# 3. Developing from a group into a virtual team

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#### Learning outcome

You will create a framework for analysing how a loosely assembled group of individuals can develop into a virtual team utilising Tuckman’s team development phases and considering such factors as trust and relationship building, goal setting and the communication process.

Objectives

At the end of the session, you will be able to

* describe the phases of the team development process based on Tuckman’s model
* identify factors that influence the team development process
* review the possible impact of these factors on the team’s life cycle
* outline a framework which can be utilised when viewing a group's development from a loosely related gathering of individuals into a fully-functioning team

## 3.1 Prelude

In the previous two units we have not only discussed the relevance of virtual teams in work environments, but also developed an understanding of the basic theories related to interculturality and proposed a dynamic and open approach to culture. With this knowledge we will now turn to the question of how a group actually develops into a team. To help us to understand this, it is vital that we consider the specific development steps that might lead towards a well-functioning team and therefore successful teamwork.

#### Download: Learning journal for session 3

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## 3.2 Introduction

Have you ever worked in a group that seems stuck in endless discussions, where nothing seems to get done; and then, shortly before the submission deadline, one or two members scramble to complete the task in order to hand in a hurried piece of work on or after the deadline? Or conversely, have you ever been a member of a group where every participant reaches out to their fellow team members, where everybody is glad to contribute and has a clear idea of their tasks, and where you feel that working together has enabled you to achieve more than you would have been capable of on your own?

Most of us are likely to have experienced both, i.e. being a member of a group that never managed to develop into a team, with members pulling in opposite directions, as well as witnessing the satisfying and enriching experience of working in a group with an open and productive atmosphere where everyone's voice is heard and these voices are formed into a consensual group objective. The reasons for each of these very different experiences are manifold, but we can state from the outset that simply 'throwing' people together because they possess certain qualifications, expertise or are located in a geographical area or department with no further thought is unlikely to make an effective team. A fully functioning team, as opposed to a work group, is characterised by collective thinking and the development of a team identity and mutual cooperation.

Knowing that a team matures by moving through different development stages and knowing how this process can be supported is one important precondition for moving from a loosely put together group into a team. It is also vital to understand that a virtual team is an extremely dynamic entity and every team differs in its path and speed of development. Some, for example, develop in an ad hoc manner due to an emergency, and may not even attempt to become a fully-fledged team. In contrast, there are also stable teams with a consistent leadership, clearly defined roles and functions where the members have developed a sound working relationship over many years.

In the light of this, the purpose of this unit is to raise awareness of the different processes involved in becoming a team and to outline some steps which encourage the development of a well-functioning team.

### Task: Differences between a group and a team

One of the first things we need to differentiate is the difference between a group and a team. Look at the figure below and in your own words, note down the main differences in your learning journal.

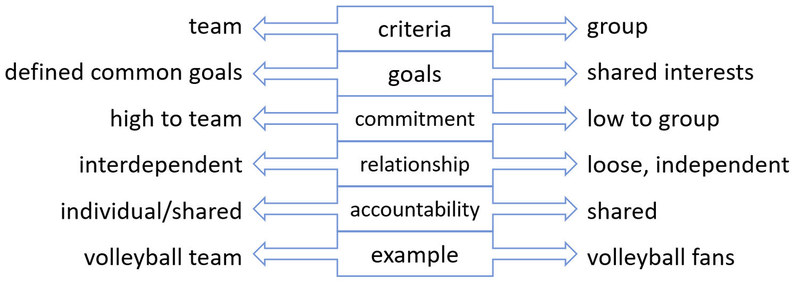


Diagram developed by Andrea Voigt for this course

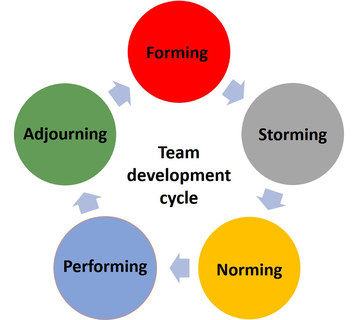
###### Sample answer

This is Alexa's answer

A major difference is that a group is a loosely coupled bunch of people sharing an interest and have an understanding of common bonds or in other words, are aware of one another. In contrast, a team is interdependent, has a clearly defined goal and members have a high commitment towards achieving this goal. This means that for a team to become fully effective, they have to cooperate and thus coordinate their tasks closely, develop a common work rhythm and a team identity. Their goal ultimately is to think and act like a team which produces a result which they could not have without the cooperation with other team members.

## 3.3 The life cycle of virtual teams

If we understand a team as a group of people who become interdependent and work together towards a common goal, then intuitively we can say that this team passes through a process of development, often referred to as a life cycle. The life cycle of a team indicates a series of phases that a team experiences until it reaches maturity. The most well-known model that tries to encapsulate these phases was developed by Tuckman back in the 60s, which includes four distinct phases of team development: Forming, Storming, Norming and Performing. Adjourning was subsequently added as a fifth phase.



**Forming**: This is an introductory phase characterised by participants' efforts to gain orientation and test out possibilities. It is therefore often also referred to as the ‘ice-breaking’ phase. The group shares information about themselves, gets to know each other, seeks orientation and initially tries to identify the boundaries of both interpersonal and task behaviours through experimentation. With regard to the objectives, the group attempts to define tasks through the identification of relevant information and respective ground rules relating to each task. All members further try to discover which interpersonal behaviour is acceptable to the group. Here they look towards the team leader, other members or existing structures and norms for guidance and support in this new and uncertain situation. The cooperation is often initiated with a virtual or in-person kick-off meeting, where group members introduce themselves and exchange initial information.

*"I believe that this was the easiest stage we went through, getting to know each other better on a personal level. This stage might have taken a bit longer than usual due to the physical distance between us. We all had to overcome the initial shyness to build a team purely through virtual communication. But I think it was the right choice to put a lot of effort into this stage because it was the foundation for all the other stages."*

Source: Learning journal, 2020

**Storming**: This stage is characterised, as its name suggests, by spirited discussions and arguments, more competitive behaviour and polarisation in interpersonal behaviour and at times conflict. Group members start to assess their own needs, and may attempt to put them ahead of the needs of the group. Similarities and differences between the group members become more visible and conflicts may emerge as the group tries to find suitable roles and responsibilities. There is a likelihood that group members disagree with the leader and with one another as a way to express their individuality. They tend to respond emotionally to task demands and exhibit resistance to suggested actions. Infighting and lack of unity are distinct features of storming. In a virtual environment it is especially important for both the team and the leader to develop sensitivity towards potential sources of conflict. This is even more critical in virtual settings due to the limitations on available communication channels.

