries, probably, they are able to serve the rest of the time still my business

is running 24\*7. So, this is very much possible with having a virtual team in your workplace.

That is why virtual teams become more relevant in the organizations and especially in a

technology enabled organization.

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Now try to let us try to understand the difference between traditional teams versus a virtual team. So, and because we everyone would have been experienced with the traditional work teams. Maybe in your college project or probably in your current workplace or maybe in a previous situations, where you worked in a team and eventually everybody had a different experience of how do we manage or working with a team.

Now let us try to understand 2 important factors, one is about the selection of members. So, for a traditional team member are selected primarily on their functional skills, meaning that yes, are they really skill on the task we are trying to have or deliver for a company? Now, for a virtual team, yes, I do not say that for functional skills become a non-relevant factor, but yes it is relevant.

Unless otherwise a person is skilled on a particular a skill which you are looking for delivering the responsibilities or a goal? Yes, it is important, it is not only important along with the functional skills you have to select members who are having an ability to learn new technology, and collaborate across functional and cultural domain is important. Like you as a person let us say you are a person A and wanted to be in a virtual team.

Virtual, I am referring to V T as a virtual team, when you wanted to be in a virtual team, essentially, yes, of course, you should have basic skill, basic skill of a let us say IT project. So,

definitely you want to have a basic skill on IT related aspect, maybe a coding or in a testing in some example. Now, it is not only sufficient, especially to work in a virtual team, you should have a sufficient skill on learning new technology.

Yes, you should be skilled enough to understanding the platform, how to collaborate with the people. And you should also have an collaborative cross functional or maybe cultural boundaries. Because you will have to encounter people coming from different cultural boundaries, you should interact and work on a platform. And if you do not have the capacity to work with the different cultural boundaries, then you cannot be a skilled or helpful or resourceful team player in a virtual work context.

So, now if you see for a traditional team, I am only worried about the functional skill, whereas in the virtual teams because you are not in a physical work setup, we are in a virtual work setup. So, it is important that a team member is really in having capacity learn a technology and also have the knowledge about how to work, collaborate with cross cultural boundaries or cross functional areas.

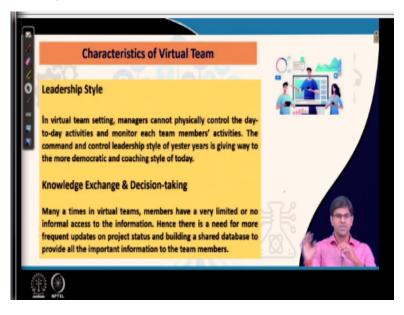
Then comes the organizational structure, so in a organizational structure in a general.. traditional teams, where you say line authorities. So, line manager is nothing but yes, see A is a manager, then. This is a typical organizational structure I am going to talk about, let us say C, D, E. And what is that reporting such as C, D, E will be reporting to B and B will be reporting to A? We also say line such there is no broken line between, there is a clearly defined structure who is going to report to whom and there is a clear define power structure also.

But whereas in a virtual team, it more of a flatter organization, I am not creating a hierarchical structure where it is a more of a flat structure I am talking about. I am talking about A B C D E all on the flat structure, where dim line of authority. I cannot have the very evident explicitly line of authorities, whereas we are going for a more of a flat or an organizational more of organic flat structures. So, it requires, so that now you will be able to deliver faster results and encourage creativity. Because in a virtual team, it is also very important that yes, you do not constrain your team that within a line of authority.

Because you are not working in a physical organizational setup to strictly following the hierarchical orders that is where traditional teams and then virtual work teams are differing. So, in addition to the existing ones, virtual teams are little different. Because of the nature that yes, you are not able to handle the team members in a one-on-one interaction, physical interaction we are talking about in a physical work setup.

So, that is why the virtual teams are different from the normal work setup or team setup we are talking about. So, this essentially necessitates that yes, people who are going to handle or you are going to work on virtual teams should have certain more skills or trying to understand create an awareness about how to work in a virtual team, how to manage virtual teams, that is why essentially this module will go into help the learners on this.

