LUND UNIVERSITY
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MULTIPLE CHOICES AND CHALLENGES

- A STUDY OF E-LEADERSHIP IN THE DIGITAL ERA

Degree Project, Master's Program: Managing People, Knowledge and Change

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Abstract

Title:	Multiple Choices and Challenges - A Study of E-leadership in the Digital Era
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Key Words:	E-leadership, Virtual Teams, Cross-Cultural Leadership, Shared Leadership, Task-Oriented Leadership, Relationship-Oriented Leadership and Situational Leadership Model.
Thesis Purpose:	The purpose of this study is to investigate the increasing specialisation of tasks in contemporary organisations and ensuing demand of expertise, and how these factors are affecting the leadership within virtual teams (teams in organisations working virtually with help of technology). Globalisation and a technological revolution has greatly transformed the business world during the last decades, with an increasing amount of collaborations occurring across cultural as well as professional borders. Through isolating the aspect of expertise as a factor which deserves attention, the study aims at investigating how it influences the form and orientation of leadership in virtual teams.
Methodology:	The study is using a qualitative method with an interpretative approach. Throughout the gathering of the empirical material, I have used an abductive approach, which have allowed a going back and forth between theory and empirical findings for an integration of new discoveries. In the analysis I have applied a critical and reflexive standpoint.
Theoretical Perspective:	The study is examined with reference to previous literature in the research area of different forms (single and shared leadership) and orientations (task and relationship) of leadership.

Empirical study: The research is based on a qualitative study where eight respondents from a large IT consultancy company were interviewed through semi-structured interviews. The respondents were team members of virtual teams working globally and in different roles.

Conclusion: Great challenges and barriers exist in global virtual teams. Due to some of these barriers the teams have difficulties in effectively fulfilling their working tasks. The work in global virtual teams as well as the leadership seems to be strongly task-oriented. More focus on relationship-oriented leadership as well as finding the right form for the leadership seems crucial for the effectiveness of global virtual teams.

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Knut Esaiasson

Lund, 18th of May 2018

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1. Introduction

In today's fast-changing global business environment new e-work settings have arisen, where old forms of leadership do not seem to match these new circumstances. A need for a more fitting e-leadership is emerging (Avolio, Sosik, Kahai & Baker, 2013). It has been argued that corporations constantly must adapt in order to survive and that they have to manage the present and create the future at the same time (Blanchard, 2008). With the advent of technological change in a globalised world, working in virtual teams (VTs) has become an arrangement of major opportunities and are by several authors claimed to be a developing organisational structure that demands extra attention (see for instance Daim et al. 2012; Anderson et al. 2007).

Working in VTs across expertise fields and country borders through Information Communication Technology (ICT) is increasingly being used when monitoring both small and large strategic and operational undertakings, often consisting of skilled team members as well as competent contractors or outsourced partners (Liz, 2002). By the settings of VTs, companies can attract competence all around the world, enabling them at the same time to cut travel costs and become more time efficient (Duarte & Snyder, 2001). But, VTs are not always a smooth phenomenon as it challenges conventional business models and existing tools of management (Colfax, Santos & Diego, 2009).

E-leadership (in this study also termed leadership in VTs) begun to be discussed and conceptualised among academic researchers around the turn of the millennium, defined as a leadership of geographically dispersed individuals or groups, who interact through technology (Avolio, & Kahai, 2003; Avolio, Sosik, Kahai & Baker, 2013). Traditional leadership models were not considered to satisfactorily explain VTs and its leadership, since they often must deal with the complexity of different languages, expertise, cultures, locations and time zones (Zigurs, 2003; Kayworth & Leidner, 2001). As we will see further in this study, what complicates the leadership in VTs even more, is the parallel increasing demand for domain expertise (Berger & Frey, 2016).

1.1 Problem Discussion

The dilemma on which this study elaborates on is how an increasing need for domain expertise in organisations (Berger & Frey, 2016) is influencing the leadership in VTs. The effect of a growing expertise will be analysed in relation to the orientation and form of the leadership. One

of the reasons to explore VTs and its leadership is because this kind of work setting seem to be a forerunner to how firms will be run in the future, partly due to the digitalisation and increased specialisation on today's globalised market (Malone, Laubacher & Johns, 2011).

In the academic literature one can discern two main directions when it comes to domain expertise competence in the leadership and the form of leadership in VTs. One is where the expertise (often relevant for the project at hand) is being manifested in one single leader (see Hüsing et. al. 2013; Crevani, Lindgren & Packendorff, 2010; Denis, Langley & Sergi, 2013), and the other is shared leadership, when team members possessing various expertise either interact along the way or step forward in a rotating order depending on what expertise is needed in a particular phase (Kocolowski, 2010; Pearce & Conger, 2003; Avolio, Walumbwa & Weber, 2009; Carson, Tesluk & Marrone, 2007; Pearce, 2008).

Leadership in VTs can be complicated. When a leader without domain expertise lead team members with expertise, an "internal market" can be created, where the leader in the VT needs to negotiate with team members for expertise and resources. This can make the process chaotic and dysfunctional and create conflicts around the power distribution, which in turn weakens the leadership (Goldratt, 1997).

