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Team Leadership in remote settings
An Actor-Network Theory Analysis

Supervisor

Herman Stål

Authors

Maria Gordou

Elisa Moreira Carqueijó

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Elisa Moreira Carqueijó

*Master of Science in Management, Graduate School
School of Business Economics and Law at the University of Gothenburg*

Maria Gordou

*Master of Science in Management, Graduate School
School of Business Economics and Law at the University of Gothenburg*

Abstract

Team Leadership (TL) is a topic that has been widely studied throughout the years. Previous studies on TL were focused on the individual and collective perspective. In recent years, technologies were included in the collective perspectives of TL under a remote setting by with the formation of Virtual Teams (VTs). When conducting our research, we aspire to bring insights into how TL is executed when an unexpected event forces organisations to work remotely. In order to structure our Empirical Findings, we approached Leadership as practices to organise our data. To achieve this, both Team Managers/Leaders and Team members of two large companies Arla and Volvo Cars were interviewed along with an observation in a team monthly meeting from Arla. After analysing the data, we came up with five TL practices. Afterwards, with the ANT perspective, we aimed to examine the different interactions and alterations that occurred in TL practices between human and non-human actants, which are considered equally important. To illustrate how these two were translating each other, it highlighted the ability of humans to bring their presence through technologies. We conclude that Covid-19 turned out to be the driving force which opened the blackbox revealing the unfolding of new hybrid collectifs. These reformulated networks are depicting the new TL practices which arose as an effect of the translation processes that occurred.

Keywords: team leadership, remote setting, practice, Actor-Network Theory, networks, actants, hybrid collectifs, translation, blackbox, presence.

Introduction

Team Leadership (TL) has been a widely discussed topic in the literature in the past decades. Previous studies that focused on the traditional approaches to Leadership were focused on the role of the Leader, his control and hierarchy towards the team (McCalin, 2003). However, with the progressively interconnected world, where all the work is being organised through a network manner, these traditional approaches have become outdated (McCalin, 2003).

With the recent methods of operations by organisations, the collective approach of Leadership is suitable to embrace and analyse the emerging and dynamic processes that people assume with their Leadership roles (D’Innocenzo et al., 2016). A relational approach was then adopted,

considering that leaders and followers are constantly interacting progressively and reshaping the idea of Leadership (Ospina and Uhl-Bien, 2012a & Fairhurst, 2007 as cited in Fairhurst & Cooren, 2009). As a result, Leadership is considered a collective process and the responsibility is shared. Thus, the setting of Leadership is the result of these relationships and practices that are occurring in the span of time (Murrell, 1997). Moreover, several researchers have focused on TL as a collective effort made by individuals (Ospina and Uhl-Bien, 2012a & Fairhurst, 2007 as cited in Fairhurst & Cooren, 2009; D’Innocenzo, Mathieu & Kukenberger, 2016) but not a lot of focus has been put on the technological aspect.

When an unexpected event arises, there is an associated uncertainty that brings disorientation, lack of control and emotional impact to the society and companies are not an exception (D’Auria & De Smet, 2020). Back in January 2020, the World Health Organisation (WHO) proclaimed an outbreak of a new coronavirus in China as an international threat for Public Health Emergency. The spreading of coronavirus disease (Covid-19) around the world was perceived as of high risk. To tackle this unprecedented issue, WHO and Public Health Authorities across the globe implemented several measures to restrain the Covid-19 outbreak. However, these actions were not adequate by themselves. People, companies and the society as a whole had to be conscious and were compelled to act, in order to immobilise the proliferation of this disease (WHO, 2020). Governments and the Public Health Agencies of Sweden and Denmark imposed some preventive measures for companies and one of the most crucial ones was to work from home, when it was possible (Folkhälsomyndigheten, 2022; POLITI, 2020).

Furthermore, with the global competition and constant advances in communication technologies, VTs and the use of technological tools are now considered a vital part of organisations worldwide. However, due to Covid-19 pandemic, organisations were forced to a more virtual type of working (Ancona, Bresman & Mortensen, 2020) as a way of survival in a time of crisis (Richter, 2020). Taking these events into account, most of the procedures that were present in teams had to be adapted through the use of technologies, as it was the only way forward for a company to proceed with its practices (Richter, 2020). Accordingly, with several scholars acknowledging it, exercising Leadership in VTs is more complex than face-to-face teams (Hoch & Kozlowski, 2014). Organisations had to swift their operations without a predefined plan or assuming the challenges they will face (Wittmer & Hopkins, 2021). Covid-19 has forced the swift to remote work even more compared to the previous years. As a result, this rapid change introduced further challenges not only for the organisations but also for their Leaders.

In line with this, several studies have been conducted which consider how Leadership is being rethought in recent years (Ancona et al., 2020; Klonek, Kanse, Wee, Runneboom & Parker, 2022; Leiung, Ngai, Seong & Woetzel, 2020; Richter, 2020; Almeida, Santos & Monteiro, 2020; Chamakiotis, Panteli & Davison, 2021; Newman & Ford, 2021; Kilcullen, Feitosa & Salas, 2021). Additionally, when looking at the conducted studies during the times of a crisis, like Covid-19, several aspects have been analysed. Klonek et al. (2022), Richter (2020) and Almeida et al. (2020) have focused on the adaptation and the importance of digitalization in times of Covid-19. Furthermore, authors have discussed about VTs during Covid-19 and

focused mostly on the role of the leader (Chamakiotis et al., 2021; Newman & Ford, 2021). Additionally, Kilcullen et al. (2021) presented more recommendations on how to act in the current context in an individual, team and organisational way. Lastly, studies such as the one by Leung et al. (2020) centred on the post-Covid-19 and the future working approaches.

To fill the apparent gap of TL studies, we aim to consider both the role of people and technologies in the exercise of Leadership in remote settings during this pandemic. To achieve that, by taking an ANT lens (Callon & Law, 1997; Law, 1992), we bring a framework that is intended to comprehend the relations between people (humans) and material or non-human entities affected by a change in the society (Law, 1992). This is achieved through considering those entities as part of a network where constant translations are taking place through time (Callon, 1986; Latour, 1987). Additionally, we aim to bring the concept of presence (Panteli, 2004). This is a crucial phenomenon to exercise TL practices when transitioning to a remote setting, however the topic has not been widely discussed in relation to TL in virtual teams, as affirmed by Panteli (2004).

Purpose of the study

Instead of focusing on a traditional perspective of Leadership, our purpose is to look into departments of two international organisations Arla and Volvo Cars whose Leadership is seen as a collective process conducted in an online setting. Furthermore, while analysing this, we aspire to point out the changes that occurred during these last two years through the interactions between the people and the technologies. To do so, a qualitative approach is applied with the contribution of several interviews and an observation. We aim to come up with further knowledge related to TL and how it has been affected in remote settings. More specifically, how companies could integrate technologies effectively into their daily practices and adapt to unexpected changes.

Research Question:

How is Team Leadership being affected under a remote setting?

Delimitations of the study

In order to answer our Research Question, we will analyse the case of two companies from the Nordic countries (Sweden and Denmark): Arla and Volvo Cars. Within these companies, we interviewed both managers and employees from two companies with a considerable global presence. The interviewees belong to departments whose members work on interdependent tasks and share responsibility for the team outcomes. Within this framework, it is crucial to take into account the significance of the interactions established between the Team members, Leadership roles, time management, and distribution of tasks to grasp the concept of TL in remote settings. Lastly, establishing and managing communication and information management tools that smooth the path for interaction should be considered vital.

Structure of the Report

The report is structured as follows. First, Previous Research related to our topic is presented along with the Theoretical Framework which is related to the theories of VTs, TL and ANT. After that, the Methodology section follows which demonstrates the research process of our study and all the related steps that were followed to gather and analyse data, limitations and ethical concerns related to our case. In the next section, the Empirical Findings are depicting the key results of our analysis related to the research of TL in VTs. The Discussion is followed by the interpretation of the Empirical Findings using the according theory that was chosen. Finally, Conclusions, contributions to previous research and suggestions for future research are being displayed.

Literature review & Theoretical Framework

Previous Research

The evolution of Teams

Throughout the years, working in teams has developed to be the standard practice in several organisations. Teams correspond to groups whose members partake in a strong sense of fitting which jointly share responsibilities to accomplish defined tasks and reach common goals (Ruta & Guenzi, 2013).

As it has been observed in several cases, Leaders are not essential for the progress of working teams. Most frequently, these teams are called self-managed teams and their main characteristic is that the responsibility is transferred to the Team members and it is not a sole responsibility of the Leader. This phenomenon is not a recent one since it has been identified also in studies of Manz & Sims (1991) and Sims and Lorenzi (1992) in which they explained the advantages of not having a “visionary hero” as the norm (Jackson & Parry, 2018).

Team Leadership

Zaccaro & Klimoski (2002) affirm a team depends on different characteristics. First, each Team member incorporates his own role in the team. This combination of distinct roles inside the team will culminate in a collective success. Second, with the teams inserted in complex environments which are constantly changing throughout time, Team members require coordination and adaptation for their actions. Third, TL is crucial for team performance. This TL approach rests on the fact that there is an aggregated effort (from Team Managers and members) which can produce higher achievements when compared to the sum of individual contributions (Zaccaro & Klimoski, 2002). Therefore, TL is collective, based on the relational dynamics between individuals (Jackson & Parry, 2018).

An aspect that distinguishes this collective Leadership is the critique towards perceiving the leader as a hero (Jackson & Parry, 2018). This is the idea of a leader who has all the knowledge and influence upon the Team members and corresponds to the traditional view of Leadership (Raelin, 2016). This phenomenon is related to the traits or behaviours of an individual actor who acts isolated and is dissociated from the context. In line with this view, Leadership is seen

as Leader-centric and exercised as “top-down” with Leaders perceived as autonomous, individualistic persons (Raelin, 2016). This type of Leader has responsibilities towards the team, taking the direction and the initiative to lead the team, manipulating all the conditions, people and decisions taken (Bradford & Cohen, 1998).