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Okay. now, some of the characteristics of the virtual teams: one is on the leadership style, in the virtual teams. yes.. it is very evident that managers cannot physically control the day-to-day activities. Yes, it is obvious because each team members are operating in a different or a diverse location. So, in this case, in a command and control leadership style, it cannot happen, because the leadership style in a virtual team should be absolutely different as I said in the previous slide.

We are discussing about line of authority; it is not possible here. So, here have to be more

democratic giving more opportunities for the discussion facilitating option then coaching style is

important rather than you go for a command and whatever, I say you do it. That kind of

leadership is not possible. So, in virtual teams more often a democratic everybody has an

opportunity to contribute and deliver.

Then knowledge exchange and decision making. In many a times in a virtual team, members

have sometimes we have a very limited or no informal access with informations because in an

organization's what will happen? We have an informal access, for example you work in a

company where you see that cross functional teams are people from different departments we

will give you some informal information.

This is what it is developing, this is what happening in a company, probably we are going to face

this, that. That information is not available in a virtual work team because unless otherwise the

members in a team have a concrete information to share with other members, it is not likely to

get the informal informations or the information is limited only to whatever is being supplied to

the members in the virtual platforms.

So, what does it mean? It means there is a need for more frequent updates on a project status and

building database adding or we are talking about coming up with dashboards. So, that everybody

have an information that.. ok.. where are the resources available, where we can access, how do

we connect to this to this person? Because in a virtual teams, you are having an limited capacity

to access to these kind of a detailed information.

So, it is important that team has to come up whether organization has to develop more frequent

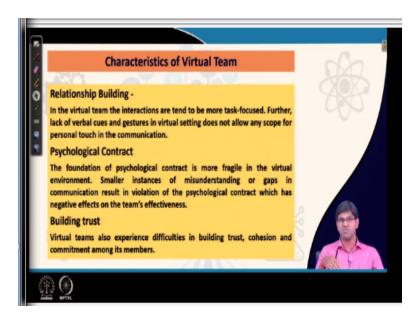
meetings and enabling them to have more information. And maybe probably good is to build a

dashboard which will provide more real time information to all team members, who can actually

readily access the information.

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Then comes relationship building. In a virtual team the interactions are tend to be more task focused, because we will primarily have these team meetings in a virtual platform and we discuss about the specific tasks to be performed, what have to be done? Then what do they do? They will be working from their homes and then whatever the tasks been given. So, now, what happened in these situations?

We as a team, we lose out some opportunity to observe the nonverbal cues or nonverbal gestures. In a Physical work setup, where you have an opportunity to observe the individual team members. So, when you have a important decision making discussions, it is not only about what I convey, it is also about what I observe, how others are responding to my opinion or my idea? Whether I can sell this idea or not? This kind of an access is limited in a virtual teams.

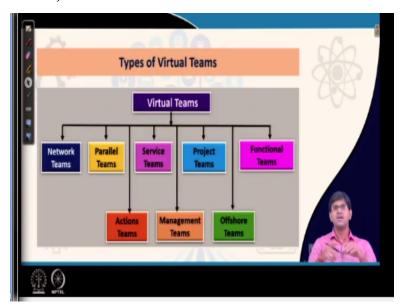
Probably we can still say observe a bit but not essentially what we can do in a physical workshop. So, there is a limited scope, so virtual setting does not allow to provide any scope of personal touch in the communications. So, it is important that now you understand to the some of the limitations in working on a virtual teams. Then psychological contract, so when you talk about a psychological contract in an organization, it is always there is a psychological contract between an employee and an employer.

So, how? Let us say I do this task, I expect my organizations or my leader to respond in a way which are positive to me. So, there is a unwritten agreement between you and your organization or you and your leader. Probably, in this kind of a virtual teams, it is more vague in the virtual setups compared to the physical work setup. For a small incidence of misunderstandings or gaps in communications, results in the violation or breach of a psychological contract.

Definitely it will have a negative consequence on the team effectiveness. Then building trust, so virtual teams also have experienced lot of difficulties in building trust. Because trust is an important factor especially when you working in a team environment, how you are going to trust your team members will determine how effective your team is going to be or how cohesive your members are?