The task of finding the most fitting form as well as the right competence for the leadership in VTs, seems challenging and may not even be possible. It might not be realistic to aim at educating future leaders in a virtual setting in several domain expertise fields (see figure 1) as is seen in the agenda by the European Commission (see section 3.6.1) conducted by Hüsing et al. (2013) - simultaneously it is understandable; a leader in a VT-setting without expertise among followers who are experts can easily lose authority as mentioned above. On the other hand, shared leadership (see section 3.6.2) in VTs have its shortcomings, since experts do not necessarily possess leadership skills (which we will see is paramount in VTs when it comes to team building and creating trust).

In order to understand why domain expertise is so relevant in the context of VTs and its leadership, we can turn to Malone, Laubacher and Johns (2011) who claim that we are moving towards an age of hyper specialisation when more and more employees need specific domain expertise, rather than being generalists. Hüsing et al. (2013) appear to be influenced by this development when formulating the *T-shaped portfolio of skills model* (where both horizontal

general leadership competence, as well as vertical expertise competence is required in the e-leader). On the basis on the crucial role domain expertise seems to be taking in today´s business, I will formulate my research question and design the empirical study.

1.2 Research Questions

1. How is an increasing demand for domain expertise influencing the leadership in global virtual teams?

2. What role has the leadership in global virtual teams in terms of its form and orientation?

1.3 Research Purpose

Globalisation and a technological revolution has greatly transformed the business world during the last decades, with an increasing amount of collaborations occurring across cultural as well as professional borders. My basic assumption in this thesis is that the growing demand of technical and specialised expertise, together with the globalisation of economic relations and the rise of Information Communication Technology (ICT), have enabled and fostered the rise of VTs. The purpose of the study is to investigate the increasing technical specialisation of tasks in contemporary organisations and the ensuing demand of expertise, and how these in combination are affecting the leadership within VTs. Through isolating the aspect of expertise as a factor which deserves attention, the study aims at investigating how this influences the form and orientation of leadership in VTs. I also want to highlight if VTs square with "analogue" conceptions of leadership, and if the virtual and global character maps with such leadership models.

1.4 Delimitations

The focus will solely be on the e-leadership, which specifically is a term used for leadership using virtual means of working and communicating. Since the term leadership is very broad and can contain many different styles and attributes, it is not possible to here elaborate on all these perspectives. This study will look closer at the aspects of e-leadership in terms of form (single or shared leadership) and orientation (task- and relationship).

1.5 Limitations

In this study the *T-shaped portfolio of skills* which Hüsing et al. (2013) proclaim, is applied and referred to in the context of leadership in VTs. The research and report by Hüsing et al. (2013) (used as a basis for the *EU skills agenda*) and the following recommendation for handling the labour market in the European Union (EU), has its emphasis on e-leadership in Small Medium Enterprises (SMEs). SMEs and VTs can be compared size wise, since VTs referred to in this study (case company ALFA) has between 4 and 15 team members. Also, the autonomy of the structure of the VTs in ALFA makes them relevant to equate with SMEs. Moreover, a model like Hüsing et al.'s (2013) (see section 2), intended as a model to meet future business demands and challenges in large scale, should be as relevant in the context of VTs as in SMEs, since VTs is a work setting seen more frequently in the business world of today.

1.6 Thesis Outline

The thesis is organised into six chapters which below is shortly presented.

Chapter 1: Introduction

In this first chapter the reader will be initiated into the concept e-leadership in the context of VTs in a global perspective, as well as being introduced to the problematic and challenging circumstances VTs are a part of in today's modern technological society. The purpose of the research will be presented as well as the main theoretical concepts of this study. Since a study of this type cannot cover a whole research area, delimitations and limitations will list the main focus and the potential weaknesses in the chosen topic.

Chapter 2: Background - A Critical View of Leading Virtually

This section will present earlier academic studies of the research topic, to introduce different opinions on the leadership in VTs, which are clearly diverged among many of the prominent researchers in the research field. The focus in this section will mainly be on the form of the leadership in VTs (see single and shared leadership), and the orientation of the leadership in VTs (see task and relationship orientation).

Chapter 3: Literature Review

In this chapter focus will be on the concepts and theoretical frameworks relevant for the research: Knowledge Intensive Firms (KIFs), leadership in general, E-leadership, different

forms of the leadership, Cross-Cultural Leadership and the increasing demand of domain expertise. The theoretical framework Situational Leadership Model (SLM) will also be introduced in this chapter.

Chapter 4: Methodology

This section will explain the philosophical grounding where my position as a researcher will be clarified, followed by the design of the research and how the data collection in form of qualitative interviews was gathered. In addition to this an analysis of the data will be presented together with a critical and reflexive dimension of the study.

Chapter 5: Empirical Study

In this chapter the case company ALFA will be presented as well as the interview respondents. The empirical findings are then categorised in four main themes; cultural differences affecting the communication, forms of the leadership, orientation of the leadership and competence. The categorisations are carefully selected based on fundamental concepts and theories of the study related to the respondents' answers and will further on be used as guidelines in the analysis.

Chapter 6: Analysis

In this section an analysis of the empirical findings will be done with the concepts and theoretical frameworks presented in chapter two and three. An interpretative approach will be used throughout the analysis of the material.