*"Looking back, this was the stage we really struggled and noticed the challenges of only communicating on a virtual basis. Brainstorming and having open discussions only in a virtual conference was difficult."*

Source: Learning journal, 2020

**Norming**: This is the phase when the group has transformed into a cohesive team. It has overcome previous resistance and now, with needs of the various team members having been met, openness to other group members dominates the interaction, both on a task and personal level. Personal and more intimate opinions are exchanged and teams implicitly or explicitly recognise and agree on ways of working together and completing tasks, and rules are made accordingly. On the interpersonal level, members start to accept the group and the individuality of fellow group members, thus starting to form a team identity. In-group feeling and cohesion develop, new roles are adopted and new standards and norms are created through consensus. Cooperation plays a key role in Norming.

**Performing**: This is the stage when the team works together productively and focuses on producing results. Roles become flexible and the focus is shifted to the individual functions and competencies of the members in the group. Subjective relationships are established, the members adjust their behaviour to the goals of the group and respond to each other in ways appropriate to the task. Conflicts are used to test and align agreements. Constructive attempts to accomplish the task  incorporate a variety of opinions and methods. The members are highly motivated and willing to learn from each other. The group, now functioning as a unit, concentrates its energy on the task at hand. A group needs to reach the Performing stage in order to be fully effective and utilise the competencies of the group members to perform at its best as the following quote indicates:

*I noticed that during the course of time everything becomes a bit more emotional. People celebrate achieving their goals and the steps leading up to themTOGETHER. But also people get annoyed. You can see it when someone does NOT answer for a certain time, probably because of an unpleasant situation, or loss of enthusiasm.*

(Translated from the German quote below)

*B8 (l.301—306): "Und ich stelle schon fest, dass im Verlauf der Zeit das alles so ein bisschen emotionaler wird. Man freut sich GEMEINSAM über erreichte Ziele, Zwischenziele. Man ärgert sich. Man sieht, wenn jemand über einen gewissen Zeitraum NICHT antwortet, dass er vermutlich, wenn es eine unangenehme Situation ist, vermutlich eher weniger begeistert ist."*

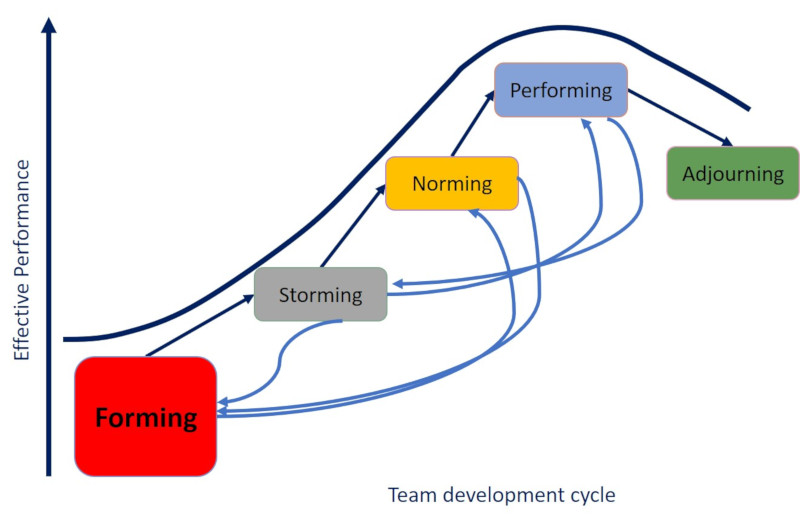
Source: Randhawa, 2020, p. 103

Adjourning: This is the stage when the project starts to wind down and team members complete their tasks. Team members' thoughts start to be diverted and the team is dissolved, or, if possible, reassigned to a new task. Under certain circumstances, the end may cause disruption, and in the process of dissolution, group members may experience feelings of sadness, uncertainty and appreciation of fellow members and the group might experience what could be called a type of ‘mourning’. There may be further self-assessments and evaluations of the group's success.

#### Critique

The team development phases outlined by Tuckman provide a generalised view of how a loosely bound together group of people moves through various phases of maturity in order to become fully effective. What it highlights is that the mere establishment of a project team is no guarantee for success and that it is crucial to acknowledge that team development is a process which needs to be sufficiently supported and promoted in order for the team to make the best use of the team members' competencies and experiences and thus achieve its full potential.

Crritiques of the model suggest that the linear development through phases cannot be supported by evidence. In reality, some teams shorten phases or skip them altogether. Furthermore, teams spend varying amounts of time in each phase and some teams find it difficult to complete the storming phase and move on to higher levels of development. In addition, it is not uncommon in practice for teams to jump back to earlier phases or start the process all over again as indicated in the illustration below. In reality, therefore, we can see the process as a constant and synchronous movement through all phases, albeit with a focus on one or two of the phases. It can also be seen that teams might become stuck in a certain stage of development, but can still reach higher development phases at synchronization points, and that sub-teams can be in different phases on a social level compared to the overall team.



Source: Based on Tompkins, Teri C. (2000, p. 212)

### Task: Developing into a team

Think about a team you have been part of: Referring to the team life cycle, how would you illustrate or describe this team's development? Draw / paste the figure into your learning journal or note down the description in the journal (you can also do both).

###### Sample answer

This is what one participant noted down:

In my opinion, after the stage of forming which was very short, we immediately switched to the stage of norming, where we decided on our goal, divided tasks, started researching and preparing the information.

The forming stage was rather short and a lot later we realised that we should have spent more time on this phase, and actually I would say through our small talk phase now and again we kind of moved back to the forming stage occasionally.

The transition between the norming and the performing stage was smooth and gradual. We were interacting respectfully with each other and our discussions were constructive, yet we were working eagerly and making good decisions. Later on, during the performing stage we at times developed an operational blindness at some point and realised that it would have been better to find out more about our team members. But because we reached this stage at a quite early stage of the whole project, we were still very motivated and wanted to give our best. So we didn’t mind that we kind of had to go to the storming and forming phase at that point.