By acknowledging the current reality that is composed of an interconnected world, several Leadership scholars have been studying Leadership theory through a collective approach, suitable to the complexities of the actuality (Jackson & Parry, 2018). An example of this is the study conducted by Ospina and Uhl-Bien (2012a), as cited in Fairhurst & Cooren (2009), where Leadership was considering both Leaders and followers as relational beings that comprised one another in a context that is evolving and progressively relational. This approach of Leadership is being generated through the interactions of people in a specific context (Fairhurst, 2007 as cited in Fairhurst & Cooren, 2009). In general, collective Leadership can take several forms like shared, distributed or relational (Jackson & Parry, 2018). In previous studies, researchers have discussed that viewing Leadership as shared and not hierarchical is more relevant than having a sole Leader as a representative (Brown & Gioia, 2002; Day, Gronn & Salas, 2004; Yukl, 2010). It has been argued that the communication inside the team is more effective because it is less formal and lacks hierarchical segregations (Bell & Kozlowski, 2002; Pearce, Yoo, Alavi, Riggio, Smith-Orr & Shakely, 2004 as cited in Hoch & Kozlowski, 2014).

In addition, Leadership could be viewed as a distributed process throughout the Team members (Murrell, 1997). As Leadership is shared, the responsibility to structure the organisation is also formed jointly by the different actors. This means that people interact with each other and by working together, they shape their relationships and the structure they are inserted in. In agreement with this view, Day (2000) brings the idea that Leadership is being co-constructed in the social interactions that allow people to work as a team with a purpose, generating Leadership outcomes. Leadership scholars that follow this interactive and relational view of Leadership, recognise it as being always in the process of becoming, throughout the time (Carroll, Levy & Richmond, 2008; Crevani, Lindgren & Packendorff, 2007). Moreover, Leadership is described as interactional because it can be observed in a flow of everyday social interactions (Drath, McCauley, Palus, Van Velsor, O’Connor & McGuire, 2008). Thus, the environment is a result of the Leadership relationships and practices that occur in the span of time (Murrell, 1997).

More studies, explain that Leadership is being created collectively constantly (Ospina and Uhl-Bien (2012b) as cited in Fairhurst & Cooren (2009) but also questioned and rethought, instead of being stable (Fairhurst, 2007 as cited in Fairhurst & Cooren, 2009). In a relational way, viewing Leadership as practices is considering the collective applications, such as patterns of communication and organisational routines that are included and go beyond the individual actions. In line with this, it is the overall actions that make the difference, not only the actions of particular individuals (Drath et al., 2008). Additionally, practice is associated with a continuous course of actions which are producing meanings (Raelin, 2016).

Virtual Teams

Most recently, with rapid technology advancements, the transition to a full online working setting became a reality (Kilcullen et al., 2021). Team members dispersed geographically are able to work remotely, forcing the organisations to ensure team collaboration through the use of technologies and establishing VTs (Kilcullen et al., 2021). VTs could be then described as remote teams using those computer-based communication technologies to work anywhere interconnectedly regardless of time or structure on interdependent tasks. In particular, VTs might never meet physically and can be located across the world. Since teams work remotely and rely substantially on technologies, their interpersonal relations can be heavily affected by the lack of physical interactions like verbal and facial expressions (Jawadi, Daassi, Favier & Kalika, 2013). However, considering Relationship management as an imperative topic inside VTs, in order to build trust and collaboration, these problems could be mitigated. To complement that, the role of the Team Manager is also vital to assist in the process. As cited by Levasseur (2012) and Malhotra, Majchrzak & Rosen (2007), Leaders are required to solve issues related to isolation, team connection, bring directions related to communication and collaboration. Therefore, it is crucial to focus on his/her role and initiatives in this working setting as well as the impact of those actions in the team's relationships (Jawadi et al., 2013).

For these VTs to operate, various technological tools need to be used as ways of formal and informal communication. For instance, Microsoft Teams, Zoom, Slack, file transferring or document sharing are crucial ways of daily interactions (Morrison-Smith & Ruiz, 2020). Moreover, to ensure that the team is collaborative and members are aligned with the goals of the company, it is crucial to use specific planning and scheduling tools but also writing tools and whiteboards (Duarte & Snyder, 2006).

Team Leadership in times of Covid-19

When looking at the literature of TL in a remote setting during Covid-19 pandemic, it could be denoted that several studies have been conducted. Due to this event, the previously known and stable status quo, which was characterised by specific structures of organisations (Gersick, 1991), has shifted the workforce to a more virtual, home-based type of working (Ancona et al., 2020).

In this regard, Klonek et al. (2022) have analysed how an unexpected and impactful event such as Covid-19 pandemic impacted teams' processes. During their investigation, they indicated that in the initial stages of the pandemic, teams' procedures were weaker as in later times where the teams started to adapt to the virtual setting and their performance improved. Besides that, some advantages to the process interdependence (i.e., when people can influence one another) as well as the access to shared resources (e.g., digital documents) in the teams. Digital work as they referred to, was then a phenomenon that gained attention. Richter (2020) supports the same opinions where he mentioned this phenomenon was previously perceived as an option but recently, it became the new norm in organisations around the world. Moreover, he focused on how the lockdown legislations triggered the digital work in teams. Therefore, he emphasises that VTs were not a choice for organisations but a concern for their survival and persistence over time (Richter, 2020). Almeida et al. (2020) also studied the importance of digitalization in

companies when affected by Covid-19. Moreover, in their research, they point out that companies had to change and implement a new and clear approach to achieve their goals.

Chamakiotis et al. (2021) highlighted how the previous studies on VTs can be adapted to Leadership during the Covid-19 times. The authors emphasised that VTs are not a new topic that arose these years but has existed for two decades. However, recently, these VTs had gone through some reconfigurations. For example, in previous years, teams were able to interact in person and virtual meetings were a possibility, however not the norm (Hoch & Kozlowski, 2014). Moreover, in VTs, distinct people might become part of Leadership due to their knowledge in determined tasks (Chamakiotis and Panteli, 2017). Therefore, different members might assume responsibility for different tasks that are being accomplished at the same time. Chamakiotis et al. (2021) came up with three factors that should be taken into account related to Covid-19: factors previously existing (e.g., trust and engagement), factors with alternate meaning (e.g., relations), new factors which arose (e.g., work-life balance and the wellbeing of the people). While describing how these factors were being exercised, the authors brought some insights on the role of the Leader in VTs (Chamakiotis et al., 2021).

Another research underlined how Leaders should react to the new setting is the one by Newman & Ford (2021). The authors recognized that managing teams virtually is not the same as being in the office. Hence, the author proposed a few steps based on the actions the Leaders could adopt to maximise the effectiveness of remote work. Kilcullen et al. (2021) also came with some advice for the companies as a unit, on how to deal with the rapid adaptations that teams had to deal with. These suggestions were being depicted into some practices, representing an effective and quick answer to the new context, at the individual, team and organisational level. Consequently, companies should reflect upon which advice should be adhered to their specific case (Kilcullen et al., 2021).

According to D'Auria & De Smet (2020), the events that unfolded due to Covid-19 caused a crisis which resulted in uncertainty, lack of control and emotional turbulence. As a result, Leaders are not able to depend on a predefined plan but need to adapt their mindsets and behaviours which will benefit them in the future. Lastly, regarding the future, Leung et al. (2020) argue that companies should reconsider their practices and adopt a hybrid approach of working, incorporating the aspects that were learned in the remote setting along with the face-to-face interactions.

Theoretical Framework

Motivation for the choice of theory

By using ANT, our main focus is to understand and illustrate how TL practices are being rethought and impacted in these self-managed teams that became totally virtual. By doing so, it is crucial to see how the Team Managers and Team members are interacting and how technological tools are shaping their daily practices. ANT is chosen as an appropriate framework to understand the complex relations of entities, both humans and non-humans (Priyatma & Mohamed, 2013). Furthermore, we can illustrate how different actors bring their

presence in remote settings, since meeting in person was not probable. Additionally, we intend to come up with some future learnings and impacts for future Leadership practices. Subsequently, perceptions about the future landscape could come up, along with some TL practices which could be proven beneficial in VTs. In this section, the Theoretical Framework is being presented with a focus on TL practices through using ANT. By applying this Theory, we also aim to gain an increased comprehension and determine if TL practices are being impacted by the remote setting and, if so, in which ways. More specifically, it is significant to analyse how the practices unfold throughout time compared to the pre-Covid-19 period and the role of technologies on those practices.

Actor-Network Theory (ANT) perspective

According to the sociology of science and technology, it is a misconception to consider the social as the mere set of relations which exist between people (Callon & Law, 1997). Alternatively, the society should be recognized as the association between human and non-human entities. As stated by Law (1992), ANT interprets the idea of social relations, organisations and power as part of a network. This network is considered heterogeneous because it consists of social components like organisations and humans (agents) but also non-human or material things like machines. Thus, ANT emphasises that society and organisations are not purely social but attributes agency to both human and non-humans, which become fundamental for the established relationships and existence of the networks (Dwiartama & Rosin, 2014). All these different elements are treated equally and constitute the diverse effects that are produced through the interconnection of the network (Law, 1992). Thus, a network is not considered a sole actor but as an agglomeration of different small actors (Law, 1992). These are constantly interacting, shaping the way information is being delivered by forming networks of objects-and-people and, consequently, end up with a certain knowledge. In particular, this knowledge gains shape in material forms such as talks and texts.

In addition, Law (1992) brings the idea that an actor is also, always, a network. A human actant is not only composed of a person by him/herself, he/she is an effect of the interactions occurring from a heterogeneous network. These social agents are actants since there is a network of small human and non-human actants that shape their existence. What is more, a non-human such as a machine, could also be depicted as a network - since all the incorporated materials are being combined with the human actants such as repairers, operators and users. This is the case also for organisations. These entities are networks composed of distinct people and material things working together (Law, 1992). Therefore, the social structure is seen more as a verb and not a noun. This means that there are no fixed or definitive agents, organisations and social order. That being so, the social structure is always evolving, being generated and reproduced overtime (Law, 1992).