Chapter 7: Discussion

This chapter is devoted to a discussion based on the empirical material and the analysis. A more broad and holistic approach to the research area is here applied to initiate a relevant discussion. The discussion also includes the challenges and complexities the leadership in VTs is facing.

Chapter 8: Conclusion

In this chapter a summary of the main findings derived from the theoretical, empirical and analytical material will be presented. This will be followed by reflections and suggestions for future research in the subject.

2. Background - A Critical View of Virtual Leadership

The digitalisation of the business world has evolved fast and new structures of working collaborations and communications are continually emerging. In the section below, I will highlight some of the previous academic research relevant to my research questions.

Figures on the frequencies of VTs

VTs as a work setting seem to gain increasingly prominence. When 1,700 knowledge workers were surveyed by Ferrazzi Greenlight, 79% reported that they always or frequently worked in VTs (Ferrazzi, 2014). Another study shows that 46% of 379 interviewed HR professionals claim that their organisations use VTs (Minton-Eversole, 2012). Surveys together with the literature and academic journals give a sense of how fast VTs are growing and underline the importance of further research in the subject. There are diverse points of views of the leadership in VTs. Many researchers consider VTs as something crucial and calls for a new management paradigm leading up to a rather new style of leadership called e-leadership (Colfax, Santos & Diego, 2009) – a leadership which will be elaborated on in section 3.5.

Different forms of leadership in VTs

The most well-suited form of leadership in VTs seems to be uncertain, and despite the increasingly commonness of this working structure, it has not been a large focus on the leadership of these kind of teams, in the research (Hoch & Dulebohn, 2017). Many researchers, for instance Gurr (2004), point out important differences between leadership in traditional settings compared to leadership in VTs. Below follows a description of the two occurring forms of leadership in VTs.

In 2012 European Commission contracted some researchers from Empirica[1], IDC Europe[2] and INSEAD[3] (Hüsing et. al. 2013) to address the potential gaps in today's e-leadership in European companies (eskills-scale, 2015). This led to an initiative (the *E-leader Initiative* 2013-2015), which became the predecessor of the larger development programme *Leadership skills for the high-tech economy*, aiming at developing a European long-term agenda (Hüsing et. al. 2013). This agenda of the European Commission is designed together with PwC, IDC Europe and Oxford University (eskills-lead, 2014). An extensive study made by independent contractors

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[1] Research and consultancy organisation in the area of innovation.
[2] An organisation analysing the future technological trends.
[3] One of the world's leading business schools.

(Hüsing et al. 2013) shows that many European companies arguably lack the type of competence which is necessary for managing the challenges in an ever higher technological driven business world. In response to the findings, an e-leadership model called the *T-shaped portfolio of skills model,* containing deep knowledge in various domain expertise fields as well as transversal skills in business and leadership-related issues, was introduced (see figure 1; Hüsing et al. 2013). This profile of demands is now being used by the European Commission as a springboard for specific e-leadership education programmes designed to meet the complexity of e-leadership.

**Leading Organizations
(Horizontal/Transversal Expertise)**
Managing change and inventing
Developing a compelling vision
Building and aligning relationships across boundaries
Making sense of a situation/Experimentation

**Using ICT Systems
(Vertical Expertise)**
ICT expertise
Function expertise
Product expertise
Customer & Sector expertise
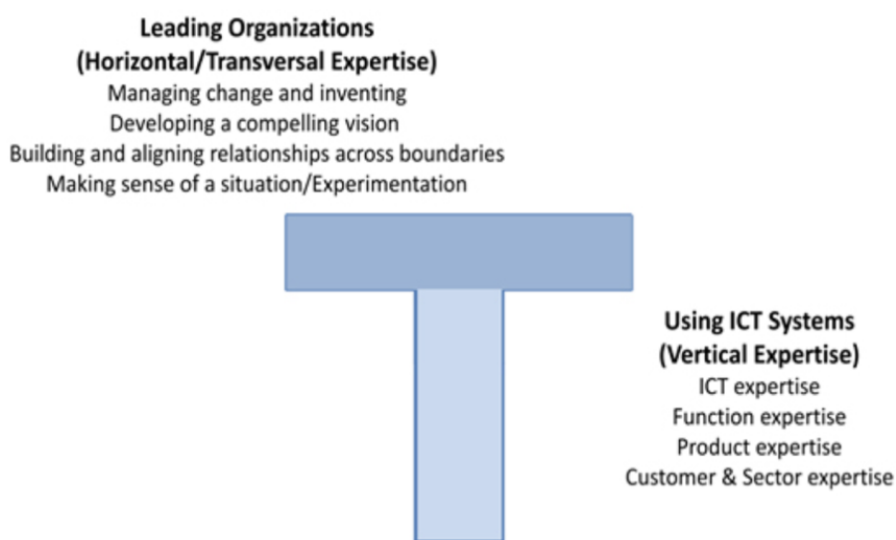
Figure 1 – Competence profile of an e-leader - The T-shaped portfolio of skills model (Hüsing et al. 2013).

As illustrated in figure 1, the *T-shaped portfolio of skills model* divides deep domain expertise competencies, for instance ICT expertise, function expertise and product expertise, with broad transversal competencies such as building and aligning relationships, developing a compelling vision, and managing change and inventing (Hüsing et al. 2013).