Because we have not yet handed in our project, the adjourning phase is still to come.

The speed of the maturing process depends on factors such as the skills and competencies of the team members, the time available, the level of virtuality, the requirements of their tasks and the organisational context in which they work. Maturity cannot therefore be measured by time but by signs of group development and the ability of team members to develop shared meaning and working routines and learn from its work processes.

In view of the criticism, it needs to be acknowledged that groups are complex, adaptive systems that are driven by interactions among group members and that developmental paths can deviate from the ideal-typical course described by Tuckman. Some groups may not experience all of Tuckman’s phases or they may experience periods of stagnation, followed by periods of activity and subsequent development. Others may change the order of the stages or go through iterative loops as they loop back into earlier phases.

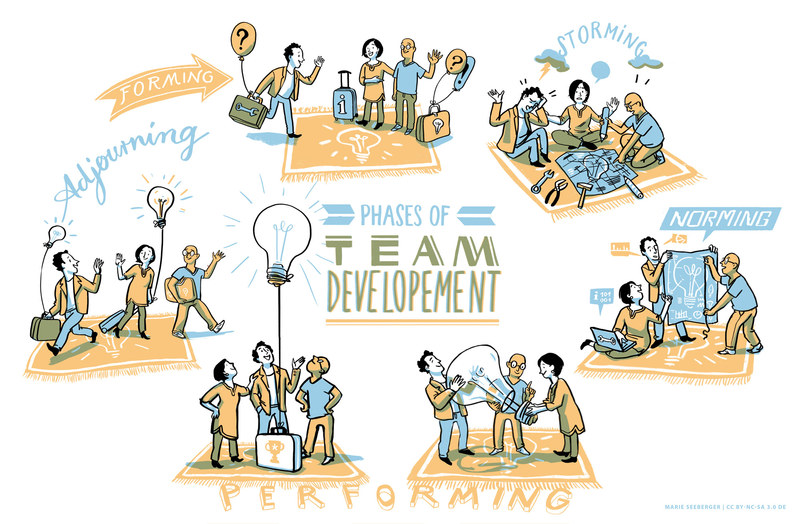
Nonetheless, the fundamental processes described within Tuckman’s phases are plausible: Every newly formed team needs an acclimatisation period during which the team members try to deal with the unfamiliar situation and strive for orientation and guidance. It also seems plausible that conflicting positions and needs arise over time and that these issues need to be dealt with in a "norming" process to ensure further cooperation, and that, if teams fail to handle these issues constructively, successful collaboration may be endangered. Finally, it seems realistic that teams do not immediately achieve the performance that is expected of them and that it rather takes time for them to mature, or indeed that the team never fulfils this potential. Moreover, the model is convincing in its simplicity and its intuitive character, as it is easy to understand and to apply. Despite the criticism mentioned, it retains its value as a simple tool for analysing and discussing team dynamics as the following quote suggests.

*"Sometimes it helps to have such phases and to go a few rounds, then discuss it with the team and present a model, because it often results in pictures. Then I say: '[...] Every team undergoes phases of development and I even have an impression that we are at THIS point now. And what do you think?' [...] And then one can use such a model to show and ask, what it looks like for you?"*

(Translated from the German original below)

*B2 (l.130-143): "Manchmal ist es hilfreich, wenn man solche Phasen hat und man muss ein paar Runden drehen, dann das mit dem Team zu besprechen und einmal so ein Modell vorzustellen, weil das häufig so Bilder ergibt. Dann sage ich: ‚[…] Jedes Team hat Entwicklungsphasen und ich habe gar den Eindruck, wir stehen an DIESER Stelle hier. Und was meint ihr denn dazu?‘ […] Und dann kann man anhand so eines Modells aufzeigen, wie sieht denn das aus für euch?"*

Source: Randhawa, 2020, p. 64



Illustrations by Marie Seeberger (<http://www.behance.net/marieseeberger>) [CC-BY-NC-SA 3.0](https://creativecommons.org/licenses/by-nc-sa/3.0/deed.en) license

### Task: Central characteristics of team development stages

Look at the images of team development and note down central characteristics of the different development stages in your learning journal.



###### Sample answer

**Forming**

This stage is characterised by:

* Novelty and the excitement about the project ahead
* Uncertainty and anxiety as to how things are going to work
* Frustrations because things seem to move slowly
* Members asking lots of questions
* Team atmosphere characterised by politeness as the team gets to know each other



###### Sample answer

**Storming**

This stage is characterised by:

* Team members challenging the validity of the task to be performed
* Slow advancement
* Tension between team members
* Disagreements concerning roles and responsibilities
* Negotiation of rules and work routines
* Some team members becoming very active whereas others are more laid back



###### Sample answer

**Norming**

This stage is characterised by:

* Considerable openness with each other and readiness to express real ideas and feelings
* Team members recognise, acknowledge and appreciate the variety of opinions and experiences among team members
* Starting to focus more on the task
* Team members appreciate to be part of the team and
* Develop their own team routines



###### Sample answer

**Performing**

This stage is characterised by:

* Team commitments to the task goal and collaborative teamwork
* Team members respond to each other in a conducive way
* Problems are solved in a constructive way
* Team members monitor its performance
* The team works hard and effective



###### Sample answer

**Adjourning**

This stage is characterised by:

* Team members slow down in order to prolong the project or speed up in order to finish before the deadline
* A feeling of loss as the team work comes to an end
* Concern and anxiety about the time after the project
* Appreciation of what has been achieved

## 3.4 Features of team development

#### Introduction

Each team must find its own speed and pattern of development. There is evidence that the maturing process of a virtual team is likely to be more complex and challenging than is the case with an in-person team. It is important to keep in mind that the stages of development are not mutually exclusive. Activities at one stage may overlap and recur at another and in the course of working together, a team may return to an earlier stage of development. Overall, there are four dimensions that can be clearly highlighted as vital to team development. These are: developing trust, clarifying roles and objectives, ensuring open and friction-free communication, personal relationship-building and collaboration. In the following, these dimensions and their relevance in the various development stages will be discussed.