TL practises through an Actor-Network Theory (ANT) perspective

By adopting an ANT perspective to analyse TL practices, these are portrayed through actor-networks considering the heterogeneity of both the role of human and non-human actants (Fairhurst & Cooren, 2009). This is associated with the concept of hybrid collectifs, where Callon & Law (1997) refer to as the way that human and non-human actants are interconnected,

carrying action, exercise it, and adjust it. In particular, these hybrid components are translating one another and are being reformed continuously and they do not remain the same through time (Michael, 2017, p. 43 as cited in Stalph, 2019). Therefore, through ANT, we will analyse TL practices through a lens that takes into account the role of people and technology in shaping social processes (Cresswell, Worth & Sheikh, 2010). This means that neither the humans nor the material actants are given primacy, the chains of associations are the central focus. In line with this, the analysis goes beyond the social relations of the human actants, exploring material elements and its contributions to the networks (Plesner, 2009). That being the case, these distinct actants establish associations that are related to one another, creating and modifying their ties throughout the time (Latour, 2005). Taking this into account, actants are capable of impacting or affecting in a specific situation, assisting the unfolding of events and their constantly evolving relationships (Fairhurst & Cooren, 2009). In other words, ANT attributes agency to both human and non-human entities which could be responsible to enrol actants and sponsor the whole network (Fairhurst & Cooren, 2009). Moreover, each network is different in terms of structure, allocation of responsibilities and through the interactions embedded in each network, practices are being translated and transformed over time (Latour, 1990).

In other words, Leadership would be constructed through processes of interactions occurring naturally. The concept of translation is important to describe the associations between entities, how their identities are being negotiated and transformed (Callon, 1986; Latour, 1987). Moreover, it is significant to not consider translation as a given and the ways in which they are formed are depending on the context that they take place (Callon & Law, 1986). Therefore, analysing TL practices as processes in remote settings brings new insights of how these human and non-human actors are being transformed nowadays (Diedrich & Guzman, 2015).

Blackbox

When the networks are substantially performed, they end up being taken-for-granted and simplified into a network package (Law, 2007). This is associated with what ANT refers to as the blackbox. This concept is composed of a unit including both human and non-human elements which are taken-for-granted, simplified and together forming a stable network (Callon & Law, 1997). However, when a problem occurs, there is a breakdown of the blackbox, making all the inner complex relationships which are formed inside the network between different actants visible (Lihosit, 2014). In other words, when the assumed affordances, meaning the network properties that allow the network to function, start breaking down, the whole blackbox opens, unfolding a more complex system (Wright & Parchoma, 2011). To reinforce this idea, Law (1992) brings the term “punctualization” which refers to when the only element that is visible is a single block and all the complexities or actants that act within that network cannot be detected. When this blackbox breaks down, “depunctualization” occurs (Latour, 1999 as cited in Tanweer, Fiore-Gartland, & Aragon, 2016), revealing the associations that exist between humans and technologies (Latour, 2005 as cited in Tanweer et al., 2016).

The blackbox can be analysed by two distinct definitions (Müller, 2012). The first corresponds to the ability to examine and theorise the interior and all the mechanisms of the blackbox. The second one enables us to use the term when organisations act as macro-actors. This concept of

macro-actors is explained through the combination of several micro actors brought together. Hence, macro-actors can be seen as micro-actors seated on top of blackboxes (Müller, 2012). Each component of the network only comes to existence because there is in itself a chain that is operating properly (Callon & Law, 1986). By using ANT, it is possible to analyse all the elements, by opening the blackbox, and understanding the functioning of the networks through their inner working processes and practices (Latour, 2005 as cited in Stalph, 2019).

Presence

The concept of presence has been associated with the capacity to be before, in front of or in the same location with other individuals or objects (Panteli, 2004). Besides that, the presence of individuals has been proven to be linked to high attention, impact and affinity. This same view of presence is linked to the physical aspect and the face-to-face interactions. When people can interact with each other physically, they are more prone to create connections with each other, strengthening the trust and engagement between them (Panteli, 2004). Since in VTs individuals are geographically dispersed and communication is more difficult through technologies (Kilcullen et al., 2021), it is more challenging also to bring the Team members' presence (Panteli, 2004). Hence, it is by this computer-mediated communication that presence in virtual settings can be established. This presence has been linked to the immersion and involvement that a person has within the virtual environment to actually affect and be affected by it (Heather, Guthrie, Stagl, Burke & Salas, 2004).

According to Fairhurst & Cooren (2009), this presence is achieved through technological channels to interpret reality, using either material things or verbal speech. One of the main concerns of the speaker is making his/her presence visible through verbal use of language in order to replace what is absent at a specific time by making them visible in the consciousness of the people involved (Perelman and Olbrechts-Tyteca, 1969 as cited in Fairhurst & Cooren, 2009). Thus, technologies allow people to interchange information, share ideas and knowledge at any time and place. Nonetheless, the virtual presence cannot be ensured only by the devices being used. This presence relies on both the technologies but also the views and perceptions of the people using them (Panteli, 2004). Following this perspective, presence should not be taken-for-granted and should be considered as an effect that has to be depicted by material objects or by discourses to the target audience (Murphy, 1994). In the same way, absence is explained as an effect, in the sense that what is felt present by a specific individual could be considered absent by another one and the opposite (Cooren, 2001 as cited in Fairhurst & Cooren, 2009; Perelman and Olbrechts-Tyteca, 1969 as cited in Fairhurst & Cooren, 2009). As Callon & Law (1986) explain, each element is important to the whole functioning of the network. So, when one of those elements turns to be absent, the whole network could break down.

Another example that illustrates the concepts of presence and absence is the speed bump mentioned by Latour (1999) as cited in Fairhurst & Cooren (2009). The author refers to a speed bump on the road and explains how it affects the way the driver is slowing down his/her vehicle when in the presence of the device. In particular, it is explained that not only the speed bump is forcing the driver to slow down, but also other elements are contributing equally: the legislations that it represents, the crew that installed it or tools etc. Consequently, agency is

attributed to all of these elements, human and non-human, as an association to make a difference (Latour, 1986).

Additionally, higher levels of involvement and immersion in virtual settings, i.e., stronger presence, are associated with higher levels of trust within the team. Once the virtual presence is clearly defined, less ambiguities will arise and more dialogue is encouraged, enhancing the Team members' relationships (Panteli, 2004). When human actants establish their presence, they have the ability to act as a macro-actor. This macro-actor is the representation of the interactions and activities of the network brought into his/ her discourses and actions. Therefore, a macro-actor cannot be predetermined beforehand, instead, his/ her identity is the result of the interactions happening in situ (Fairhurst & Cooren, 2009).

Moreover, in this new reality, it is relevant to look into the human actors' ability to be present in a physical space and, at the same time, to analyse how these actors bring their presence in a remote setting through technologies. Thus, the term presence and specifically the virtual presence requires some considerable attention when all the Team members are acting from a distance and "macro-acting" according to their roles (Fairhurst & Cooren, 2009). In a remote setting, Leaders need to be aware of the interactivity of technology, so his/her presence is felt in a positive way to influence the Team members to move forward.

Methodology and Data Collection

The type of data

To answer our Research Question, we will make use of Qualitative data (Silverman, 2019). In particular, we are searching for data that is flexible, allows us to know what people are doing in a virtual context, how the processes are evolving and their outcomes. These are qualitative data that provide us with rich descriptions of the daily practices such as: observations; analysing texts, documents; interviews; recordings and transcripts (Silverman, 2019). The purpose of the study is to analyse Leadership as a process and a collective during Covid-19 while also identifying the potential differences that emerged with the use of technologies. A qualitative and inductive approach seemed to be the most suitable approach for this study since our goal is to comprehend the process and the evolution of how things have been altered.

Context and target population of the study

Regarding the setting of our study, this will be conducted in natural settings. This data will then be crucial to answer "how" the meanings and practises of actors have evolved through time. While understanding a certain fact, we will get more information to understand the "why" interrogations through the new context. In other words, we want to emphasise that our research will take place in natural and real settings, capable of providing the fundamental natural occurring data (Silverman, 2019). Our research is then grounded in a qualitative study by analysing two Nordic companies with a considerable presence in their own markets: Arla and Volvo Cars.

Arla

Nowadays, Arla represents the world's fourth biggest dairy company based on milk input and the world's largest organic dairy producer (Arla, 2021). Furthermore, the company is also the oldest cross-border dairy cooperative. With a vision to create the future of dairy to bring health and inspiration to the world, Arla's aspiration is to become a leader in value creation and sustainability (Arla, 2021).

Volvo Cars

In recent years, the company is considered a global leader in innovation and technology, whose production is based in four different countries and sales are globalised in more than 100 countries (Volvo, 2022). With the ambition to set its growth and satisfy their own and the society's demands, Volvo Cars is making a huge impact in the automotive industry. By setting a new standard in the society, the company aims to be a leader in safety, sustainability and online business (Volvo, 2022).

By interviewing individuals within these companies, we are looking into various departments and their operations. These companies were chosen due to their significance in terms of global presence in their corresponding markets (e.g., Sweden and other foreign markets) and the types of teams that exist within them. These are self-managed teams that turned to be mostly digital with the Covid-19 outbreak and faced the need to rethink their daily practices in a remote setting. Initially, our purpose was to analyse two distinct companies to find some discrepancies in terms of their Leadership practices in virtual settings. However, throughout our research and while doing the interviews, we realised we were in the presence of a single unit of analysis (Silverman, 2019), since the impact on practices was quite similar between the two companies. Therefore, throughout the report, both companies are not being distinguished but incorporated in a single group.