An e-leader profile with multiple competencies such as shown above can be questioned for several reasons. Zigurs (2003) and Carson, Tesluk and Marrone (2007) claim that it is unlikely that one person effectively can fulfil a multi-skill profile without risking the outcome of the work. There is a trend of criticism among researchers in the field towards a single e-leader that

is expected to have sufficient competence in several domain expertise fields (Yukl, 2006; Pearce, 2007).

Shared leadership is a collaborative form of leadership involving different VT-members to jointly handle the leadership (Kocolowski, 2010; Pearce, Conger & Locke, 2008), which can be seen as a contrast and an alternative to the multi-competent single leader. Here the functions of leadership are distributed across several team members and can occur as a serial emergence of several leaders over the process, where at least one team member at the time take the role of influencing the other members, often depending on what expertise is needed (Carson, Tesluck, & Marrone, 2007; Zigurs, 2003). This form of leadership is gaining an increasing prominence in today's VTs (Avolio, Walumbwa & Weber, 2009; Carson, Tesluck, & Marrone, 2007).

As seen above, different researchers emphasise different factors and competencies for the leadership in VTs in order to be successful. The list can be made long. Regardless if a leadership is traditional with a single leader, or a collective as in shared leadership, it seems like relationship-oriented qualities are underscored in VTs (Kayworth & Leidner, 2001).

Another poignant view in the context is held by Cascio and Shyrygailo (2003), who state there is no particular style of e-leadership that fit more than another, or, as Zigurs (2003) puts it, VTs may vary in form and therefore sometimes needs to assign a leader and at other times not.

There is an ongoing academic research on the importance of relationship-orientation in the leadership in VTs. Many authors underline the importance of, for instance, team building aspects such as increasing social relations and remove interpersonal problems as well as creating trust (see Zaccaro & Bader, 2003). The outcome of the VT's work is considered becoming better when there is trust and cohesion among the team members. But the relationship-building aspects become hard to manage since the team members may never meet and can result in a too task-focused orientation (Powell, Piccoli & Ives, 2004). To enhance outcomes of the work in a virtual setting there are recommendations for the leadership to foster a more relational environment in an early stage, for instance by listening to what the team members have to say, giving continuous feedback and setting clear roles (Kayworth & Leidner, 2000). The more people talk to each other in this context, the higher trust and better social relationships people get (Jarvenpaa & Leidner, 1999). It seems, however, as the relationship-building factors in this context may not be the only challenge for the leadership of VTs.

Challenging circumstances for the leadership to be met in VTs

Leadership in VTs are facing many challenges. Pulley and Sessa (2001) argue that one of the greatest of them is to succeed in creating a "collective culture" among the team members that allows the communication from the leadership to be understood. This would be critical especially if the team is large, since it then increases the vulnerability of poor communication and a risk of free riding among the group members (Haas & Mortensen, 2016). Cascio and Shyrygailo (2003) claim that key factors for the leadership in VTs are related to getting the team members to cooperate closely (despite the differences), and to manage and control the progress without meeting face-to-face. Many researchers in the field also emphasise building of trust as something both challenging and essential (Zaccaro & Bader, 2003).

3. Literature Review

In this section an introduction to the concepts and theoretical tool used in this study will be presented. These concepts and tools are helpful in understanding the research questions and its context and will also work as references for the analysis. The first section will cover following relevant concepts: An increasing demand of domain expertise, KIFs, VTs, different views on leadership, leadership in VTs, forms of leadership and cross-cultural leadership. The second section will contain the theoretical framework Situational Leadership Model (SLM).

3.1 An Increasing Demand for Domain Expertise

An increasing demand for domain expertise can be seen in both society in general and specifically in organisations and firms. This is a central assumption behind this study, since it can be supposed to have far-reaching implications on the labour market as well as on the structures of leadership. By compiling recent reports from the world's largest most renowned global management consultancies, Berger and Frey (2016) shows that digital technology has affected the demand for new skills in most sectors of economy. In the context of these big shifts one uses the term *a fourth industrial revolution* (Berger and Frey, 2016).

Consultancy firm McKinsey, for instance, predicts a dramatic change in the labour market. As new technology develops the demand for specialised competence will increase. Old job models will collapse while new ones are being created to match the new requirements. The need for ICT skills will go beyond technology and across both occupations and industries, McKinsey states in the report, and writes that for every sector, digitalisation changes the way products and services are produced, sold and distributed, as well as how firms are managed (McKinsey, 2015). The survey shows that half of the respondents stated that their CEOs are in charge of the organisations' digital agenda (McKinsey, 2015). Although one should be critical against this source because of its ambition to mark towards less digitised organisations, the discussion of this future development is heavily topical and worthy of a more detailed investigation.

Since technology diffuses across all industries and occupations, many other branches such as manufacturing, engineering and medicine, will also be affected. In particular, technology has increased the demand for domain expertise competence in more complex tasks that are difficult to automate (Berger and Frey, 2016).

In this new landscape there will be required "hard" skills, such as ICT, as well as "soft" skills, in employees as well as leaders (Bolle et al. 2015; Hüsing et. al. 2013). The future importance of having cross-functional skills has also been recognised by European Union (EU) (see Hüsing et. al. 2013 in section 3.6.1) and UK's Digital Skills Committee (UK Parliament, 2018), when declaring that employers are in search for fusion skills – a mix of creative, social and technical skills. The domain expertise is in many occasions possessed by knowledge workers in Knowledge-Intensive Firms (KIFs), which will be further elaborated on in the next section.