Trust

A critical driver for developing a positive working climate and achieving task performance is the development of trust. Trust or trusting as a central variable can be understood as the belief in the team’s competence and integrity to manage the task well. Additionally, trust refers to the willingness of team members to be vulnerable in the sense that a person trusts the actions of another person without being able to monitor or control the validity of the action. Furthermore, trust involves disclosure in the sense that a person is ready to share confidential or private information and talks about their own mistakes and weaknesses. Trust is essential in relationships that require collaboration and cooperation and is positively related to a team’s satisfaction, performance and commitment to a task. Trust is also critical to effective communication and a low level of trust may, for example lead to ambiguous information being interpreted negatively.

*Well, if you don’t have trust, it’s not a team. How can you work well with people you do not trust? A team without trust is not a team, full stop."*

Source: Learning journal, 2020

From a personality perspective, some people more than others are intuitively prepared to trust. People with a high tendency to trust have learned in the course of their life that trusting others affords them more advantages than disadvantages, which is why trust is their default behaviour. This attitude is only expires when a person clearly displays untrustworthy behaviour. People with a low tendency to trust, on the other hand, initially act cautiously and sceptically in many situations. There may also be variations in an individual’s propensity to trust based on subjective beliefs about the extent to which trust is possible and meaningful in certain areas of life. For instance, a person may regard trust as appropriate in private contexts but not as a suitable strategy in work relationships.

At the beginning of a working relationship, where the interaction partners have hardly any information about each other, trust develops on the basis of calculation. **Calculation-based trust** is founded on an assessment of the extent to which one's own interests coincide and are compatible with those of the other person. The interaction partners weigh up the benefits and costs associated with the relationship, i.e. whether it appears worthwhile to take some risks when entering into a dependent relationship, for instance because there is a prospect of long-term cooperation. This trust can be kept alive through rewards in the event of expectations being met or the threat of punishment in the event of a breach of trust, e.g. loss of reputation. For some relationships trust remains at this level, e.g. because the parties do not need a more complex relationship or trust violations have occurred, thus making it unlikely that further trust will develop.

**Knowledge-based trust** occurs when the interaction partners get to know each other better through repeated and varied interactions and information sharing. It is based on the observation that the behaviour of the other is consistent over time and in different contexts, and thus one knows the other person sufficiently well in order to be able to predict future behaviour. Even if the increased knowledge about a person leads to the belief that the other is predictably untrustworthy, even this type of predictability enhances trust. Many working relationships do not progress beyond an enhanced knowledge-based trust.

In constructive, long-term relationships, in which the interaction partners get to know each other in depth and share many positive experiences, **identification-based trust** may develop. This is a deeply felt trust between the interaction partners. It emerges from knowing and identifying with the other person’s beliefs, values and intentions. In this case, strong feelings can develop between the interaction partners. They mutually understand, agree with and endorse each other’s needs and wants, and shift their focus from maximizing self-interest to maximizing joint outcomes. Identification-based trust thus makes it possible to act on behalf of the other and make decisions in mutual interest, so that any form of control or monitoring becomes unnecessary. However, identification based trust requires intensive and frequent interaction and only develops in a small proportion of relationships. This type of trust would be more indicative of the performing phase.

Trust between interaction partners in a professional relationship thus requires a considerable amount of time and develops in small steps through frequent interaction, whereby dealing with knowledge, information and errors is essential. It can also be observed that trust between the interaction partners is initially based primarily on a cognitive foundation, while in later phases of a relationship the affective side of trust plays an increasing role as people invest emotionally in the relationship, express genuine care and concern for the well-being of the other person, believe in the virtue inherent in the relationship and are convinced that these feelings are reciprocated.

*"What was a real challenge was to build trust remotely whilst being under pressure to perform. Thinking back, we had little choice but to trust each other in order to complete a common task… I have missed the personal touch of face-to-face communication."*

Source: Learning journal, 2020

This quote signals that developing trust in virtual teams appears to be even more important than in face-to-face teams and at the same time it is also a lot more challenging. It requires careful consideration of the technology used, in particular in highly virtual teams, since this often has to replace the spontaneous meeting for lunch or the casual chat at the water cooler, during which informal work and non-work-related conversations help team members to get to know each other on an informal basis. When the visual contact is missing or reduced, it may simply take longer to identify and adjust to the habits and skills of the other team members. And since team members are in different locations and possess a variety of cultural backgrounds and technical expertise, a number of initial ambiguities will need to be clarified before they can start to trust the team. These might involve questions regarding how the information they offer will be used, whether their contributions will be recognised, whether other members will share and contribute equally, and what type of working style will be expected or agreed upon.

When team members experience a trusting attitude towards them, this usually evokes stronger trust, creating a self-reinforcing cycle. However, trust can be broken much faster than it can be built, and has to be seen as a dynamic construct and thus a process. This is why trust development and maintenance is a central issue in any phase of team development. The fact that trust-building is a process is highlighted in the following quotes:

*"Initially there was a lack of comfort, rapport, and trust on our team."*

*"At the beginning interpersonal trust was not high. I sensed a high level of insecurity about positions and roles..."*

*"There was a lack of comfort and trust among team members, making cooperation and collaboration difficult – at least early on."*

Source: Rosen, Benson; Stacie Furst and Richard Blackburn, 2007. Overcoming barriers to knowledge sharing in virtual teams. Organizational Dynamics, 36 (3), pp. 259-273, p. 262

If we understand that team members have a propensity for different levels of initial trust and also acknowledge differences in the developmental trajectories of cognitive and affective trust throughout the working relationship, then we can see that trust development and maintenance is an ongoing task. The pre-existing trust that a person feels acts as an information filter, i.e. new information tends to be interpreted in such a way that existing expectations and impressions of a person are confirmed. Calculation trust would be more indicative of the storming phase, whereas knowledge and identification-based trust would be more indicative of the norming and performing phase of team development.

Sharing personal information and getting to know each other are central pillars for trust development in the storming phase, whereas clarifying group goals, work procedures and expectations are more relevant in the forming stage of team development. Developing common understanding and identity as well as common work routines on the other hand, is central in the norming and performing phase of team maturation. A key factor in team development is therefore how well the team manages to initiate the trust-building process, thus laying the groundwork for a constructive working relationship.

#### Clarity of roles and objectives

Defining, setting and communicating clear, mutually agreed goals, as well as ensuring a common understanding and motivation towards the tasks to be completed are key aspects of any form of teamwork. However, when teams work virtually, these points are even more imperative simply because team members cannot physically walk into an office and ask for clarification or further details. At the same time, developing a clear purpose is essential for building loyalty and establishing trust in intercultural and virtual teams. It appears that in virtual teams a strong, shared vision of roles and objectives is much more important in staying oriented to each other and committed to the team than a detailed implementation plan. This may be so because sharing a goal and having a common purpose acts as a substitute for the lack of informal in-person meetings, which are crucial in keeping the team attuned to each other and building strong relationships.

