

Working In Contemporary Teams

Dr Chitra Dey

Department of Management Studies

Anna University

Week – 04

Lecture - 16

Team Dynamics in Agile teams

Welcome to lecture number 2 of module 4. In the previous lecture, we saw what is agile methodology. We looked at the principles and values of agile. Then we looked at what are Agile teams and some of its common applications across different industries. Finally, we looked at how we can design effective Agile teams. We looked both at composition and structure so that we can create effective Agile teams.

Let us see what we are going to do in this lecture. In this lecture, we are first going to focus on team development. Due to certain characteristics of Agile teams, team development becomes a very crucial and critical factor to ensure that the team functions effectively. The second aspect that we are going to look at are the different team dynamics.

Then I will introduce you to one organization which has effectively introduced Agile methodology in its teams across different locations. Finally, we will look at what are the outcomes which are important for teams and we will close the chapter by looking at challenges people face when they work in Agile teams and what are the future aspects which will be important for working in Agile teams. Before we go into team development, we have to understand why it is so crucial for Agile teams. There is a characteristic of Agile teams which makes team development very important and that is the high level of dependency. Agile teams are highly dependent on external stakeholders.

Agile teams have to constantly interact with customers to understand the customer's changing requirements of the product they are building. Agile teams also have to coordinate and collaborate with other teams which are working in the same product. Next, the team members, that is the members who are within one Agile team are also highly dependent on each other. How do we manage such high level of dependency? Well, one of the ways in which we can manage such high levels of dependency is by

creating a highly cohesive team which has a very good and shared understanding of the team as well as the team's task. And one of the important levers which we can use to build such kind of teams is by focusing on team development.

The team researcher, Tuckman, noticed that teams go through their life cycle in five stages. The first stage is the forming stage. This is when the team members are introduced to one another. They are usually very excited about being part of the team. They are looking forward to working in the team.

They are trying to figure out what is the team's task and also they are trying to understand what is their individual role in contributing to the team's task. In this phase, usually you will see that people talk positively. They do not bring up topics which could possibly lead to any kind of conflict and they are really excited about looking forward to the team's work. Then comes the crucial phase of storming. This is when conflict slowly raises its head in the team.

There could be differences among team members in their working styles or also in their concept about what needs to be done in the team. Because of these differences, conflicts can arise. Team members can also start vying for leadership and power positions within the team. Now, at this phase, it becomes very crucial for team members to start listening to one another and understanding how they can contribute together to the team's task, which brings us to the next phase, which is norming. In the norming stage, team members begin to understand that they have to collaborate and that each person has a specific role which is important for the completion of the team's work.

People begin to have consensus building. They look at trying to solve problems jointly and slowly, cohesion within the team starts to build. The next phase is the performing phase. This is the true phase where there is a cohesive team. Team members usually give up their individual points of view to make sure that the team is moving towards its team goal.

There is also sharing of work and help and there is also a lot of mutual understanding between team members. This is the phase where true shared leadership emerges and there is a lot of flexibility between the team members working. Now, in other kinds of teams, the next phase would be the adjourning phase, which is when the team delivers the final product, evaluates its performance and shuts down the team. However, usually in agile, teams are long-standing teams. Therefore, we do not put a lot of emphasis on adjourning phase, but that does not mean that the adjourning phase is not important.

Now, the importance of the five stages of team development model is that teams do not

rush into performance phase unless they go through the forming, storming and norming phase properly. And we would have seen the structure of the team where I said that there are three important roles in agile teams. They are the product owners, the team lead or the agile coach and the team developers. Now, the role of the agile coach becomes very important in team development. The agile coach is the person who helps the team form, storm and norm as fast and as best as possible so that they start performing well.

Having seen what are the five phases of team development and having understood what are the characteristic feelings and behaviors which team members go through in each of these phases, let us see how the team members in agile teams can manage each of the phases of team development. This is to ensure that the team moves from one phase to the other as smoothly and as fast as possible so that they hit the performance phase as soon as possible. In the first phase, which is the forming phase, the main challenge is to help the team members develop a good understanding about each other and also set clear expectations about what the team has to deliver for the team task. Now, for the teamwork, here it is very important that the team members understand how they fit in. One way to do this is by explaining what are the strengths and weaknesses of all the team members.