3.2 Knowledge Workers and Knowledge-Intensive Firms

A KIF is an organisation whose value is mostly based on its employees' knowledge, also called knowledge workers (KWs). A majority of the KWs possess a degree from a University and they are usually highly skilled and prefer to work autonomously without clear-cut hierarchies. Many KIFs are trying hard to retain their KWs as these represent the firm's most important resources. However, unfortunately for many KIFs, KWs change job far more frequently than an average worker (Newell et al. 2009). Therefore, selection of the right competence by a selective recruitment, as well as building a strong culture to keep the knowledge, are factors very important (Alvesson, 2004). Many KWs work in a virtual setting, often in a global perspective across country- and cultural borders (Newell et al. 2009). In this study a KIF acted as a case company and KWs from Sweden and India from the case company was subject for a qualitative study. It can be assumed that many KWs work in the context of VTs, since these teams often are put together with cross-functional and cross-cultural team members with different domain expertise. What is interesting to further elaborate around is how different hierarchies and organisational structures affect the KWs autonomy in different countries. Autonomy in the work is, as explained above, something highly prioritised in KWs, and putting this view of work in the context of different hierarchical structures, create many questions as we will see in section five.

3.3 Virtual Teams

In today's organisations it is common to collaborate by working in teams, often with individuals across country borders with diverse competencies and cultural backgrounds. Working in global VTs cut large travelling and facilitation expenses by using technology for more efficient ways of working and communicating. VTs consist of individuals working from dispersed locations and communicates through ICT (Nevogt, 2013). Powell, Piccoli and Ives (2004) define a global

VT as a group of organisationally and geographically dispersed members in different time zones, working together through ICT to solve different organisational tasks. VT as a concept was introduced 1997 by Lipnack (2000) and has received much attention during the last decades, since this type of constellation, arguably, has opened new possibilities when it comes to attracting the most-sought after talents and competencies on the labour market (Duarte & Snyder, 2001). The term VT will be used throughout this study but in certain contexts it is also called distributed, remote or geographically dispersed team (Nevogt, 2013).

People who work as leaders in VTs need to have, it could be argued, a certain set of skills beyond the knowledge in how to use ICT and how to manage people with different cultural backgrounds and domain expertise. Leaders of these teams must also have an understanding of human dynamics and find a way to overcome the challenges with time and distance differences (Duarte & Snyder, 2001). According to Duarte and Snyder (2001) there are six types of VTs, which three accords with the working structure of this study's case company ALFA. Three of these six types will be introduced below. The excluded three types will not be presented here since they are not having any significance to this study and to the case company.

Networked teams

Networked teams consist of individuals who work towards a common goal across organisational boundaries, geographical distances and time differences. Often in these types of teams there is no clear definition between the organisation and the networked teams, in that the members often rotate on and off, depending on when and where their domain expertise is needed.

Project development teams

Project development teams focuses on clear roles for each one of the members. This type of team consists of highly task-oriented and specialised professionals which are assigned to work on specific tasks and special assignments that the organisation is not able to do themselves. This kind of team have the formal right to make decisions and normally exist for a long time.

Functional teams

Functional teams work in one specific area such as finance, R&D or accounting. The members have clear roles in these types of teams and are often separated from within the organisation.

3.4 Different Views on Leadership

According to Alvesson, Blom and Sveningsson (2017), leadership is characterised by an unequal relationship between the leader and the follower. A leader needs to succeed in influencing the followers in order for a followership to emerge. This inequality should not be seen as something negative, but a willingness from the part of the follower, to be led and to become better. If a leader does not succeed in leadership, the risk of failures in an organisation increases. In VTs this can become particularly important due to the many challenges these teams are facing.

Effective leadership seems to be important in work-related settings. Hersey and Blanchard (1982) state that approximately 50 percent of newly established companies disappear within two years, and after five years nearly 70 percent of these companies go out of business. They claim that most of these failures depend on ineffective leadership. The question of what leadership really is, becomes important to understand. The general view of the meaning of leadership held by many authors in organisational studies is "*the process of influencing the activities of an individual or a group in efforts toward goal achievement in a given situation*" (see Hersey & Blanchard, 1982, p. 83).

In the large *GLOBE Research Project* (Global Leadership and Organisational Behaviour Effectiveness), 84 researchers and 170 co-investigators from 62 countries, agreed on a definition of leadership which unlike the aforementioned adds motivation and the ability of enabling the followers: "Leadership is the ability of an individual to influence, motivate and enable others to contribute toward the effectiveness and success of the organisation of which they are members" (House et al. 2004, p. 15). It is striking that the definition emphasises an individual leader and seems not to take into account the variation of the form of leadership, for instance shared leadership, which has become increasingly common in new working settings such as VTs (Kocolowski, 2010). Comparing the two definitions one sees that when defining leadership, the first definition uses the term process, while the other refers to an individual leader.

In the new virtual settings leadership is greatly affected. In this study I will try to understand and elaborate on the leadership in such settings - the e-leadership.