The process of clarifying and setting objectives has its first tentative beginnings in the initial phase, and it is likely that more concrete goals can start to form in the storming phase. However, due to the fact that goals are rarely static, require adjustments and at times even change in character, they require regular revision. And even if the overall goal remains the same, the strategies taken to reach the goal are likely to change as teamwork progresses. This means that regular checking, feedback, queries or verification are needed to ensure that everybody has the same understanding of the goals and sub-goals at all times.

Clarity of roles and objectives go hand in hand and ensure that team members know what the purpose of working together is, but also the role they are to play in achieving it. Roles help geographically dispersed team members to relate in the sense that they know when to link up, for what purpose and what their relationships are. It appears that ensuring role clarification is even more relevant in virtual rather than in co-located teams and needs to include all members as well as the team leader. Of course the number of team members has an influence on the intensity of role clarification and as the quote from a team of three shows, it can be done without it. However, this team also sees the danger of not clarifying roles:

*"We never specifically decided on our roles and each member took on a role as a task came into force. However, if things had turned out to be heated, and the roles were also unclear, we would have had a disorganised mess, which could have dragged our whole process down.""*

Source: Learning journal, 2020

Given the dynamic nature of virtual team work, the clarification of roles and objectives are typical tasks in the storming and norming phase, but with the development of the team, team roles may need to be redefined. This means that although team roles can be defined based on the goal set in the storming and forming phase, they should be re-assessed as the team matures through constant feedback and clarification.

In conclusion it can be said that clarifying roles and objectives is an important task during the initial phases of team development, which needs to be reassessed throughout the team’s life cycle. This helps virtual team members to relate to each other and therefore clarification needs to be even more explicit than in a co-located team in order for the team to function well.

#### Relationship-building and collaboration

Collaboration, understood as the ability and willingness to ‘pull together’ and work towards a common goal requires a sense of dedication and commitment towards completion of tasks. Developing a personal bond with other team members helps to promote and maintain such a commitment. In fact, it has further benefits since a personal relationship and sense of connection supports the transition from the idea of ‘them and us’ towards a ‘we’ concept. Developing such a common identity supports a positive team atmosphere and thus helps to avoid incorrect assumptions and reduce potential misunderstandings since questions can be asked freely and without hesitation. It also provides an environment in which trust, understanding, compassion and acceptance of all team members can flourish.

In a team environment in which members feel personally connected, it becomes a lot more comfortable to share ideas, admit mistakes and provide constructive feedback, which in turn supports task performance. The development of personal relationships between team members is thus considered to be an important prerequisite for establishing and maintaining virtual working relationships. Indeed, there is ample scientific evidence that personal bonds greatly contribute to a positive team atmosphere and task performance. In such an atmosphere there is a willingness to share personal information and interests as well as supporting each other through difficult times. This kind of sharing is vital for establishing a common 'we' identity and feeling. Developing and using team bonds as a support network solidifies the connections among team members as the following quote underlines:

*"The major challenge I see is that working in a virtual team means that everybody contributes a small piece towards the whole project, and therefore many people do not have the big picture. In other words, they don't just deliver software, they are part of an entity [...]. There was something that came up later: 'You've been aware of that for a half a year, why didn’t you tell me about it earlier?', 'Well, that wasn't our task' [...]. And they are actually RIGHT, but they were the only ones who noticed it. To see themselves as part of the whole team, is I think a problem that can also affect a non-virtual team. But this is simply the question, do I feel responsible for the whole project or really only for my small part?"*

(Translated from the German quote below)

*B11 (l.260-274): "Die Hauptherausforderung, die ich sehe, da ein virtuelles Team auch bedeutet, dass jeder quasi einen kleinen Teil letztendlich zu dem Gesamtprojekt liefert, ist, dass ganz vielen Leuten das große Picture fehlt. Sprich nein, sie liefern nicht nur Software, sondern sie sind Teil des Ganzen [...]. Da waren dann so Sachen, die spät aufgekommen sind: ‚Ihr wisst es seit einem halben Jahr, wieso habt Ihr es nicht vorher schon kommuniziert?‘, ‚Naja, das war ja nicht unsere Aufgabe‘ [...]. Und sie haben erst einmal RECHT tatsächlich, aber sie waren die Einzigen, die es gesehen haben. Und sich DA quasi als Teil des Ganzen zu sehen, wobei ich glaube, dass ich das gleiche Problem in einem nicht virtuellen Team haben kann. Sondern das ist einfach die Frage, fühle ich mich für das Gesamte verantwortlich oder wirklich nur für meinen kleinen Teil?"*

Source: Randhawa, 2020, p. 95

Some people need more time to open up, share personal information and develop personal relationships than others. Relationship building as well as developing a team identity is a process which starts in the initial phase of team evolution and may continue throughout the entire team building process. It goes hand in hand with the establishment of trust.

Communication

Communication in virtual teams is of course linked to the technology used. As a starting point, team members need to consider the whole spectrum of communication technology designs that might be feasible considering the team's ultimate goal. They need to decide which synchronous and asynchronous channels are best suited in each situation in their specific work environment. The selection of communication technology is vital since there is no doubt that the technological infrastructure exerts a considerable influence on knowledge sharing, team coherence and ultimately team performance. However, focusing excessively on the technical issues risks ignoring the importance of the people using the technology and their influence on the team's success. Indeed, it is the interplay between technical communication tools and the people who utilise different elements of communication which makes communication in virtual teams a complex undertaking as the quote indicates:

*"Talking on the phone you get some kind of a picture of the issue. But due to the challenges of using the telephone, speaking English, intermittent internet problems, dialling in did not work and [...] the sound quality was awful. You wouldn't BELIEVE the things I've experienced. [...] Especially at the beginning it was exhausting. If you're new to the company, first of all you need some kind of acceptance. You want to introduce yourself, but how can you do that when the technical setup is a catastrophe?"*

(Translated from the German quote below)