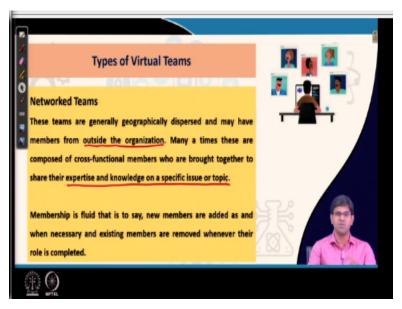
Unless otherwise you do not trust your team members, it will be less likely that they are going to work in or create a oneness way. This trust is built much faster in a physical work setup compared to the virtual work teams. So, now it is important that the organizations has to make or you as a leader has to make a conscious effort in ensuring that yes, trust has been built between the team members despite the fact that you are virtually connected. So, building trust is an important factor or characteristics for a virtual team.

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Then, now we are going to discuss about various types of virtual teams. There are 8 different types of virtual teams we are going to discuss ranging from network teams, parallel teams, service teams, action team, management team, project team, functional teams and offshore team. So, I am going to discuss in detail in each of the teams, let us start from the network teams.

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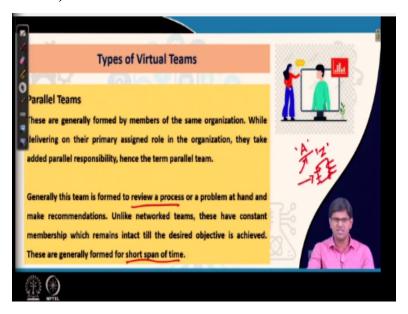


See the network teams are the one which are generally of course all virtual teams are geographically dispersed and may have members from outside the organization. That is the important aspect. So, network teams probably I can give an example is that let us HR forums or probably IT manager forums or people who are expertise in the finance area might have a forum. So, this network teams are one which are not essentially all the members are from the same organization, where these members are from a different organization, maybe a professional network you have.

And you are essentially to come there to share the expertise and knowledge on a specific issue or topic, probably let us say there is a new technology or a product or a service is going to be delivered. And you as an expert in this area, you are being a part of the professional network bodies, where you virtually interact to discuss about what are the developments happening in this particular domain or this area and maybe some challenges being faced, how do we address the challenges?

Here more of a expertise experts meet here virtually through a professional network forums, where this is what in the network teams. Their membership is fluid, because new members are keeping added, old members will become and leaving the forum and maybe it is about I subscribe to the network or maybe I continue to associate with the network teams. Unless otherwise, if I do not want to renew my membership with the teams, I might leave the network teams. So, these are networks teams, not essentially from within the organizational members.

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Now, we are going to talk about the other virtual teams where we are going to talk about essentially or the employees from the same organization is going to collaborate in the virtual teams. So, what is this parallel teams? So, these are the teams which are formed when the members of the same organization. As I said network teams are members of from a different or outside the organization.

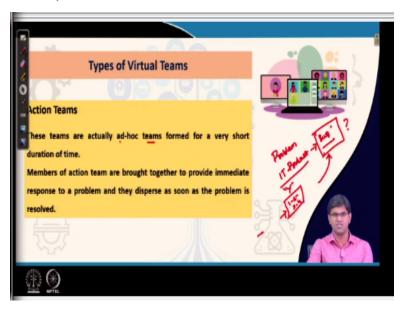
Now, when you talk about the network teams, all the members are from the same organizations. So, what is parallel team? When the team who are already primarily engaged in some other tasks. Let us say I, as a manager, assigned to deliver a task A, now I am already delivering a task A, now I am also assigned with a parallel responsibility. So, probably I been delivering this activity.

Then I am also been called to form become a part of a team, it is called Z, then I become a parallel team. So, maybe in a parallel similar to me there are other members also pulled into form

these virtual teams. So, generally what this team does is they form to review either, review a process or a problem maybe specifically to resolve certain problems, to make some recommendations, how do you work on this problem?