3.5 Leadership in Virtual Teams

The increasing demand of working in cross-functional and cross-cultural settings in different geographical locations in different time-zones, have created an increased need of a new kind of leadership. This new kind of leadership, e-leadership, was coined by Avolio and Kahai (2003), and in contrast to traditional face-to-face leadership, e-leadership takes place in an environment of ICT. Here, it is not just the interaction between an e-leader and the members of a team that is done by ICT, but also all the rest of the work. Cook (2014) means that the e-leadership has the same responsibilities as traditional face-to-face leaders, such as developing the team members, controlling and monitoring the progress, ensuring commitment, structuring and organising the work. But leading virtually also creates new challenges traditional leaders have not experienced before. These challenges are among others to put together successful teams containing people from different cultures, motivating its team remotely and monitoring, structuring and organising the work from a distance. Furthermore, dealing with the fast-technological changes and learning how to use the new technology on a daily basis in the work, are also challenges e-leaders confront (Crawford-Mathis, 2009).

Avolio and Kahai (2003) claim that it is possible to exercise the same kind of content and leadership styles through ICT, as in a traditional face-to-face setting. They are primarily concerned if team members experience the presence of the leader and if the communication can be as efficient as in a face-to-face meeting. To become a successful leader in a VT-setting a relationship and trust-building context needs to be created (Cascio & Shurygailo, 2003; Zaccaro & Bader, 2003). Often this has to be done quicker than in traditional face-to-face leadership since the interaction only is held through ICT, which usually not involve the normal day-to-day talk in the classical setting (Avolio & Kahai, 2003). This puts extra focus on leadership's ability to team build and foster good communication, which is important for avoiding misinterpretations (Crawford-Mathis, 2009). It also seems important for the leadership in VTs to be sensitive to cultural differences, especially when teams nowadays often consist of people from many different cultures (Cascio & Shurygailo, 2003).

E-leadership types in VTs

Cascio and Shurygailo (2003) mean that a VT can be divided into four classifications depending on the number of managers and locations the VT works in. The different classifications are 1) Teleworker is a single manager of a VT in one location. 2) Remote team is a single manager of a VT in multiple locations. 3) A Matrixed teleworker is a VT with multiple managers at one location. 4) A Matrixed remote team consists of multiple managers in several different locations. An organisational situation seen in matrix (4) is considered, according to Cascio and Shurygailo (2003), to be the most difficult one to manage.

Figure 2 - Cascio and Shurygailo's (2003) VT matrix

3.6 Forms of E-leadership

In this section the *T-shaped portfolio of skills model* of a single leader will be contrasted to shared leadership, a form of leadership which has become common in VTs. Since VTs often are dynamic units working across multiple borders and barriers, it seems significant to look closer at what works and not works in such a context.

In contrast to the *T-shaped portfolio of skills model*, shared leadership inheres a view of the leadership as collective (Crevani, Lindgren & Packendorff, 2010; Denis, Langley & Sergi, 2013). The intention here is not to do a comparative study between these two forms of leadership, but to relate them to the increasing demand of domain expertise (Berger & Frey, 2016).

3.6.1 T-Shaped Portfolio of Skills Model - A Competence Profile for Future E-leaders in the EU

One way of solving the increasing demand of domain expertise in the virtual working setting might be to apply the *T-shaped portfolio of skills model* created by the contracted researchers (Hüsing et al. 2013) for the European Commission. It is a comprehensive study made with the purpose of showing the increasing demand for e-skills and it function as a springboard for educating e-leaders in Europe (E skills-lead, 2014). The study is a scenario-based forecast of the ICT development in Europe between 2013 – 2020, offering concrete recommendations and a roadmap for the implementation of the strategy. The intention with the study was to get empirical data as a basis for a European agenda aiming at preventing shortages, gaps and mismatches in innovation skills, as well as facilitating a cooperation between European stakeholders and policymakers.

Because of the ongoing digitalisation in so many sectors, the authors using academic research together with their own estimates, to highlight an increased demand for a new type of *leader*, savvy in both ICT, other expertise than ICT, as well as in organisational development. According to them, there will be a great need of business leaders having more knowledge in ICT (and other "deep" expertise), as well as there will be a need of ICT leaders having more organisation-related knowledge (see figure 3). These requirements are forenamed to be crucial in order for Europe to enhance its competitiveness and capacity for innovations in the future (Hüsing et al. 2013).

The lines of actions addressed in the report point towards an aligned policy of actions in order to meet the new digital era. Among many things, a cooperation of member states and stakeholders is mentioned, as well as benchmarking public policies, developing new leadership-approaches and cooperate with universities and business schools. These recommendations are now being used in the *EU skills agenda* conducted by the European Commission.

The suggestion of an e-leadership profile with a mixture of both deep and transversal competence, is of great importance for this thesis. Even if the authors sometimes recognise a need of diffusion of e-leadership in large and complex enterprises, the report is being used as a guide when educating leaders with a multi competence portfolio of skills. Despite there already

being several European education projects (e-leadership programmes) aiming at this (for example in Denmark, Netherlands and United Kingdom), the authors call for a much larger scale of action, proclaiming a need of greater collaboration between educational institutions and industry in order to give universities access to the latest technological resources (Hüsing et al. 2013).