*B6 (l. 175-186): "Am Telefon macht man sich ja irgendwie so ein Bild. Aber durch die Herausforderungen des Telefonierens an sich, auf Englisch, unterbrochene Internetleitung, Einwahl hat nicht funktioniert und […] Tonqualität war eine Katastrophe. Ich hab da SACHEN erlebt. […] Es war am ANFANG besonders sehr anstrengend. Wenn du neu bist im Unternehmen, du brauchst erst einmal so eine gewisse Akzeptanz. Du willst dich vorstellen, aber wie soll das gehen, wenn selbst die technischen Herausforderungen schon eine Katastrophe sind?"*

Source: Randhawa, 2020, p. 92

Team communication can be conceptualised as an exchange of messages between two or more team members and can thus be regarded as the foundation of any teamwork. It enables team members to express themselves and to share knowledge and information. Interpersonal communication is always a form of social interaction and can be understood as an attempt at mutual understanding and the construction of meaning between at least two people. And it is this aspect of mutual construction of meaning which requires particular attention in virtual teams.

If we want to establish mutual understanding and common meanings then the communication frequency is key. Although high communication frequency does not guarantee identical viewpoints among team members, it increases the likelihood of convergence of perspectives, especially in the earlier stage of team development and when the level of virtuality is high. High communication frequency in the initial stages of team development and a comparatively high density of interactions provides opportunities to establish trust, and contributes to the establishment of a common identity and understanding. At the same time, it is important to ensure the quality of the information shared as many virtual teams suffer from an excess of unnecessary information, resulting in cognitive overload and consequently decreased performance.

Of course it is difficult to measure communication quality but generally speaking it can be defined as the extent to which communication is perceived as clear, complete, understood and timely. The notion of perception in this context is of particular relevance because it draws attention to the receiver of the message. It emphasises that high quality communication involves shared understanding. This shared understanding can refer to preferences for different communication styles, the chosen working language and work locations. When teams have different understandings of terms and concepts and operate in different time zones, the perception of timeliness plays an important role. A team member may receive an e-mail much later than the rest of the team and his or her immediate reaction may be to interpret this as a late response. Time zone differences also limit the opportunities for real-time interactions. In this context the notion of closed-loop communication is relevant, a term used for ensuring that the message has been sent, received and understood. The higher the virtuality of a team, the higher is the proportion of asynchronous communication. And in a virtual team setting, closed-loop communication can mitigate some of the issues that endanger effective communication. The establishment of a closed-loop communication system and thus more positive perceptions of timeliness, is an important activity during the storming and norming phase.

Communication in virtual teams is also susceptible to misunderstandings and misinterpretations when transmitting, understanding and interpreting messages since it is generally more complex when mediated through technology. This is because because the media used is always accompanied by channel reduction and filter effects. The fact that facial expressions and spatial awareness of sounds, which usually guide a conversation and support mutual understanding, are partially or completely missing in electronic communication, increases the potential for miscommunication.

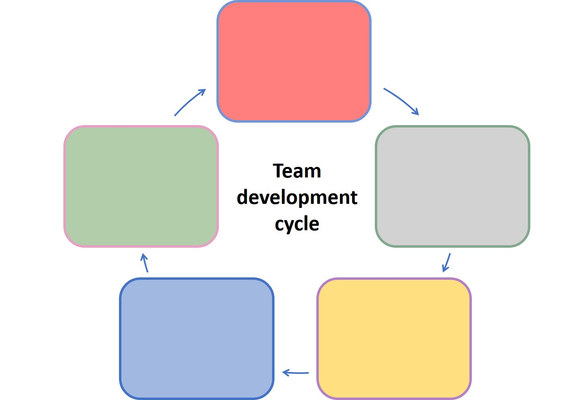
Members of virtual teams need to pay particular attention to the negotiation process regarding the technology used and the frequency of communication required as well as mechanisms to ensure that the content of communication has been received and understood. It is vital that the team understands the particular challenges of communicating virtually, establishing the issues to be agreed upon and a closed-loop communication system. This process is likely to start informally in the first meeting but needs to be dealt with more explicitly during the storming and norming phase of team development and should be part of regular feedback rounds.

### Task: A framework for supporting team development

You work for a German company specialised in software development for cash registers. The company has subsidiaries in Austria, Switzerland, France, Russia, China and Mexico. For one year, the project ‘new universal software architecture’ has been in place but did not advance very well. This is why a new team of five has been put together with the task to overcome the issue of having two different software structures for Asian and European/American cash registers.

You are a member of this diverse virtual team and because of your experience in virtual team work are supposed to support the team. As a team you have three months to develop a proposal for a new software architecture. You are sitting in your office and reflect the Tuckman model of team development as well as the knowledge you have considering critical dimensions for developing into a mature team. With this in mind, you are sketching out a framework which should help you to quickly develop into a team. You have a budget for one personal meeting and the proposal is that you have weekly conference calls.

For drafting this framework you may use the graphic below, which you will also find in your learning journal.



###### Sample answer (1)

This is what Nuria noted down

**Forming:**

* Ask team members for a cultural profile
* Find out about individual expectations
* Develop a shared understanding and sense of team identity
* Develop a clear understanding of task

**Storming:**

* Organise a personal meeting
* Use cultural profile to develop a common ground
* Encourage conflicting members to develop a mode of communication
* Ensure a clear understanding of task and roles
* Support the development of solutions

**Norming:**

* Develop a team charter specifying procedures and task requirements
* Set individual accountabilities, completion dates, and schedules
* Agree on procedures for information sharing
* Finalise a procedure to manage virtuality
* Distinguish task and social time and how to accommodate it

**Performing:**

* Ensure team members are supporting each other
* Support monitoring achievements

**Adjourning:**

* Support team in reviewing their achievements
* Discuss important learnings from the team work
* Celebrate your achievements and team development

###### Sample answer (2)

This is what Walther noted down:

**Forming:**

During an initial meeting I would offer to support the team members to get to know each other on a personal and professional level. For this end I would ask team members to send brief biographies around, so that everybody already has some information about the others in advance. I also feel that this could help us to start building a relationship. Whether it is too early to define the roles and functions of the team members depends a bit on the experience they bring along with regard to working virtual and has to be seen. Whether this is also the stage in which we can think about behavioural routines we want to establish I am not sure yet. But we should surely start to develop a shared understanding of the task to be carried out.