Method of data collection

To analyse our research, we will use primary data such as interviews and an observation conducted online. These interviews are the so-called in-depth interviews (Silverman, 2019), a rich source of information to have some insights from both Managers and the rest of the Team members to better understand their perspectives and impressions on what has changed with this new reality. According to Silverman (2019), generating authentic data is vital and, in order to achieve this, we obtain insights directly from people's experiences in the form of open-ended interviews. In particular, we attempted to explore their daily practices and behaviours, if and how these have been altered due to the new reality of the new business scene. Regarding our secondary data, we are considering the up-to-date Annual reports as well as other relevant data from the companies' websites (Arla, 2021; Volvo Cars, 2022). More concretely, the Leadership Competency Model in Arla Foods, where we can juxtapose both the interviews and the observation with the characteristics presented on that model of Successful leaders in Arla (Arla, n.d.). An additional type of data that was useful to our topic are news articles and scientific articles related to our topic.

The majority of the data collection of our study was interviews. In our case, we interviewed 19 employees, including Team Managers and Team members, from separate departments across the chosen companies (Table 1). The target interviewees seemed to be a suitable group to analyse since these are professionals who have been working for some time at their companies and experienced the change that has occurred through the transition to the full remote setting. All the interviews were conducted through Zoom and Microsoft Teams platforms between February to March and lasted between thirty-five to forty-five minutes. Besides that, all interviews were allowed to be video-recorded and transcribed.

Table 1: Data collection

Interviews		
Companies	Respondents	Number
Arla Arla Manager (VM) Arla Team member (ATm)	Manager (AM1) Team members (ATm 1 - ATm 9)	10
Volvo Cars Volvo Manager (VM) Volvo Team member (VTm)	Managers (VM1 & VM2) Team members (VTm 1 - VTm 7)	9
Observation		
Type of meeting	Participants	Duration
Arla's monthly team meeting (AM1's team)	AM1 and AM1's Team members	1,5h

While conducting our interviews, our questions were primarily focused on the TL practices that took place virtually while also the mental and operating struggles that they faced. In particular, the interviewees gave us insights into how the different Leadership practices were being adapted over time in remote settings, their main learnings through this experience but also their thoughts regarding the future working landscape.

Lastly, in our research, we were part of a monthly virtual meeting of Arla as a form of observation to complement the interviews. These monthly meetings are part of regular activities of the Leadership teams and illustrate how the actors interact with one another, the skills and practices they used and their interactions. Thus, this observation was done in a not-structured way (i.e., without any direct intervention) so we could obtain authentic information while observing the actions in real time unfolding (Silverman, 2019).

Data Analysis

By analysing the data through a grounded theory approach (Silverman, 2019), we conducted several sequences of open coding around our topic. The experiences related to the TL practices

enacted remotely as a process enabled us to face rich and diversified data. Moreover, the interviewees mentioned that, not only the communications but also the effect on relationships was crucial to the creation or maintenance of the ongoing connections within the company. Several broader codes emerged as significant in the early stages: (a) Working setting prior to the pandemic, (b) The transition to an online setting, (c) Self-managed teams, (d) Relationship Management, (e) Meetings, (f) Communicational and operational tools, (g) Challenges from the remote working, (h) Perceptions of the future. These broader themes guided us to elaborate our Findings into five TL practices.

Our aim in this study is not to come up with new theories in the field, but to take use of the grounded theory. While coding and interpreting the data, we pretend to relate our Findings to the existing theory. To complement the Empirical Findings and enable a more fluid understanding for the reader, some testimonies via quotes will be presented from employees of both Arla and Volvo Cars.

Limitations

In the course of our study, some limitations had to be faced. One of the first challenges we had to deal with was the difficulty to reach professionals from the chosen companies, both Team Managers and Team members. As researchers, we depend on their availability and openness to our study which can be considered demanding in these current challenging times. Besides that, the provided data from the interviewees' perspective might be biased and limit us to their perspectives, since this can represent their own constructed 'narratives' of the situations (Silverman, 2019).

Another aspect we had to take into account was that the data gathered by the interviews might induce us to a distinct path since the interviewees come from different departments and areas within the companies. As Silverman (2019) states, researchers might have specific information in mind that they would like to gather without considering that this information might not be easily accessible. Furthermore, by choosing two companies from distinct industries, the results can be both similar or completely distinct and that is a crucial aspect that we, as researchers, need to manage. Since we might follow in the trap of making a priori assumptions due to us knowing the companies beforehand, since they are widely known across the world.

In regards to our observation, we need to be aware that different observers might record different interpretations and results. Consequently, it is not considered a sufficient method of collecting data by several researchers (Silverman, 2019). To such a great extent, we need to confirm and compare what has been observed with what has been said throughout the interviews by paying attention to every detail.

Lastly, the time frame allocated to this study might be a challenge to study such a complex and diversified phenomenon like TL practices. While conducting this research, we need to take into consideration the high complexity of the study and make the appropriate allocation of our data to analyse the ones most relevant to our case (Silverman, 2019).

Ethical aspects and consequences

While conducting our research, ethical concerns were a main consideration. The process and analysis regarding the publication of our research has been explained to all the participants of the study in detail. More specifically, to ensure a high level of transparency, issues related to confidentiality were thoroughly discussed (Silverman, 2019). Moreover, each respondent was reached via email and agreed voluntarily to participate in our study. Before each interview, everyone was informed beforehand regarding the purpose of our study and what questions were required to be answered. In addition, all the interviewees were informed that their identity would not be revealed for the research so the only way we will refer to the testimonies would be through the distinction as a Team Manager/Team member in their company and their gender. By doing this, their identity is anonymized and the provided data cannot be linked to a specific person. Also, throughout the interviews, we have taken into account the prevention of any potential harm that could perhaps emerge from the information provided. Lastly, all the work that has been done is free of plagiarism and all the results presented are authentic according to our collected data.

Empirical Findings

The Empirical Section represents the key findings of the study. By contemplating Leadership as practices, we aimed to find patterns and organise our Findings. For the purpose of our study, we identified five different Leadership practices: Managerial practices in self-managed teams, Communicational practices, Operational practices and digital tools, Relationship management practices and Practice of virtual meetings. Following the analysis of the practices, we present possible impacts of these unexpected two years on future practices from the perspective of our interviewees and the observation which was undertaken.

Managerial practices in self-managed teams

When conducting our interviews, the type of teams, from both companies, corresponded to teams which were self-managed. More specifically, a certain level of independence and trust were considered the norm. The tasks were well defined and Team members were aware of their area of responsibility, while making sure to not overlap the others. Besides that, the need to contact the Team Manager was visible only in the case of issues or concerns and during the regular catch ups booked (i.e., one-to-ones, team meetings).

Overall, the Manager in these self-managed teams was described as owning the role of an advisor or coach. For instance, answering questions and concerns which might arise from the team in an ongoing project. More concretely, the Manager could be reached to advise or guide the work, making sure that the Team members were on the right track and the tasks are adequately perceived. According to our interviewees, a Leader is also seen as someone who is being updated by the team but also updates and informs on the progress of the work executed. To illustrate this more concretely, AM1 affirmed that he would prefer to empower his team, by letting them know what their roles and responsibilities are. By establishing this behaviour, the Team members would feel ownership for their work and deliver it with their highest personal effort for the team's success. These words align with what Arla's Annual report (2021) has

declared, that every employee should feel comfortable to express and voice their true authentic self in the working space of the company. In addition, the Team Manager believed that this was a higher rewarding situation to be in, than micromanaging and looking into all the details of his members' tasks. In addition, Managerial practices followed a considerably more sensitive approach to the team's needs when they started working remotely. Their main concern was to create the sense of team spirit and team chemistry even from a distance. Despite this challenge, the team functioned reasonably well but also acknowledges that it would be great to meet in person, since, due to the pandemic, some members could not meet personally.

“Because, you know, there's more distance between us all, and we maybe haven't all met each other or get the chance to meet each other as often as we would like. So I'm definitely more sensitive to creating that team spirit and team chemistry and trying to do that and some sort of online way as best we can”.

(AM1)

Another type of self-managed team that needs to be taken into consideration is the one that includes people whose nature of work is to travel to production sites around Europe. Some of their tasks are conducting and participating in workshops, while also monitoring the progress of the production. As a part of their work, these people were mainly relocating to different sites, where the projects were taking place.

“Before the pandemic, I spent most of my time at different sites. So, it was a physical meeting and physical meetings at sites related to the subject I was dealing with at the time.”

(ATm7)

When interviewing people based in Sweden, it was evident that the Covid-19 restrictions lasted only for a short period of time. During the peak of the pandemic, some employees were still able to go to the production sites, conduct workshops physically or had the option to go to the office when it was mandatory. More specifically, physical workshops inside the country were conducted less frequently and with a limited number of participants compared to pre-pandemic. In fact, most of them, especially the ones which were out of the country, had to be conducted in an online setting.

“There are people within my team that need to work close to real vehicles or other test objects, so they had to be on-site even during the peak of the Covid-19.”

(VTm1)

By the time teams became virtual and the technologies started to be part of the daily activities, the practices of certain Team Managers were quite promptly rethought. However, there were some Team Managers whose support and engagement seemed to be lacking. These types of Leaders were more focused on results and did not take considerably into account the well-being of their employees. Nevertheless, most of the Team Managers tried to keep the team spirit on high levels (e.g., through coffee meetings, weekly team meetings, team building activities - quizzes). Moreover, they tried to ensure that every member of the team felt heard and as part of the team, despite working remotely. One important thing that Team Managers were also focused on was assuring that non-work-related topics were also discussed. Previously, with the

team working in the office, these social moments were basically guaranteed but remotely, they had to recreate the way they ran meetings.

Regarding work-related tasks, it could be noted that the organising and distribution of tasks of a number of interviewees did not vary too much. Due to the nature of the teams, their tasks and the established organisation were reasonably fixed. As a result, distribution of tasks did not shift due to the transition to remote work. For instance, interviewees who have specific roles and are part of self-managed teams allowed a quite structured type of work even before the pandemic.