3.6.2 Shared Leadership

The concept of shared leadership is relatively new within organisational studies. Most of the research done on leadership has evolved around the study of a single leader (Crevani, Lindgren & Packendorff, 2010; Denis, Langley & Sergi, 2013). The concept of shared leadership refers to a sharing of influence and power between different individuals in teams, rather than a centralisation of the influence and power to one single individual leader (Pearce, Manz & Sims, 2009). It is sometimes seen in contrast to the traditional hierarchical and vertical leadership, where the leader often is one single individual (Bolden, 2011). According to several authors, shared leadership is gaining much attention in today's organisational settings, where team structures are slowly starting to replace hierarchical structures (Avolio, Walumbwa & Weber, 2009; Sally 2002). Pearce, Manz and Sims (2009) claim that the most successful way to lead VTs in organisations is through shared leadership, some authors even claim it to be the fundamental condition in today's KIFs (Pearce, Conger & Locke, 2008). Of particular interest to this study is if dispersed geographical locations affects leadership, and if shared leadership is difficult to practice in dispersed teams.

There exist different types of definitions of this kind of leadership. Yukl (1989) for instance, defines it as individual members working in a team starting to influence the other members of the team and its activities, while Pearce and Sims (2000) point out shared leadership as a leadership deriving from team members and not just from an appointed leader. Bergman et al. (2012, p. 18) use a definition that more clearly define the leaders in the group: "Shared leadership occurs when two or more members engage in the leadership of the team in an effort to influence and direct fellow members to maximise team effectiveness".

Nevertheless, according to Gilson et al. (2015), shared leadership is anticipated to promote team effectiveness in VTs. Sharing the leadership can be an advantage for teams and its members if an ability of self-leadership is there (Bell & Kozlowski, 2002). In order for shared leadership

to function well in VTs, the team members need to come to an understanding of the influencing, supporting and fostering of motivation, as well as the decision-making (Carson, Tesluk & Marrone, 2007; Pearce & Conger, 2003). However, historically, shared leadership can be traced back to the Republican Rome where co-leadership was used as an efficient leadership form (Sally, 2002).

3.7 Cross-Cultural Leadership

The way organisations and its leadership are being run has changed rapidly due to the globalisation of economic and social relations and a continuous development of new technology (Berger & Frey, 2016). These aspects have created complexity in today's work, and a need of broadening the talent acquisition from around the world. People are collaborating across cultural borders which puts extra pressure on the leadership as people from different cultures may have different opinions in how the leadership should be exercised (Hanges et al. 2016; Henson, 2016). To be a leader in a context where the economy, politics, environment, religion and especially the culture are different, is arguably more complex than being a leader in one single location (Henson, 2016).

Chutnik and Grzesik (2009) state that the main challenges for organisations working in cross-cultural settings, is to find global leaders that possess an ability to find new ways to communicate across geographies and time zones. Particularly good communication skills are therefore necessary in the leadership. Although new technologies enable people to speak and communicate through technology it is still important to sometimes meet face-to-face to foster the development of trust. Other important factors to take into consideration when leading globally is to encourage its team members to train and learn about other cultures (Oertig & Buergi, 2006). But it is always important to remember that even if a leader is successful in one culture it is not certain that he or she will succeed in another (Javidan et al. 2017).

3.8 Theoretical Framework

3.8.1 Situational Leadership Model

Since the work settings of VTs are complex, it is relevant to look closer at what orientation a leadership has or should have in such settings. In this study, a critical elaboration of the SLM will be presented and used as a theoretical reference for analysing if and how the increasing demands of expertise on leadership in VTs, is influencing its orientation. SLM was developed in 1969 and was introduced in its first version in Hersey and Blanchard's (1982) book *Management of organisational behaviour: utilizing human resources*. SLM is used as a tool for analysing the relationship between leaders and followers, using "cores" to identify different orientations of leadership with the concepts of task-oriented and relationship-oriented leadership (Hersey & Blanchard, 1982). The SLM model originates from the late 1960s and is not yet revised to the modern digital age of ICT, and its leadership. The intention with applying this model to this study is also to challenge and see how applicable it is in today's leadership of VTs. The model itself is interesting to analyse in relation to the leadership in VTs since the leadership differs in a VT compared to a traditional face-to-face leadership.

Hersey and Blanchard (1982) claim that it is important for a leader to identify what is going on in the environment and to adapt accordingly. The situations an organisation face and the corresponding behaviour of the leader will in this sense play a crucial role for the effectiveness of leadership.

The SLM divides the leadership in two different leadership behaviours - *task-oriented leadership* and *relationship-oriented leadership*. The task-oriented approach of the leadership is focused on to which extent a leader is likely to define and organise the roles for the followers, and the demonstration of how, when and where the tasks are going to be accomplished. The relationship-oriented side of the leadership, on the other hand, emphasise a more relationship-building and emotional supportiveness of the members, where a two-way communication is encouraged. Hersey and Blanchard (1982) argue that a leader often possess a combination of task and relationship behaviours, but that different leaders should use more or less of either of these orientations depending on the situation. The weighing of these two sides of behaviours will affect the outcome of the leadership and the followers' effectiveness. Except for the task and relationship-oriented factors, the model also relies heavily on the level of readiness and maturity the leadership's group of followers possess. The SLM is supposed to be used as a tool

for leaders to better understand the relationship between the followers' valued level of maturity, and the right exercised and most effective leadership.