**Storming:**

This is definitely the time to make sure everybody has a good understanding of the task at hand and the role of each and every one and the contribution each can make. This is likely to involve some conflicting issues which need to be dealt with. Developing an understanding of how best to approach a conflict or issues would thus be part of the agenda. Fostering a good understanding and appreciation of each other’s perspective would surely be needed as well as notions as to when and how to reach consensus or other ways of conflict management. Listening to ideas and concerns as well as consolidating views would be important. As people start working together and understand where they depend on each other, we would also need to allocate some time to discuss issues outside of work. So I would suggest to devote some time at the beginning to just share how everybody is doing and try to make this part of a routine for the team to agree on.

**Norming:**

This is an important phase for agreeing on work procedures and a kind of a team charter. A project plan would surely help in making sure every know what to do when. We also must make sure everybody feels comfortable as a member of the team and ensure satisfaction

**Performing:**

If things have gone well so far and the team is functioning well, there is little to be added here except making sure that we all monitor and evaluate what we are doing and whether we work according to plan. We also want to make sure that everyone feels comfortable as a team member and is satisfied with the achievements so far. In case things are not advancing as we wanted, we need to make adjustments to our project plan.

**Adjourning:**

All projects come to an end and this one is the same. It is time to celebrate and review the achievements made. I think everybody should think about personal achievements as well as achievements with regard to the task at hand. I would ask team members how we can best do that and how we can celebrate despite the fact that we will not be able to meet.

## 3.5 Summary

Simply because people start working together, does not mean they are automatically a team. In order to become a team, a working group goes through several development stages until it reaches maturity. Tuckman called these stages of the team life cycle forming, storming, norming, performing and finally adjourning. Although a team does not necessarily follow this development in a linear fashion, remembering these stages and being aware of the typical developments that take place at each stage helps a team to mature. This is particularly important because in order to perform well, team members need to trust each other and develop a common understanding with regard to their goals and objectives. Only when the team is ready and willing to genuinely collaborate and harnesses the intrinsic motivation of each team member to move towards team objectives are they able to perform well. One precondition for developing into a team is therefore communicating effectively and ensuring common meanings. This brings with it a number of challenges, especially in the context of virtual teams, because it involves dealing with a variety of technological devices. Additionally, virtual communication is more susceptible to misunderstandings and misinterpretations than face-to-face communication.

## 3.6 Learning review

### Task: Case "Development of a project team"

Based on the following case study, written by Gina Abudi, analyse the process of the team's development with reference to Tuckman's development stages. With the knowledge that you have acquired, think about what a team coach could do to support the team's development in each of these phases. Give feedback aimed at enhancing team performance with specific recommendations. Note down your results in your learning journal.

Background and team members

A team has been pulled together from various parts of a large service organisation to work on a new project with the aim of improving how the company manages and supports its client base. The team lead on this project is Sandra from the Chicago office who has 15 years’ experience as a project manager/team lead managing process improvement projects.

The other members of the team include:

* **Peter**: 10 years’ experience on various types of projects, expertise in scheduling and budget control (office location: San Diego)
* **Sarah**: 5 years’ experience as an individual contributor to projects, strong programming background, some experience developing databases (office location: Chicago)
* **Mohammed**: 8 years’ experience working on various projects, expertise in earned value management, stakeholder analysis and problem solving (office location: New York)
* **Donna**: 2 years’ experience as an individual contributor to projects (office location: New York)
* **Ameya**: 7 years’ experience in process improvement projects, background in developing databases, expertise in earned value management (office location: San Diego)

Sandra has worked on projects with Sarah and Mohammed, but has never worked with the others. Donna has worked with Mohammed. No one else has worked with any other members of this team. Sandra has been given a very tight deadline to get this project completed.

Sandra has decided that it would be best if the team met face-to-face initially, even though they will be working virtually for the project. She has arranged a meeting at the New York office (company headquarters) for the entire team. They will spend 2 days getting introduced to each other and learning about the project.



The initial meeting (Stage 1: Forming)

The day of the face-to-face meeting in New York has arrived. All team members are present. The agenda includes:

* Personal introductions
* Team building exercises
* Information on the process improvement project
* Discussion around team roles and responsibilities
* Discussion around team norms for working together
* Introduction on how to use the SharePoint site that will be used for this project to share ideas, brainstorm, store project documentation, etc.

The team members are very excited to meet each other. All of them has heard of the other members, although they have not worked together as a team before. They believe they each bring value to this project. The team building exercises have gone well; everyone participated and seemed to enjoy the exercises. While there was some discussion around roles and responsibilities – with team members vying for “key” positions on the team – overall there was agreement on what needed to get done and who was responsible for particular components of the project.

The onsite meeting goes well. The team members get to know each other and discuss their personal lives outside of work – hobbies, family, etc. Sandra believes this is a great sign that they will get along well – they are engaged with each other and genuinely seem to like each other!



The project work begins (Stage 2: Storming)

The team members have gone back to their home offices to begin work on their project. They interact via the SharePoint site and the project is off to a good start. And then, the arguments begin...

Peter has put up the project schedule based on conversations with only Mohammed and Ameya on the team. Donna and Sarah feel as if their input to the schedule was not properly considered. They believe that because they are more junior members of the team, Peter has completely disregarded their concerns about the timeline for the project. They then challenged Peter’s schedule, stating that it was impossible to achieve, and was setting up the team for failure. At the same time, Sarah argued with Ameya over who should lead the database design and development effort for this project. While Sarah acknowledges that Ameya has a few years more experience than she does in database development, she only agreed to be on this project in order to take a lead role and develop her skills further so that she could advance at the company. If she had known that Ameya was going to be the lead, she wouldn’t have volunteered to join this project team. Additionally, Mohammed appears to be off and running on his own, while at the same time neither keeping the others informed regarding his progress nor updating his information on the SharePoint site. No one really knows what he has been working on or how much progress is being made.

Sandra had initially taken a side role during these exchanges, hoping that the team would work it out for themselves. However, she understands from past experience managing many project teams that it is important for her to take control and guide the team through this difficult time. She convenes all of the team members for a virtual meeting to reiterate their roles and responsibilities (which were agreed in the kick-off meeting) and to ensure that they understand the goals and objectives of the project. She then made some decisions when the team couldn’t come to agreement. She determined that Ameya would lead the database development design component of the project, working closely with Sarah so that she can develop further experience in this area. Also, she reviewed the schedule that Peter created with the team, making adjustments where necessary to address the concerns of Donna and Sarah. She reminded Mohammed that this was a team effort and that he needed to work closely with the others on the team.