Communicational practices

The communicational practices were impacted substantially due to the pandemic. Until the emergence of Covid-19 pandemic, individuals had the opportunity to have daily face-to-face interactions. With everyone being in the same place, the interviewees affirmed it was easier to reach someone and talk to them without the need to book a meeting. However, with everything becoming digital, people lost all these physical interactions and the lack of contact were part of the new working setting.

*“And then, when the pandemic actually happened, everyone had to work from home (...)
So it's gone more digital for sure”*

(ATm1)

*“And then we changed completely the set up for that, so it was actually an advantage if
we could see at the end, because obligated us to be more digital, learn about
digitalization and actually perform the digitalization”*

(VTm7)

It is evident from each Arla and Volvo's interviewee that the main communication tool used by the employees was Microsoft Teams. The tool was primarily used either for video call meetings along with the use of the whiteboard tool which is part of Microsoft Teams. Moreover, quick chat conversations were also useful to replace face-to-face interactions and meetings, allowing everyone to share files and communicate faster than through emails. Despite Microsoft Teams, Zoom, emails and phone calls were also another way of communicating but it was not as common. All the interviewees identified the significance of physical interactions which were ordinary before Covid-19 but despite this inconvenience, teams found new ways and means of collaborating which, in some cases, were even more effective.

Although these new tools were brought to the Communicational practices, the communication mediated by technologies in VTs has been affected due to the distance experienced by the Team members. Owing to the distance, interviewees assumed it was more difficult to create connections with their colleagues since the physical contact was not apparent. When it comes to these teams, the interactions in person could not be replaced remotely in the same efficient way. During these times, people started to interact less and became more distant. Furthermore, people found it was more difficult to approach their colleagues for small talk in case they did not know each other beforehand. Moreover, they referred to the struggle to share their doubts about work related matters when the office communication was not there.

Additionally, some struggles surfaced especially when a new member had to be integrated in the team and all the members were dispersed geographically. It turned out that the integration and the connections took a longer time when compared to the hiring processes which were implemented in the past. However, it was stated that the recruitment teams were putting extra effort to on-board as smoothly as possible the newcomers by establishing more online sessions. At the same time, when the regulations of a specific country allowed people to go to the office, especially at the beginning of the on-boarding process, certain meetings were being conducted at the office to integrate new employees. However, despite all the effort from the involved parties, the process of getting a new employee fully integrated was slower compared to pre-pandemic.

“We have had a struggle to on-board new Team members in the team (...) It takes longer to feel a connection to the team and the ramp-up time is longer. We tried to have more sessions online with the newcomers, and meet when possible, at the office, but still the process of getting a new person ready was slower.”

(VTm1)

Nevertheless, an interesting aspect of remote working emerged while interviewing the respondents. In particular, it was stated by a number of interviewees that they felt a closer connection with their colleagues while working in an online setting. Despite this unexpected change, the quick and direct way to communicate through technological tools enabled them to share personal struggles and concerns more than they used to. This was explained due to the ease of just sending a message on the chats to reach people that previously were located in different parts of the company. As a result, these employees created deeper personal connections which reinforced their performance at work and mostly helped them on a mental aspect especially in the first months of isolation.

Operational practices and digital tools

In terms of different technological tools being used to organise and track the progress of the team, several tools were being used. For example, Power BI tool was a tool that the team used to organise multiple projects. Moreover, Mural board and Teams planner were widely used by all of the interviewees, especially when conducting workshops. Apart from this, the regular way of keeping track of their personal tasks and responsibilities was Microsoft notebooks or typical notes during meetings. In addition, Asana and Trello were also used to plan daily tasks more efficiently. However, some IT tools which were widely used for daily activities were required to be developed further in order to be used effectively in a completely remote environment. Additionally, in the case of Volvo Cars, as one employee mentioned, the need to be more digital obligated the team to learn and become more digitised.

“So the software used, the IT systems used, were not designed to handle the type of load put on when everyone started working from home. And that was the main issue we had in the early days of the pandemic, as certain tools would not be able to handle the capacity, certain work could not be done.”

(VTM4)

Moreover, VM9 explained that, inside her team, an unexpected change occurred at the beginning of the pandemic, when a vital part of the work was conducted by external consultants that they had to be cut off. The team then faced significant difficulties and had to come up with a solution to move forward. As a result, the team came together to develop a new software tool to analyse data and form reports that were previously the consultants' assignments. Thus, the team approached this change as an opportunity to become more digitised and work more collaboratively, by working also with other digital tools that were not used before.

Another significant struggle, that created major problems of communication, was related to the unstable wireless network, lags on the system or Virtual Private Network (VPN) issues. These occurrences created problems in the daily interactions between colleagues and especially when conducting meetings or workshops online. Particularly, in workshops where so many different people are taking part from several parts of the world, connection problems were a constant barrier that had to be overstepped.

Relationship Management practices

According to the Leadership Competency Model in Arla (n.d.), the engagement of people is one of the main focuses. Maintaining strong relationships towards people inside the organisation but also with the external stakeholders is considered imperative. Therefore, they need to act openly, by listening and sharing their different perspectives (Arla, n.d.). Regarding the team spirit and Relationship Management practices, the respondents confirmed that the process to manage the relations within the team was easier prior to the pandemic when everyone was physically at the office. More precisely, people could have small talks easily, instantly reach other people at their desks to clarify any questions or even have coffee breaks to strengthen their relationships. With the shift to remote work, the relationships were undeniably affected, in the sense that employees were not able to meet each other in person and felt more distant. At the beginning, people were handling the situation positively and had high hopes that this unexpected reality could be a mere phase. Soon after, it was apparent that the outbreak was taking longer than expected and employees began to struggle with the isolation or taking care of their kids at home, so it became an imperative for the company to act. To maintain relationships within the teams, some team-building activities had to be established online along the time. Through our research, we observed that two different approaches were apparent: some teams did not take advantage of the technological tools to develop team building activities whilst other teams incurred considerable efforts in those activities.

On one hand, the teams which did not invest in these types of practices experienced more difficulties to build and maintain relationships between colleagues while the work was strictly remote. Interviewees recognized that, before the pandemic, teams were enrolled into some bonding events like weekly fikas at the office and after work dinners. However, when the transition occurred, these events and the implicit interactions were lost. This could be since some people were not interested in spending more time on another call and the interactions were not the same compared to the office. Despite this, some interviewees recognized that team building activities like these would be effective in the creation of connections, strengthening the team spirit and bringing more openness to the team.

“There was less social activity overall (...) I think in our team, specifically, we didn't. And trust suffered. That was one of the results”

(VTm4)

On the other hand, a number of teams invested substantially in their activities remotely. In fact, in these VTs, the personnel made an extra effort to be seen through the technologies to bring the team together and succeed, although they were not meeting physically.

“So they were really, really trying to make sure that we were okay and that we were managing and that we were well basically. I think it might have been an extra effort to manage, to make everybody comfortable and feel like part of the team. If it was before the pandemic, then you just assume they're going to be there. It's a physical thing”

(ATm4)

Moreover, every quarter, an online team-building activity was taking place which rotated across the team, so different people would come with that responsibility each time. An example of a Virtual team building activity was a quiz to identify personality traits of a colleague that were previously unknown to the rest of the group. This was intended to get to know each other better and grasp the “person” behind the professional. Moreover, some activities and meetups were scheduled after work, with the purpose to promote a more informal engagement on a continuous basis. More specifically, a Thursday bar where they could meet up online to have a drink and just talk or to do a quiz. However, these virtual meetups were discerned as something that could never replace physical interactions. Another type of activity that was established were the Friday walks as a group, by keeping distance in an attempt to feel closer as a team.

Practice of virtual meetings

In relation to the meetings, there were certain differences between the period before and after the transition to remote working. The interviewees affirmed the duration of the virtual meetings was shorter, but the frequency increased drastically when compared to the physical ones. Besides this, the importance of body language and facial expressions as well as the perceptions that people had when they were working together in the office became more apparent. When meetings became virtual, teams faced some struggles to understand facial expressions and reactions since individuals were more prone to turn off the microphone or video camera. In fact, as a Team Manager from Volvo Cars emphasised, people were encouraged to turn on the camera so they could have a glimpse of the reactions through their technologies.

“But again, if you're not using a camera and microphone all the time, then you don't have a physical interaction, you may lose some context that you might have in a real-life meeting.”

(VM2)

Nevertheless, it was observed that their connections were not as powerful and the team spirit was weakened while the quality of the online meetings diminished. Furthermore, when meeting each other physically, employees could reflect, generate new ideas and strengthen their relations. This was possible either before or after meetings but also during lunch and coffee breaks. In a virtual setting, these interactions would be more complex. Since it was difficult to denote the level of engagement of the employee through a video camera. Besides that, when

working in the same environment, both the Team Manager and the rest of the team were able to cooperate easily when a question popped up to their minds. However, when concerns were taking place virtually, this easy in-terrain contact was not feasible in most of the cases. In order to achieve this direct contact, it was necessary to send an instant message on Microsoft Teams, which could result in long waiting for an answer, especially when the manager was busy. When conducting meetings online, it was observed through Arla's team meeting that there was an increasing concern to discuss informal topics in order to unify the team. Additionally, apart from those moments, as expressed by AM1, there were some online coffee catchups where the team would assemble for half an hour to talk about non-related work topics.

In addition, depending on the nature of the team, Team members working with distinct people from different departments required them to interact continuously throughout the working processes. Besides that, the existence of monthly team meetings, where the whole team could gather up was also a mandate. Employees would come up with inspirational presentations, updating one another about their field of work, while also taking it as an opportunity to raise issues to the higher positions in the company. Throughout an online team meeting at Arla, Team Managers were presenting a recap of some completed workshops in the past weeks from their specific site. Through this process, the audience could have a glimpse of the progress and plan for future workshops. Thus, several insights from different people arose in the team and through discussions they got co-constructed, resulting in some valuable conclusions. Moreover, the opinion of the Team Manager was expected to provide his point of view on the topic.