Team members should know what are the technical strengths of different team members and make sure that they know who they can approach when they need some kind of help or clarity when they start their work. So, a good introduction is what needs to happen during the forming phase. Now, in terms of setting expectations about the deliverables in the task, one of the important roles is that of the product owner. The product owner is a person who has a very good understanding of the business of the client. He or she has to translate these business requirements into deliverables on which each of the agile team members have to work.

Now, it is not something which the product owner dictates to the team. The team developers and the product owner together work on understanding what are the deliverables for the agile team. So, in the first phase of team development, it is important to help the team understand one another and also to set clear expectations about what the team has to deliver. But again, I would reiterate the focus is on building the team rather than making it focus on the task. The next step or the next phase in team development is that of the storming phase.

Teams move from the forming stage into the storming stage when they move out of their comfort zone. That is, when they stop being polite to one another and start asking questions which can raise issues because of differences in working style or because of differences in opinions about how the work should be done. The storming phase is also a

phase where team members begin to compete with one another for leadership positions and for power positions within the team. So, the different members of the team have to make sure that this is the phase when the conflicts are faced head on, resolutions are found and then the team members start listening to one another. This can be done by ensuring that there is continuous feedback between team members, issues are identified and resolved as and when they come up and because of these two things, trust builds within the organization or the team.

Now, it is very important that the team members start listening to one another and understanding that they need to collaborate to get the team task done. Without this happening, the team cannot move towards the next phase which is the phase of norming. The phase of norming is when the team members start to collaborate with one another. The team is slowly building as a cohesive unit. Team members start working on consensus and join problem solving.

They recognize what each team member contributes to the team task. When this happens, shared leadership also emerges. That is team members take up leadership roles as and when the opportunity arises. Team members need to recognize the skills and competencies of each other to be able to come forward as leaders and also to allow other team members to come forward as leaders when the situation demands. The next phase is that of the performance phase.

The performance phase is when the team becomes a truly cohesive unit. There is true joint problem solving and members celebrate their success whenever they achieve small milestones. Also, team members set aside their individual priorities so that the team can move towards the team goal. The last phase is the adjourning phase. The adjourning phase is when the team delivers its final output, when it evaluates its performance and disperse and the team members go on to different other teams.

Now, what agile teams can do during the adjourning phase is to make sure that they capture the learnings of each team member from that particular project that they worked on and make sure that this learning goes with each team members to different teams. It is also very important to celebrate the contributions of each team member and also celebrate the team having successfully completed the project. However, I must also point out that the way the agile teams are structured is such that they celebrate small wins over the period of the team's life. And therefore, adjourning is not about the only celebration that you are going to have in recognizing the team's effort, but there are other recognition also happening during the life of the team. Now, how does task work happen in agile teams? The five phases of team development is primarily focused on how the team develops, that is how the team members start working with one another.

But the work that is the task which the team has to complete is broken down into small blocks of called sprints. In each sprint, a team has a very specific task or milestone which it has to achieve. This is done so that the team can manage the huge project. Each sprint is about two to four weeks in duration and there are very set deliverables which the team has to give. The team members, the team agile coach and the product owner together decide what has to be achieved in each sprint.

And they also decide when we can say that the tasks of that particular sprint has been finally delivered. That is when do the team members know that a sprint is over. A sprint is also important because it gives the teams an opportunity to celebrate a small win. Also, it gives the team an opportunity to understand how they work together as team members and identify areas for improvement for teamwork.

Now, we move on to team dynamics. Researchers and practitioners have been studying traditional teams for a long time. And looking at how effective traditional teams work, they have come up with different kinds of theories which help the teams to manage their work so that they are effective. One of, for example, one of these mechanisms is the traditional coordination theory. Traditional coordination theory, for example, helps us understand what are critical dependencies for teams and then proposes certain solutions for these dependencies. A team might have a dependency on a resource or a particular person.

Therefore, what happens is that the team leader or the team manager identifies the task which has to be done, identifies the critical resource who is going to do this task and then assigns the task to the resource. Another dependency which can happen in traditional teams is the dependency on a customer. So traditional theory says that one way to solve this is by having standardization. That is, we develop a template which can be used across customers. Another dependency is the dependency on multiple stakeholders.