How do we address these issues? Whereas are like in the network teams, where they have a constant membership, which remains intact till the objective is achieved. So, whereas this kind of a parallel teams are generally formed for a specific task. And meaning that their existence will be time bound, very limited in nature, where this is called a parallel teams.

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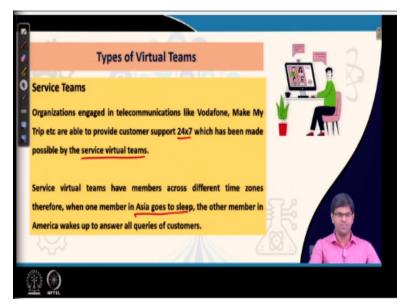


Let us try to understand the next one action teams, these teams are actually again adopt teams and form for a very short duration of the times. What do they do know? These team are formed together to provide an immediate response to a problem. And that the responsibility is over once they are able to address the problem and then they will actually disperse the team and then this team will never come again. So, this kind of virtual team or action teams let us say a company is encountering a problem. Let us say in an IT product and there is a bug.

So, now you need to address this and you see that now your team members are not able to resolve it. Now, you need an expert to work on this, why? How do we resolve this bug? So, now I am forming a team which is called Y and I have 1, 2, 3, 4 members. And they are virtually meeting and they are trying to fix this bug. Once this is solved, so and their team is dissolved.

So, this is called an action team specifically formed to address a specific problem or some challenges or critical things to be addressed in an organization.

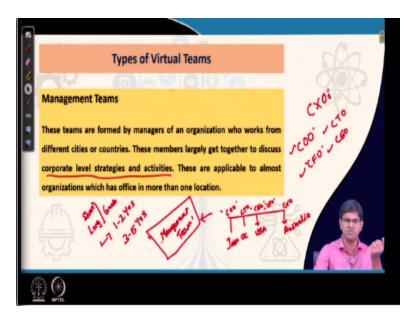
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Then comes for service teams. So, in the service team as a generally for organization especially in a telecommunications industry, where maybe in some examples of Vodafone or maybe travel OTA, online travel platforms like make my trip, they are able to provide customers have put 24\*7 maybe some of us even would have approach or reach to their customer service personnel. Or even if you reach late evening or late night in the midnight, probably you have called your hotel is not booked probably, you will always see that yes, somebody is responding. So, now you will be able to understand that this possible by the service of virtual teams. Because now these members are across different time zones, there were let us say one team which are working in the Asia goes to sleep and the other side of the team were start to work.

So, probably because of this virtual team you see the service teams are able to continue to provide service to their customers as and when it is required irrespective of what time the customer or client requires a service. The service team essentially operates on a virtual platforms, though they are all operating at different time zones.

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Then comes management teams, so these management teams are primarily formed by the managers of organizations, who work from different cities or countries. These members are largely get together to discuss corporate level strategies and activities. So, now if you talk about some of the examples of their management teams can be let us say CXOs chief executive officers in an organizations. Let us say I have chief operating officer, COO and I have CFO, chief financial officer and I will have chief IT technology officer CTO then I will have CEO.

So, now I have all these executives probably let us say I am talking about a company who are multinational companies operate in multiple locations. Let us say, so India, UK, USA, then let us say Australia, I am just giving an example. Now, if we look at maybe probably it is an US company, I have my CEO sitting in US and trying to oversee the overall operations of the organizations. And now you see maybe the majority of the business or maybe the main productions or the service being offered from India, I want my CEO sitting here.

And probably my CFO also sitting at USA maybe looking at the financial perspectives, but my CTO is operating in UK and another CXO is operating in Australia. Probably this virtual, now what is happening? There is a management team, who virtually meet to discuss about some of the organizational strategy. Now as an organization, I have important strategic decisions to be made. For example, one want to decide on the short-term or long-term goals. So, let us say long term and short term goals about as a company what we are going to do for next 1 to 2 years?

And what kind of an investment or a business decision we can make to see our company next 2, 3 to 5 years, how we are going to? So, for this what will happen? Though people are operating in different locations or geographies, then they still interact on a virtual platform, trying to discuss about the corporate level strategies. Maybe what kind of strategic visions we are going to have? This is called a management teams. Then essentially you see that managers are in a people in the middle level or senior level management, actually form this management teams.