“This is where we just come together and we update one another and what's happening in our areas. There are normally some inspirational presentations, about what different people are working on.”

(AM1)

Nowadays, in order to maintain the daily interactions in a remote setting, meetings had to be scheduled with more consideration. Overall, virtual meetings were seen as advantageous since time could be saved unlike when people were moving around the office. One of the main problems at the beginning of virtual meetings was making sure that all the participants were online and working on the same document online. Another core struggle that teams faced was related to the network connection stability during calls, which could result in low quality of audio and video. Moreover, during meetings and workshops screen sharing and usage of specific tools had to work accordingly in order to ensure the best communication during these virtual settings.

“The struggle that I can think of is that many Team members might have some technical issues related to the internet, VPN, Microsoft Teams.”

(VTm3)

The landscape of future practices

Overall, with the use of technologies, all the interviewees agreed that flexibility was a noteworthy addition to the new working setting. According to the interviewees, flexibility arose in two different aspects: the location where they work and the ability to choose when to work according to their preference. And changes, like this flexibility, are expected to remain in the

near future, as supported by Trapp (2022). From one side, companies have acknowledged the fact that their work can be executed as effectively or even more compared to before, except when the nature of the work forces people to go to the production sites.

“We can do digital. I mean, our responsibility is to deliver a task independently with digital or face to face. And we are able to deliver.”

(VTm5)

Furthermore, employees assume that the possibility to have this flexibility to work hybrid in their jobs will be one aspect that will have a huge consideration in the near future. According to Robinson (2022), when companies come up with this new flexibility and allow the employees to work according to their preferences (e.g., on site or remotely), they are communicating that they trust their work wherever they are and it boosts their confidence. This is reinforced by AM1 who encouraged the employees to take ownership of their work. Another aspect of the hybrid working environment that might concern the Human Resources team of both Arla and Volvo Cars in the following years is that, in order to remain competitive, they need to rethink their hiring process with this kind of flexibility for the future employees. Otherwise, they might lose the opportunity to on-board valuable employees into their teams.

Besides, a learning that came up during this transition was the emergence of new ways of conducting workshops effectively and the appearance of new communities through technologies. Stakeholders all over Europe were able to take part in those workshops which would otherwise be absent, due to travel inconveniences and lack of time. By showing this, it is possible to denote that technologies can bring more ideas and knowledge sharing from people around the world. Additionally, the employees emphasised the importance of valuing their time and separating their working life from their personal one. They referred to it as a struggle for the first months of working at home that needs some consideration in the future because working hybrid is highly probable in the future.

“When you're working at home, you don't naturally switch off your computer, you continue to work. When you are at the office, and then go home, you close the computer and all the systems. But when you're at home you have your computer on all the time.”

(VTm7)

Furthermore, professionals need to understand the importance of participating physically in certain meetings and workshops. More specifically, generating significant ideas, getting to know each other personally and exchanging cultures is another vital aspect that needs to be taken into account for the subsequent years.

“And then I think the recognition is that there are just some topics, you know, tough, complex topics that are difficult to do online. You just sort of need to be together in a room where you can see the body language better, where you can, you know, touch and feel, post-it notes on the wall or scribble on a flip chart sheet of something together.”

(AM1)

Summary of key results

Overall, it has been observed that the TL practices have gone through some significant changes during this transition to the online setting. In this recent reality, the working setting has been changed and the new ways of working might still be here for the following years (Trapp, 2022).

Undoubtedly, with the possibility to work both remotely and on production sites, Team Managers need to be more aware of the new inconveniences that arise with this current context. Individuals who work in different international production sites will require more attention from the Team Leader. Specifically, they should touch upon subjects that would be taken-for-granted when everyone was working at the sites.

Furthermore, communication between employees was depicted with some improvements regarding the decreasing time to reach people from different departments or sites. However, with the distance, people might not feel so comfortable to talk as openly as having face-to-face interactions.

Besides this, companies need to be aware that technologies might face some problems and it is important to keep up with updated software. In one of the companies, several new tools had to be adapted to the new demands through regular updating of the software or new ones were enrolled in the working practices. Apart from that, network connection issues created several problems in running virtual meetings and workshops.

Additionally, relationships are a crucial and sensitive part of this new reality. Working remotely has turned people more distant, becoming less prone to share non-work-related topics to each other while the team spirit is highly impacted. To compensate for the lack of connections and manage the team connections, it has been agreed that online team building activities have been beneficial, when meeting in person is not a possibility. In accordance with that, virtual meetings are a new way of reuniting the whole team, bringing up ideas and sharing knowledge with each other using digital tools.

Lastly, the future impacts on the practices are showing that companies should take into consideration that their employees could be as effective as before while working from home. Thus, offering flexibility to their employees in the future should be an essential element of the future working settings not only for their current employees but also for upcoming hires which they will expect to have the freedom to work hybrid. Moreover, assessing the importance of meetings and workshops that require physical participation could be an aspect of consideration for the teams.

Discussion

The Empirical Findings provided us with valuable insights regarding how TL has been altered by the widespread use of technologies under a remote setting. In order to answer the Research Question “*How is Team Leadership being affected under a remote setting?*”, we will interpret our Findings by using several concepts of ANT. The data collected in the previous section

enabled us to identify five TL practices and demonstrate opinions and reflections regarding the landscape of future practices. In order to understand in more detail how TL was being affected, we need to identify the elements that were part of these processes.

When analysing the different TL practices in the previous section, we came up with four different patterns as a way to depict how they got affected by using ANT: Arla and Volvo Cars as networks, Covid-19 as a driving force to rethink the networks, The unfolding of the TL practices and the Impacts on future practices.

Arla and Volvo Cars as Networks

When analysing both Arla and Volvo Cars, it is clear that many actors, human and non-humans, are consisting of their network (Fairhurst & Cooren, 2009) like the Team Managers, Team members, digital tools (computers, Microsoft Teams, Zoom, Slack), Covid-19 pandemic and Government legislations etc. These companies also constituted their own networks (Law, 1992). In each one of them, there were patterned roles that were being performed by these distinct actants which were all essential for the companies' operations (Law, 1992).

Prior to the pandemic, Arla's and Volvo Cars' operations were considered stable and taken-for-granted (Law, 2007) throughout the organisations. Specifically, employees were going to the office, conducting physical meetings and interacting daily with their colleagues. These interactions align with the words of Panteli (2004) who explains that physical presence, which was considered the norm prior to the pandemic, is the ability of humans and objects to be present in the same location. We are also considering the identified previous operations, as the old TL practices that were recognized as standard inside these organisations. In particular, these practices were formed by hybrids of people and material things, working together to achieve the team goals and forming stable networks (Callon & Law, 1997). In line with these ideas, Law (2007) explains that a blackbox is composed by human and non-human actants which are taken-for-granted, communicate and interact to achieve the stability of the network. In our analysis, we are considering that both companies are included in one big blackbox. Both companies were using similar standard procedures to operate in which employees and material things are a vital part. According to Law (1992), employees could be viewed as human actants who form social relations inside the working space.

When looking into the network of these companies, more specifically into the role of the human actants, it was possible to denote that each Team Manager and Team member were also by themselves a network (Law, 1992). Specifically, each one of them was not only restricted to the physical body. Besides their knowledge and skills, other elements such as materials - laptops, emails, phones - and also humans - the company personnel - were crucial to execute each role and make an impact.

In the same way, the digital tools are also considered networks themselves since they are part of an association of actants. All the components constituting technological tools, the employees using those and the operators were crucial to the well-functioning of the tools (Law, 1992). For

that reason, each actant owns its own agency that becomes vital for the formation of relationships and continuation of the networks (Dwiartama & Rosin, 2014). These actants are interconnected and come together and form different TL practices that had to be adapted to the online setting (Latour, 1990). As a result, the social structure was composed of multiple networks that interacted and shaped reality (Law, 1992).

Covid-19 as a driving force to rethink the previously stabilised networks

With the emergence of the Covid-19 pandemic, all the previously mentioned mechanisms inside of the Arla and Volvo Cars' blackbox were impacted. With the legislations imposed by the local Governments, new TL practices had to be formed by the companies and the whole network needed to shift to a remote way of working (Ancona et al., 2020). In relation to previous studies of virtual teams, the more virtual environment that was formed in both companies was a way of persistence in a time of crisis (Richter, 2020) and not just a choice to include employees that were dispersed geographically as referred by Bell & Kolzowski (2002). Therefore, it is crucial to open the blackbox to understand how this network is being affected (Latour, 2005 as cited in Stalph, 2019), by an unprecedented non-human actant: the Covid-19 pandemic.

The unfolding of TL practices

With the need to adapt to the new remote setting (Ancona et al., 2020), companies had to rethink their approaches (Almeida et al., 2020) and their TL practices were not an exception. Studies which focused on Leadership during Covid-19, have also studied this phenomenon within VTs. However, the focus of the researchers was centred on the role or the importance of the Leader within the team in a challenging time like the Covid-19 pandemic (Chamakiotis et al., 2021; Newman & Ford, 2021). In our research, we also recognize the Leader plays an important role in the team, but we do not consider that his/her contribution solely, is sufficient to renew the Leadership practices. It is important to analyse not only Leaders, followers but also non-human actants (Fairhurst & Cooren, 2009).

Instead of analysing through the individual perspective (Zaccaro & Klimoski, 2002) or only in the relational approach of Leadership, whose emphasis rests on people (Zaccaro & Klimoski, 2002; Jackson & Parry, 2018; Ospina and Uhl-Bien, 2012a & Fairhurst, 2007 as cited in Fairhurst & Cooren, 2009), one should investigate the interactions between the distinct actants from Arla's and Volvo Cars' networks which forced the translation of practices (Latour, 1990). Moreover, in virtual contexts, one should be aware that it is more challenging for individuals to show their presence (Panteli, 2004). Thus, previously known practices had to be translated and executed online with computer-mediated communication, in order to ensure the presence in a virtual setting (Panteli, 2004).