How can teams manage dependencies on multiple stakeholders? Well, create extensive documentation to ensure that these dependencies are captured and then shared across the different members. Now, the interesting point here is that agile does not use traditional mechanisms. If you have a team which uses any of the mechanisms which I have just listed, it's very possible that it is a traditional team which is masquerading as an agile team. Agile has a different set of mechanisms to ensure that the teamwork happens smoothly. One example is that agile does not depend on extensive documentation.

Instead, it forces its members to have frequent communication with each other, so they kept up to date about the requirements of multiple stakeholders and dependencies

between team members. Another important difference between agile teams and traditional teams is that it is not the team leader or the team manager who identifies the tasks and assigns it to a team member. The assignment of task among team members and how it should be done and when it should be done is something which the team members decide along with the product owner and the Agile coach. So, in the following slides, we are going to focus at some of the team dynamics, but please bear in mind that these dynamics are very different from the dynamics of traditional teams.

So, first let us look at team coordination. Agile teams have been created primarily to deal with two important issues which is constant change and high level of complexity in Agile projects. Now, this is solved in Agile teams by making sure that the team members work in a timely and integrated manner. They prescribe frequent interactions among the team members so that they can exchange important information with one another. Agile also prescribes certain tools and techniques to ensure that team members can quickly look at these tools and identify where they are in terms of teamwork and task work. One such example which I have given in this slide is a wall board which displays story cards.

One look at the wall board can help the team members quickly understand how they are progressing in terms of the sprint which they are currently in. It can help them identify where the progress has happened, where there is a challenge and who needs to do what so that they can move towards closing that sprint. Some of the other coordination mechanisms which teams use here are done lists and code repositories. Another major challenge which Agile teams face is that of communication. And Agile team usually prescribe co-located teams which are highly bound to ensure that communication happens smoothly.

The team members usually work in the same space and they are also highly bounded. That means team members in Agile usually do not work on more than two projects at the same time and even then they try to work on one project at a time. Second, most of the members of the Agile team work on the core task of the team and except for a very few members who are not required throughout the life of the team, most of the team members stay within one team itself. Another prescription for improving communication in Agile teams are face-to-face meetings. Research has shown that face-to-face meetings increase productivity a lot.

And since members are all at the same hierarchical level, there should not be too much of friction for them to communicate. One of the prescriptions for ensuring smooth communication are daily meetings which are called as stand-up meetings. Stand-up meetings help the team members to ask each other for help. It also gives them an opportunity to inspect the work of one another and to adapt the work done so far and

take corrective action. So, it is not at the end of the sprint or it is not at the end of the project that you are doing a postmortem.

It is during the work itself that the team members look whether they need to do any corrective action to put the team back on track. Now, one important question which both researchers and practitioners are trying to answer is what happens to distributed Agile teams. Because of the scarcity of certain resources and because of business context, sometimes teams have to be distributed. We are still figuring out ways in which we can come up with processes and policies to ensure distributed Agile team work in an effective manner. It is very important to notice that Agile teams do not promote competition.

They are not structured and they cannot work effectively if the team members are constantly fighting among each other for leadership and power positions. To ensure that the team members collaborate, teams are usually self-managed. That is, the product owner gives them the list of tasks but it is the team which decides what task had to be done when during which sprint. Another important aspect of collaboration is cross-training. I had mentioned the concept of T-shaped professionals or T-shaped developers when I was describing about team design.

That is, the team members should not only be very good in their own functional areas but they should also have a good understanding about the work which other team members are doing and this will allow them to collaborate well with one another. One of the mechanisms to help team members achieve this level of collaboration is through encouraging cross-training, that is, learning from peers. This is easier said than done because the team members not only have to spend time on improving their technical expertise but also they have to spend time on understanding what other people in the team are doing. And the other people in the team should also be generous enough to share their learning with other team members. So the different members of the team have to work together to schedule these kinds of cross-trainings.

The next important process in agile teams is team boundary spanning. Team boundary spanning happens when team members reach out to people outside the team either for getting resources or information. Agile teams have certain specific roles which help in team boundary spanning. For example, the role of the product owner ensures that the team is well connected to the customer. But we should keep in mind that all the members of an agile team is expected to be in touch with members outside the team.