During the virtual meeting session, Sandra referred back to the ground rules the team set in their face-to-face meeting and worked with the team to ensure that there was a plan in place for how decisions are made on the team and who has responsibility for making decisions.

Over the next few weeks, Sandra noticed that arguments/ disagreements were kept at a minimum and when they did occur, they were worked out quickly by the team, without her involvement being necessary. Still, she monitored how things were going and held regular virtual meetings to ensure the team was moving in the right direction. On a monthly basis, Sandra brings the team together for a face-to-face meeting. As the working relationships of the team members started to improve, Sandra began to see significant progress on the project.



All is going smoothly (Stage 3: Norming)

The team has now been working together for nearly 3 months. There is definitely a sense of teamwork among the group. There are few arguments and disagreements that can’t be resolved among the team. They support each other on the project – for example when solving problems, making decisions as a team, sharing information and ensuring that the ground rules put in place for the team are followed.

Additionally, the team members help each other to grow and develop their skills. For example, Ameya has worked closely with Sarah to teach her many of the skills he has learned in database design and development and she has been able to take the lead on accomplishing some of the components of their part of the project.

Overall, the team members are becoming friends. They enjoy each other’s company – both while working on the project and after hours via email, instant messaging, Twitter, or over the telephone.



Significant progress is made! (Stage 4: Performing)

The team is now considered a "high performing team". It wasn’t easy to get to this stage, but they made it! They work effectively as a group – supporting each other and relying on the group as a whole to make decisions on the project. They can brainstorm effectively to solve problems and are highly motivated to reach the end goal as a group. When there is conflict on the team – such as a disagreement on how to go about accomplishing a task – the group is able to work it out on their own without relying on the team leader to intervene and make decisions for them. The more junior members – Donna and Sarah – have really developed their skills with the support and help of the others. They have taken on leadership roles for some components of the project.

Sandra checks in with the team – praising them for their hard work and their progress. The team celebrates the milestones reached along the way. When necessary, Sandra provides a link from the team to the executives for decisions that need to come from higher up or when additional support is needed.

The project is on time and within budget. Milestones are being met – some are even ahead of schedule. The team is pleased with how well the project is going, as is Sandra and the executives of the organisation.



Time to wrap up (Stage 5: Adjourning)

The project has ended. It was a huge success! The internal customer is pleased and there is definitely an improvement in how the company supports its clients. It has been a great eight months working together…with some ups and downs of course. Each of the individuals on the project will be moving to other projects within the organization, but no one is going to be on the same project. They will miss working with each other but have vowed to remain friends and keep in touch on a personal level – hopefully they will work together again soon!

The team has come together in the New York office to discuss the project, including documenting best practices and discussing what worked effectively and what they would improve upon given the chance to do it again. Sandra has taken the team out to dinner. They are joined by the project sponsor and some other executives who are extremely pleased with the end result.

The End!

This is a simplistic view of a team working through the five stages of team development. I hope it provides some benefit to you.

Remember that at any time this team was able to revert back to a previous stage. Let’s assume that another individual joins the team – the team will revert back to the “forming” stage as they learn how to work with the new team member, re-establishing team guidelines, finding their way again, and learning how to work cohesively as a team. Or, let’s assume that Mohammed slips back into his old ways of keeping to himself and not sharing information with the team – this may cause the team to revert back to the "storming" stage.

It is important to remember that every team – regardless of what the team is working on – will follow these stages of team development. It is the job of the team leader to help see the team through these stages; to bring them to the point where they are working as effectively as possible toward a common goal.

Source: Abudi, Gina (2016). The five stages of project team development. https://project-management.com/the-five-stages-of-project-team-development (accessed on 30.10.2020, used with permission).

###### Sample answer

Here is Olesia's feedback to the team of the case study:

**Forming**: During this phase as a coach I would recommend to establish better communication and try to build trust among the team members. All the developments described in this phase I find relevant, so far everything is going seamless.

**Storming**: This phase is a real challenge, so it would be recommended that the team leader helps to resolve misunderstanding and other types of communication issues, so that emerging conflicts won’t escalate. As a coach I would also suggest that team members express their concerns and try to communicate on terms of mutual respect and understanding.

**Norming**: All the developments at this phase are inherent to the phase description. As a coach I would recommend to keep moving in the same direction and enjoy the effective results.

**Performing**: This phase shows how successfully established relationships between team members affect the project and bring brilliant results. As a coach I would be satisfied with the described situation.

**Adjourning**: The final phase is almost always a bit painful if the team-members have achieved mutual understanding and the team functions efficiently as a single entity. It is wonderful to see how this team coped with all obstacles. As a coach I would have been very satisfied with the team’s functioning and their work results.

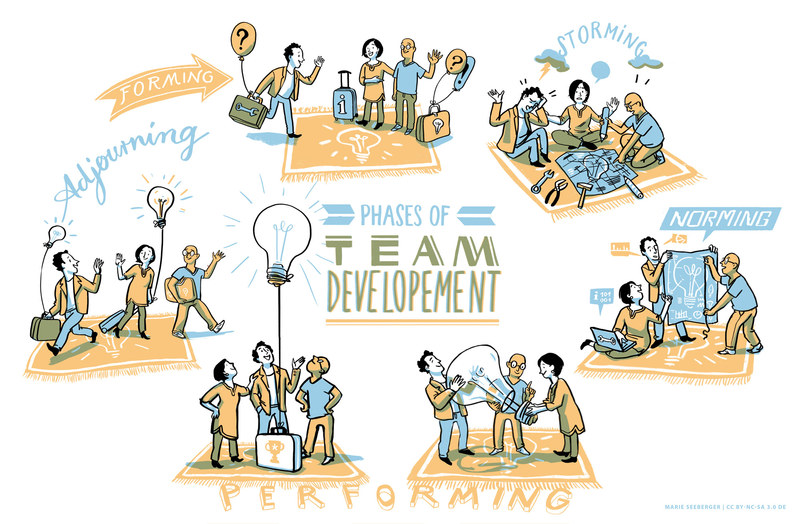


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## 3.7 Sources, further reading and web links

#### Sources

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