Self-managed teams and the development of their inner relationships

By analysing our data, we identified two kinds of self-managed teams that had to adapt their mandates and transform their way of working. In one case, Team Managers had to only participate in virtual meetings and make constant use of digital tools. But in the other case, even in the peak of the pandemic, some employees had to still go and work on site. These two distinct

groups could be interpreted as two networks or hybrid collectifs of human and non-human actants that formed different kinds of disciplines to operate and reform their Leadership practices (Callon & Law, 1997). This distinction between the groups resulted by not only the nature of the diverse roles employees acquire but also due to other components such as the government legislations related to Covid-19 (Michael, 2017, p. 43 as cited in Stalph, 2019).

Another aspect that is interesting to be discussed, is that prior to the pandemic, workshops were conducted mostly physically. However, with the need to work remotely, a new worldwide association of participants emerged that was previously not possible due to geographical dispersion, resulting in better communication and increased knowledge sharing (Latour, 2005). Moreover, the relationships between the teams evolved and all the actants were impacting each other (Fairhurst & Cooren, 2009). As a result, workshops would continue to be conducted effectively but in a different setting. Through this new way of running workshops online, it becomes clear that each network of actants has its own structure and allocated responsibilities (Callon & Law, 1997). These structures are not remaining steady due to the continuous interactions between the actants (Latour, 1990; Callon & Law, 1997).

While acting remotely, Managerial practices had to be reformulated and translated jointly with the use of divergent actants (Latour, 1984). The Team Manager who held an advisory role in our research, along with the digital tools, are attributed agency and together they support the whole network (Latour, 1984). The studies of Manz & Sims (1991) and Sims & Lorenzi (1992) affirm that in self-managed teams, responsibilities are shared between colleagues which aligns with our case. While interacting with Team members, Team Managers began to realise there was a break-down of their blackbox (i.e., Managerial practices were not suitable to the remote setting) due to the changes (Lihosit, 2014) that surfaced due to the pandemic outbreak. In particular, the impossibility to bring the physical presence remotely (Panteli, 2004) brought some problems related to the isolation and loss of interactions (Levasseur, 2012; Malhotra et al., 2007). In order to balance that, the Managerial practices, as well as the Relationship Management practices, started to translate (Latour, 1990). With the recommendations to work remotely, the Team Managers had to make their and the Team member's presence felt from a distance (Fairhurst & Cooren, 2009). Digital tools like Microsoft Teams were important to display their verbal speech so that the whole team would be engaged (Perelman and Olbrechts-Tyteca, 1969 as cited in Fairhurst & Cooren, 2009) in virtual team-building activities or virtual "fikas". As the previous study of Jawadi et al. (2013) states, relationship management inside VTs is essential to establish trust and collaboration within members. This illustrates the immersion that people can have in the virtual setting to impact or being impacted by it, as affirmed by Heather et al. (2004).

In our case, Arla's and Volvo Cars' Team Managers acted on behalf of several micro-actants. More specifically, Leaders "macro act" (Fairhurst & Cooren, 2009) in the name of the companies' values, purpose and legislations that are in force (Richter, 2020) during this challenging time. For example, throughout the online meetings, Team Leaders acted upon the concerns shared by the Team members, which in turn could be brought to upper positions in the company (AM1). Thus, Leaders were able to guide and advise in the name of the company

due to their recognized role. Via technologies, they were macro-acting in the name of their companies (Fairhurst & Cooren, 2009) in various meetings or tasks.

On one hand, due to the breakdown of this network, the Team Manager needed to bring his presence in different ways which included the usage of technologies not only for work-related topics but also for team-building activities to boost their mental stability (Fairhurst & Cooren, 2009). On the other hand, in self-managed teams, Team members needed also to bring their presence visible through their contribution to these virtual activities (Fairhurst & Cooren, 2009) since its an interactive process. In these virtual team-buildings, both Team Managers and Team members took advantage of the virtual presentations and dialogues in chats via Microsoft Teams to achieve that (Murphy, 1994).

Besides these team buildings, the online one-to-ones or virtual games or events organised, were equally important, since there was a greater focus on the relationships established between the actants in the network (Latour, 1984). It was through practices like this that these hybrid collectifs (Callon & Law, 1997) could maintain their associations while interacting and reshaping their ties while sharing insights and knowledge (Latour, 2005).

However, this was not the case for every team. Since TL practices were taken-for-granted (Law, 2007), the hybrid collectifs of the companies were not prepared to deal with unforeseen events like the pandemic. When the “depunctualization” occurred, the old TL practices were not suitable (Latour, 1999 as cited in Tanweer et al., 2016), certain hybrid collectifs did not put the effort to replace their physical presence through verbal communication and ended up being absent remotely (Perelman and Olbrechts-Tyteca, 1969 as cited in Fairhurst & Cooren, 2009). For that reason, the ability of the actants to enrol and support the whole network, that Fairhurst & Cooren (2009) referred to, was missing. In addition, the expected contributions and interactions carried out by the chains of associations too (Plesner, 2009), meaning that the lack of communication did not allow people to ask questions and get to know each other, coming up with less shared knowledge. This is in line with Callon & Law (1986) mentioned that, when one of the elements of the network is absent (e.g., people), the whole network fails.

Means of communication and meetings in a virtual setting

Before the rapid change, daily physical interactions along with the widespread use of digital means of communication were considered the typical type of interactions inside the network while working in the offices. Furthermore, people were able to discuss work-related topics and reach their colleagues directly through face-to-face interactions. Panteli (2004) referred to this type of physical presence, where people are interacting in the same place. In particular, when interacting physically, there is a stronger connection and familiarity within the team, increasing the overall trust and engagement (Panteli, 2004).

However, due to the Covid-19 outbreak, the ways of communication that were previously adapted by the companies had to be reshaped, since technology was playing a more vital part inside the network (Cresswell et al., 2010). Hence, a new form of hybrid collectifs (Callon & Law, 1997) - people and objects - was essential so these associations would continue to interact

and share information within the organisation, ending up with a knowledge (i.e., new way of communicating) (Law, 1992). More concretely, Microsoft Teams was the main communication tool used by the employees. The tool was primarily used either for quick chat conversations, video call meetings along with the use of the whiteboard tool. Despite Microsoft Teams, Zoom, emails and phone calls were also another way of enrolling everyone inside the network to ensure the translation of the communicational practices (Fairhurst & Cooren, 2009).

During the analysis, we interpreted that, through this change, individuals approached the vast use of technologies in different ways. A specific group of individuals took advantage of the technological tools, translating the ways of communicating (Callon, 1986; Latour, 1987). With the ease to just send a message on the chats to reach people, the identities were constantly negotiated and their relationships evolved (Callon, 1986; Latour, 1987), while a number of individuals were sharing information as well as personal struggles and concerns. Panteli (2004) also highlights that the high engagement and involvement inside the team encourages more dialogue and trust between the members and decreases uncertainty.

Nevertheless, other groups of individuals faced difficulties forming closer relationships with their colleagues, while being associated with the technological tools (Latour, 2005). This could be related to the difficulty of delivering information appropriately through the several interactions that occurred inside the network (Law, 1992). As a result, the struggle of communication that was detected inside the hybrid resulted in lack of trust within the team.

When it comes to the practice of meetings, the way they were held before and after Covid-19 changed drastically, due to the inability to conduct physical meetings. As a result, the practice of the meetings had to be transformed (Latour, 1984). The number of the meetings increased but at the same time, their duration got shorter. Besides that, employees spent less time when carrying these meetings since it was no longer needed to move around offices or travel. During those meetings, the presence of both managers and employees was denoted through the discourses (Perelman and Olbrechts-Tyteca, 1969 as cited in Fairhurst & Cooren, 2009) made by the video and microphones, ensuring that both the body language and expressions were visible remotely (Murphy, 1994). However, occasionally the perceptions of people regarding these interactions (Panteli, 2004) were interpreted in different ways depending on the individual. Meaning that a discourse which is visible by one member could be considered absent by another one (Cooren, 2001 as cited in Fairhurst & Cooren, 2009; Perelman and Olbrechts-Tyteca, 1969 as cited in Fairhurst & Cooren, 2009). For example, as it was denoted in our data, the levels of engagement inside a team was perceived in different ways.

By analysing the monthly virtual meeting of Arla, a new hybrid virtual collectif (e.g., employees combined with Microsoft Teams) was formed with its own rules and processes (Callon & Law, 1997). Specifically, during those meetings, Team members could share information related to their current projects, exchanging insights and informal topics. Hence, the actants were developing their associations, negotiating and altering their relations according to the specific contexts they were facing (Latour, 2005). Taking this into account, everyone could impact or

affect in a specific situation, assisting the unfolding of events and their constantly evolving relationships (Fairhurst & Cooren, 2009).

Regarding the on-boarding process, both companies had to rethink their procedures since prior, the process was vastly different. Considering that the on-boarding of new members became a challenge, it was important to establish the presence of the human actants to guide and support them in the initial stages. The recruitment teams needed to adapt and operate in a new way (i.e., virtually) to ensure a smooth start for the newcomers. In particular, the establishment of online presence was imperative to establish high levels of communication (Panteli, 2004) via online sessions. This was achieved by using distinct tools to establish a new way of integrating an employee. Consequently, it could be said that due to the constant interaction of the individuals involved, another new hybrid collectif was formed, by establishing new hiring processes and disciplines (Callon & Law, 1997).

Another noteworthy statement discussed by a number of interviewees, was that their working hours increased, while working remotely. Employees had easy access to the laptop/technologies at any time which resulted in spending extra hours compared to the past. This could be perceived as if employees were making themselves present more, through macro acting from a distance (Fairhurst & Cooren, 2009). Therefore, due to their increased presence, individuals felt it was more complicated to create boundaries between work and personal life, as emphasised also by Chamakiotis et al. (2021). Apart from that, with all the operations transferred online, everyone could be present in several meetings and workshops from diversified locations (Panteli, 2004).