It is not the sole responsibility of the product owner to do boundary spanning. Boundary objects are also extensively used to make sure that other team members from other teams

and other stakeholders are also constantly updated about how much of the work the team has accomplished and what is the level at which they are. One important aspect of team dynamics for agile teams is team cognition. I have mentioned when talking about communication, coordination and collaboration about the importance of knowledge sharing, creating shared mental models and also situation awareness for team members. It is very important that we have different mechanisms and processes in place so that team members can share knowledge with each other.

This sharing of knowledge should lead to the development of a mental model which is congruent between all the team members. That is an understanding of who does what, that is the teamwork and what kind of work should be done, this is the task work, should be spread among all the team members. Not only that, considering the sprints in which the teams will be involved, all the team members should have a very good awareness of the situation of the team. Some of the different ways in which the teams can build this is by using the mechanisms which I had talked about in the previous slides. To develop team cognition, it is very important that there should not be a volatility in membership.

If the team members constantly keep changing or if there are new additions to the team at any different phase in its life cycle, then it can cause problems in knowledge sharing and also the new member of the team will have to be brought up to date in terms of the shared mental model. Another aspect is that there should be constant communication and coordination mechanisms happening to ensure that team members are on the same page. Daily stand-up meetings are very important here because this is not only a place to ask for help, but also to inspect the work that they have done so far. To ensure that teams are able to do this, they rely heavily on tools and technical factors. For example, by using shared folders, by using different kinds of templates, calendars and time sheets, planning and scheduling is managed.

A shared calendar is something simple which helps the team members look up what is the time at which look up the availability of other team members for having different kinds of meetings. Templates also help them make sure that the work that they produce are comparable. Collaboration also happens through shared documents, dashboards and reports. Shared documents are very important because they not only help us track which team member has contributed to what, but it also helps us keep a track of what are the different versions through which the product has progressed. Performance evaluation also happens through reports, making sure that the work of the team remains as transparent as possible to all the team members involved.

Another important aspect of team dynamics is the work environment. Now, I have introduced you to so many challenges and different mechanisms to address these

challenges. But one very simple way in which we can help agile teams work effectively is by designing the work environment appropriately. Well, one prescription is to have co-located teams where team members are working in the same space. However, this can be challenging when it comes to organizations which offer team members the possibility of remote work. Another mechanism which we can use to help teams collaborate effectively with one another is shared space.

Now, the picture which I have given in this slide is an example of a shared space. You will notice that the work environment is structured in such a way that members can work alone when they want to and the tables can be quickly rearranged so that more team members can join in to have team discussions. So, shared spaces should not only be such that they encourage teamwork, but they should also be elastic enough to meet changing requirements in team size. Now, I would like to give you the example of an organization which has very successfully implemented agile methodologies in its teams. And this is the audio streaming and media services provider with which we are all familiar called Spotify.

Spotify has successfully implemented agile methodologies across its teams in various locations. But Spotify did not start out its life in this manner. It started out by using an agile methodology called Scrum. However, when the organization began to grow and the teams also began to grow, they found out that the Scrum methodology alone was not enough to help the teams deliver the results that they wanted the teams to deliver. So, the organization decided that they will adopt a structure that supports the processes that drives performance and innovation.

So, let us see what this structure is. The basic unit at Spotify is called as a squad. This is a self-managed team which consists of developers, product owner and an agile coach. Earlier, I had talked about team design, where I said that there is a role called as the team lead. The team lead or the Scrum master is the person who has a very good understanding of agile methodology and helps the team members implement these principles and values when they work. So, this agile in Spotify, this role of team leader is called as an agile coach.

The agile coach is not a leader in the terms that he will dictate others what to do, but actually has a servant leadership role. That is, his primary responsibility is to meet the needs of the other team members. Apart from this, there are certain other characteristics of the squad. The squad has the autonomy to choose the development methodology to deliver results. Now, I had said that there are different methodologies under the umbrella of agile methodology and the teams in Spotify have a certain amount of freedom in choosing which methodology to follow.

And these are self-reliant teams which run from the design phase to the release phase of the product. Team members are highly bounded, that is, they are dedicated core team members who work on one team member, one team alone. And these teams are long-standing teams which focus on certain areas like for example, providing payment solutions or building radio experience and so on. What are the other ways in which members are collected in Spotify? Well, we have tribes, chapters and guilds.