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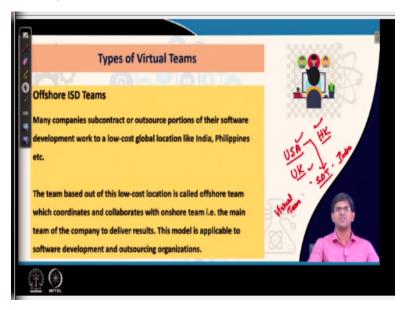


Then the next one is a project or a product development teams. These teams are classic virtual teams where we developed even in 1990s, we are still seeing these project or product development teams. They were actually you see that company, that is a time after the globalizations, companies started to have their operations in multiple locations, multiple countries. And they have their project team's product development teams operating in multiple locations, they are connected over the platforms.

They were actually trying to develop a product or deliver a service or deliver a product to people of the different countries. And some members of the team are operating in different locations; they were collaborating and trying to work on a same project or same product. I as a team member work in UK and another set of team members I have operate from USA and another set

of team members are operating from India, they are all collaborating are still working on the same project. So, those are all from a project or a product development teams.

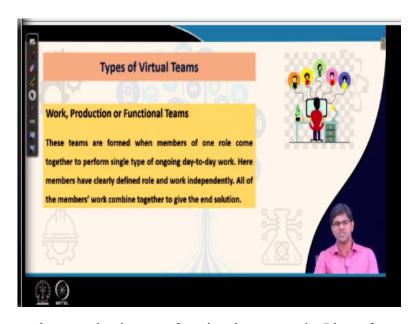
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Then comes offshore software development teams. So, many companies subcontract or outsource portion of the software development work to the low cost global companies, may be global countries like India or Philippines. So, these countries are we have a lot of skilled workforces. And they are actually many countries use this as a destination to have the offshore locations, where I can actually have my offshore team players who were working on my product, my IT enabled services.

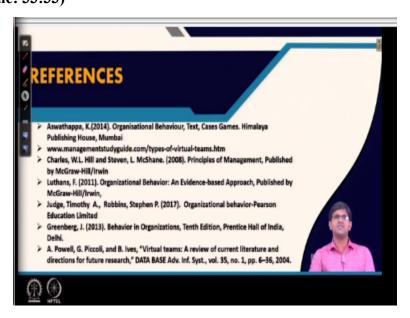
But maybe I may be a company in USA or probably my company is from UK or maybe from Hong Kong, probably with this country, I have my corporate headquarter there and trying to have an operations. But probably, I will have my software development team from India. So, how do I connect? How do I monitor? Through this virtual team I am trying to connect and then ensure that yes, they are able to carry out the performance or carry out the activities of the organization.

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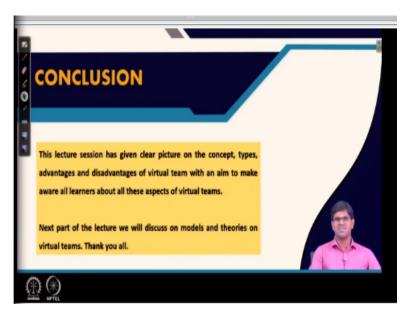


Then we also see work or production or a functional team maybe I have form a functional teams they are connected when I have an operations in multiple locations probably I want to have a functional teams through virtual platforms to discuss about ongoing day to day work. So, they will have a clearly defined and work by independently. So, all of them were combined together to give the a solution. Because though I work in different locations probably but everybody collaborates and try to run the show and then they will be able to give address as and when an organization requires.

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So, today we had discussed about concepts of virtual work teams and we also discuss about the difference between traditional work teams, and we also discuss about some of the different types of virtual work teams, ranging from network teams to management teams to product or product development or project development teams. And now we are getting a understanding about what is this virtual work teams. In the next discussion, next lecture we are going to discuss about models and theories of virtual teams. We will all see you in the next lecture, thank you.