The significance of digital tools and their dysfunctions

As we mentioned previously in the beginning of the Discussion, Arla and Volvo are included in one big blackbox, acting as a macro actor (Müller, 2012). Inside this blackbox there are several micro-actors interacting and relating to each other which in turn, represent smaller blackboxes (Müller, 2012). Thus, the blackbox that we will focus on in this section is the one of digital tools.

When certain technological issues emerged related to the VPN, Internet connection and Microsoft Teams, the assumed affordances of these technologies started to break down and the black box began to reveal all the complexities inside (Wright & Parchoma, 2011). This opening of the blackbox took place when the practices that were vital in the working setting like meetings and workshops were failing (Latour, 2005 as cited in Stalph, 2019). As a result, it became necessary to understand what is happening “inside” this blackbox. Specifically, the network consists of several actants that, if they do not work well together and one collapses (e.g., Microsoft Teams), problems could arise (Lihosit, 2014). In this manner, when those elements that compose the blackbox stop functioning as expected, people realise that both people and technologies are equally important (Law, 2007).

With the blackbox being open and not functioning as expected (Wright & Parchoma, 2011), companies had to invest more on technologies and software and learn how to use these new digital tools. In one case, the previously known technologies were not widely developed to live

up to the new pace of working so the network had to be readjusted (Michael, 2017, p. 43 as cited in Stalph, 2019). In addition, new digital tools were being introduced to the new work context (Morrison-Smith & Ruiz, 2020): Power BI; Mural board and Teams planner, Asana and Trello. In another instance, a new software tool had to be developed by a Volvo Cars team because their network needed to be reformed due to the lay-off of a supporting group of external consultants. As a result, the previously known practices conducted by those consultants had to be transformed (Latour, 1990).

However, we should not disregard the fact that more elements are included in this network besides the digital tools, like the legislations that were imposed, government legislators, companies' regulations etc. All the actants related to the pandemic, which is considered an actor network itself, were previously absent from the network. Latour (1999) as cited in Fairhurst & Cooren (2009) also emphasises, in his example of the speed bump, that several elements are contributing to a network. Therefore, some previously absent actants made themselves present and forced individuals to show their presence in new ways to reconstruct the TL practices. Specifically, people (e.g., Team Managers, Team members), objects (e.g., laptops, phones), digital tools (e.g., Microsoft Teams), Covid-19 pandemic (e.g., legislations) as an association, contributed equally (Latour, 1986) to the reconfigurations that occurred during this rapid change.

Impacts on future practices

With the need to translate and adapt TL practices to the remote setting, some reflections were being delineated by the interviewees. The majority of them highlighted the importance of the freedom to work hybrid and take advantage of the digital tools to work as effectively as before (Morrison-Smith & Ruiz, 2020). In this new hybrid, working from home a couple of days a week, depending on the preferences of the employee and the Team Manager is considered normal (VM1 & VM3). In accordance with the study of Leiung et al. (2020), companies should follow a hybrid approach and adapt their practices through the learnings that arose while working solely remotely.

Moreover, by transforming the on-boarding process and offering job positions to future employees that incorporate the flexibility of working hybrid would add value to the company as underlined by Leiung et al. (2020). However, the opening of the blackbox (Wright & Parchoma, 2011) made interviewees rethink the significance of valuing their personal time at home and not spending extra hours working just because of the accessibility that they had to their working equipment at any time. This goes in line with Chamakiotis et al. (2021), who outlined that, with the Covid-19 outbreak, new factors were now being considered as the work-life balance and the wellbeing of the employees.

Regarding the meetings, as it has been already stated, most of them took place at the offices. Now, with the use of more non-human actants (e.g., laptops, Microsoft Teams, Zoom, chats), the practice of meetings has been undoubtedly impacted and it will be maintained for the upcoming times. More specifically, reducing the number of meetings but also the duration of them aligns with Latour's (1990) view, that every network forms its own structure, which is

based on the constantly transformed interactions. However, as stated by some interviewees, a concerning factor is that employees need to understand the significance of being present in specific meetings or workshops that require critical attention that might be missed while using a digital tool like Microsoft Teams. This could be attributed to the fact that humans are interpreting information in their own unique ways by interchanging ideas through technologies (Panteli, 2004). In line with Law (1992), since several different small actors are affecting the way that information is being delivered, individuals need to be aware that knowledge will be shaped when all these interactions occur. This could also be the case in regard to the new insights that arose through the formation of the global association of actants during workshops.

By analysing the employees' reflections of both Arla and Volvo Cars, we conclude that the present TL practices are already impacting the future ones. This goes in line with the idea Law (1992) brought where the social structure is seen more as a verb (i.e., evolving along the time) and not a noun (i.e., stable). From now on, as the interviewees emphasised, TL practices are being transformed constantly as a process in online settings (Diedrich & Guzman, 2015). To sum up, the translation of these practices was not prearranged since they are an effect of the interactions that happened throughout time (Law, 1992) in both companies. In other words, as Callon & Law (1986) affirmed, it is the context, in our case Covid-19 pandemic, that affects the translation of the TL practices.

Conclusion

The report has the purpose to come up with insights and contribute to the studies of Team Leadership in remote settings that look into Leadership as a collective process. While studying both Team Manager and Team members from two large organisations such as Arla and Volvo Cars, we were able to understand both companies perceive and exercise in similar ways the distinct TL practices throughout the span of the Covid-19 pandemic. Therefore, we analysed both of them as a single case throughout our report.

By organising our data by viewing Leadership as practices, our Empirical Findings section denotes five different TL practices that were being detected: Managerial practices in self-managed teams, Communicational practices, Operational practices and digital tools, Relationship Management practices and the Practice of virtual meetings. Besides that, we illustrated reflections regarding the "The landscape of future practices". Upon debriefing these Findings, we could analyse the data through ANT and answer our Research Question "*How is Team Leadership being affected under a remote setting?*" by drawing four conclusions.

Firstly, we conclude that Arla and Volvo Cars were described by predefined patterns of roles and TL practices. These two companies were considered as a big blackbox that due to the emergence of Covid-19 outbreak, was forced to open in order to understand the relations between different human and non-human actants. Due to the break-down of the blackbox, some vital actants were identified: Team Managers, Team members, digital tools, material things like computers, Covid-19 and the legislations imposed by the Governments. Therefore, with the blackbox open, it became visible that all mechanisms inside the blackbox were not working as

they used to. Consequently, the TL practices had to be reshaped and adapted to the new remote setting.

Secondly, the TL practices that took place remotely were being developed over time via translation processes through the interactions between human and non-human actants. These components, which are perceived as having equivalent agency, formed hybrid collectifs which enabled the TL practices to be transformed. Thus, each type of actant could not translate these practices by themselves; it was the associations of actants that affected these practices. By taking advantage of technologies, people could share information, communicate, negotiate and shape their identities. These translations were feasible, since human actants could bring their presence and act as macro-actors even when the physical contact was apparent.

Thirdly, the translation of the TL practices in the remote setting occurred due to a major driving force: Covid-19 pandemic. This outbreak, through the Governmental legislations, along with the people's interactions, forced the restructuring of both companies' networks. Therefore, the new TL practices in a remote setting are perceived as an effect of the emergence of Covid-19.

Fourthly, regarding the new TL practices that arose in the networks of Arla and Volvo Cars, it is evident that these are already impacting the future ones. Companies now comprehend that employees could remain equally productive even while working online. As a result, offering flexibility to the current and future employees should be a high priority the following years. Moreover, the setting of the meetings and workshops should be decided in accordance with the importance of the topic of discussion.

To summarise, TL, analysed through practices in remote settings, is affected by the constant translations executed by the associations of people and objects. These translations are only possible because there is a collective effort throughout time.

Contributions

Our report contributes to the literature of TL in remote settings when an unexpected change occurs. Previous studies of TL have focused more on the role of the people and technologies were either not included or less attention has been attributed to them. In addition, studies on Leadership during Covid-19 pandemic were more preoccupied with leader-centric and organisational recommendations, the role of digitalization and the post-Covid-19 era.

With our study, we aimed to come up with expanded knowledge related to how companies could encompass both people and technologies, following a collective approach, into the exercise of TL practices remotely through an ANT perspective. Specifically, when a breakdown occurs by a rapid and unexpected event like Covid-19 that could affect the hybrid networks. Furthermore, with the lack of literature related to the presence of the human actants in remote settings, we managed to bring some insights in terms of how this presence could be captured through the digital tools that were being used by the target population of our study. Specifically, how the presence is being affected by the different perceptions and interpretations of information which individuals occupy, which result in more difficulties for humans to be present online. Moreover, the presence of individuals is also being affected by Internet

connection issues or problems related to material or digital tools which produce other types of miscommunications inside the network. Furthermore, previous studies emphasised that the social structure is constantly changing and evolving throughout time and, with our research, we were able to present some trends of the future landscape of the TL practices in a remote setting. However, the readers should be aware that those trends might be applicable only to the dairy and automotive industries like Arla and Volvo Cars since our data was collected by a specific group of interviewees.

Future research

The results of this study can be useful for future studies of how TL practices will be affected in the following years where the hybrid setting would probably be considered the norm. Apart from that, it should be mentioned that it would be pertinent to investigate which and how new tools could be integrated into the Leadership practices in the hybrid settings. Since it has been recognised that digital tools were fundamental to exercise TL practices, they will probably keep being indispensable for following years. Apart from this, it would be relevant to investigate with more depth the phenomenon of presence in a remote setting since this is a concept that has not been widely discussed by the researchers in the field of team Leadership.

Due to the small target population of our study, further research should be conducted by more researchers related to TL and how it can be affected by several types of companies or industries. By focusing on these two specific companies analysed in this report, we recognize that organisations should constantly rethink their social structure which is composed of several hybrids. Lastly, TL practices, relations, interactions and identities should be continuously transformed to respond to the unexpected changes that might arise and possibly affect TL under a remote setting.

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