Tribes are a collection of squads from related work areas which stay together. That is, they are given co-located spaces where there is a lot of shared space. Now, since teams working, since these are teams which work on related areas, it is very likely that they will face similar problems across different squads. So, when you have a tribe, team members of different squads are expected to share expertise and also knowledge among each other so that it will be easier for them to face challenges in their teams. The next way in which the members in Spotify are grouped is called as a chapter.

Chapters consist of people who have similar skills or competencies. And the person who leads a chapter becomes the line manager for the different team members. In this sense, the agile methodology very much resembles a matrix organization. Another important structure which Spotify has adopted to ensure knowledge sharing is that of a guild. These are informal teams which are formed which consists of people who have similar interests. And these guilds meet once in a while to ensure that they share information with one another.

So, if you look at the structure of teams in Spotify, it is created in such a way that teams can focus on their dedicated work. Teams can share knowledge between teams which are working on similar problems. And also, they are structured into chapters so that people who are having similar competencies can also help one another. More information about Spotify can be obtained on the web in the link which I have given at the end of the slide.

Now, let us come to the important team outcomes. It is without doubt that adopting agile methodology helps teams have a very high degree of effectiveness and efficiency. And without doubt, there is a high improvement in the quality of the product. You will remember that in the first lecture, I said that the very concept of agile methodology was brought into being because software developers felt that teams were developing products which were not useful for the customers. So, because of the way the team is structured and because of the way the tasks are structured, without doubt, there is a reduction in cycle time, reduction in costs and errors. But more importantly, there are performance outcomes which go beyond effectiveness and efficiency.

And that is, one, agile teams have more satisfied customers. These customers can include members who are within the organization or internal customers and external customers as well. And very importantly, agile methodology ensures that the employees are highly engaged in the work that they do. And because of the way the work is structured, members have a lot of opportunity to learn when they work in agile teams. Another important outcome for teams in agile is team viability. Team viability is the extent to which team members look forward or want to work with the current team members in future team products.

Because the teams are long-term teams, it is very important that team members like working with one another. Because of the high levels of autonomy and self-management, which are associated with agile teams, we will see that there is an increase in team viability. However, are agile teams without challenges? No. Like I said before, any volatility in membership can cause problems. If a new member is introduced to a agile team, the agile team has to go back to the forming stage and then go through storming and norming before they can become fully-fledged performing teams.

Another challenge with agile teams is developing the concept of shared leadership among the team members. That is, team members have to realize how they themselves and other team members can contribute to the team task. As and when the situation arises, team members have to come forward and take the leadership position based on their skill and competency. Another challenge here is developing team leads or agile coaches and product owners. Remember, I said that the product owner has to be someone that the team members trust and the product owner and the rest of the team together have to prioritize and execute the work in each sprint.

Another big challenge for agile teams is to develop T-shaped employees. Team members should have the mindset not only to develop expertise in their own functional areas, but also have a broad understanding about the work done by other team members. So, what does the future hold for agile teams? Agile teams are going to find an increasing application when businesses start focusing more on customer demands and because of the changes in the business environment. We can expect that agile methodologies in some form or the other will start being implemented in teams across different kinds of industries. So, one important aspect which bears in mind is that we need members who have social skills which are required to collaborate as much as technical skills which are required for the job which they have to do. Instilling of these social skills will have to start when we are educating students and training employees to work in agile teams.

Also, it's very important that we focus on teamwork before we focus too much on task

work. The final thing which we have to keep in mind is the increased use of project management tools and training the team members to use these project management tools optimally. To summarize, in this lecture, I focused on team dynamics in agile teams. We talked about how teams develop.

There are two aspects here. One is the development of the team and one is the task work. The team development was explained through the five phases of team development model. Then we looked at communication, coordination and collaboration in agile teams and how they are different from traditional teams. Then we closed the chapter by looking at the challenges that people face when they work in agile teams and what is the future of agile teams. As always, I leave you by looking at interesting topics that you may want to look up.

Please look at the net to identify other instances of organizations which are using agile. Please share this on our shared workspaces so that other people who are using this course also can benefit from your comments. Another thing which you might want to look up is what are the different frameworks under agile and how you or your organization can choose one framework that fits your organization. You may also want to look up shared leadership and servant leadership and how it can be developed in your organization. Finally, also look up what are the tools which help agile teams. With this, I leave you till we meet again.