Maturity decides the orientation of the leadership

As seen from above the level of maturity in a group of followers plays an important role in the model of Hersey and Blanchard (1982). In a team for example, the different team members' capability and readiness to take responsibility and control of their own actions, as well as the maturity of the team as a whole, determine the type of leadership needed. The level of maturity does not often apply to a general maturity or immaturity but should be evaluated in each and every task one individual or group is being assigned to and is expected to accomplish. The level of maturity is especially interesting in the context of teams since different team members can have different competencies and knowledge-gaps. Some persons in the team may be good at exercising the tasks but less good in communication, being shy or unwilling to express certain things. The leader should reflect about what the task and the situation require and assess the level of maturity in the followers and from this decide what kind of leadership orientation s/he should use to get the most out of the team. The idea and function with the SLM model is to understand how a leader (ship) should support its followers to aim at a higher degree of maturity. Below a diagram shows the correlation between different aspects of leadership - task and relationship behaviour - and the level of maturity, in a curvilinear axis (see figure 3).
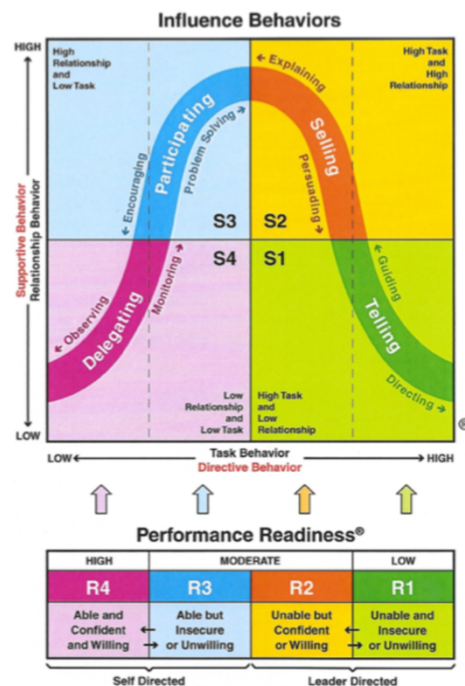

Figure 3 (Northouse, 2007). - SLM's styles

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The model shows the letters R (as in readiness) and S (as in styles). In SLM there are four levels of maturity listed: low (R1), low to moderate (R2), moderate to high (R3) and high (R4). Depending on the maturity level of a person or a group, there are four correlating leadership behaviour approaches: *Telling (S1), Selling (S2), Participating (S3) and Delegating (S4)* (see figure 3).

When a person or a group of followers are having a low maturity level (R1) there is both an unwillingness and incapacity to accomplish a specific assignment. In this case, a leader who emphasise a *Telling* approach by giving clear instructions and directions, will have the highest probability to help the group of followers to succeed, according to SLM. This *Telling* behavioural style emphasis a leader who tells how, when, where and what to do in different circumstances. A too relational and supportive approach can in this sense be counterproductive and ineffective. The *Telling* approach requires a high task-orientation and needs less of a relationship-oriented leadership (Hersey & Blanchard, 1982).

A low to moderate maturity level (R2) arise when the group members are willing but unable to accomplish a specific task because of lack of competence. In this situation a *Selling* (S2) approach is advised, where a combination of a task and directive behaviour together with a relationship-oriented and supportive style will strengthen the enthusiasm among the followers and lead to a better outcome. In this stage a high task and high relationship-orientation is required since the leader needs to get the followers to understand and to buy into the tasks as well as getting them to understand the reason for the assignment.

When the maturity level is moderate to high (R3) the followers are unwilling but able to accomplish a specific task. The unwillingness usually originates from insecurity. In this stage the followers are often able to do the task but needs a motivational push. In this sense a more relationship-oriented leadership is required to foster a two-way communication where a supportive and *Participating* (S3) approach leads to a higher probability of success. In this state a high relationship-oriented style is required, while the task-oriented style can lessen.

The last maturity level is when the followers have a high level of maturity (R4). Followers in this stage are often both willing and able to accomplish a task, why a *Delegating* (S4) approach where little directions and support are necessary. The followers already possess the right competence and confidence to succeed, and a leadership with low relationship-orientation and

low task-orientation is most likely to be rewarding. At this maturity level the followers work so autonomously that they often not are in need of any support or directions from the leader.

As seen in the diagram, SLM contends that immature followers need to be strongly directed by a task-oriented leadership in order to become productive. Likewise, an increase in the level of maturity of the immature followers should be rewarded with more relationship-oriented supportive leadership, which in turn fosters further increase of the maturity of the group. Once the followers reach a high level of maturity, the leadership should focus on decreasing both the amount of control as well as the relational approach. The final stage of maturity, when the followers are very mature, there is no need for the leader to do anything but giving them full autonomy. The leader in this sense works as a facilitator and is supposed to react if any follower's motivation or performance decreases. Then the assessment and guiding through the necessary steps in the curvilinear starts all over again, with the goal to once again achieve a higher maturity level (Hersey & Blanchard, 1982).

Critique of the SLM model

The SLM model is widely applied in different leadership education programmes and is practised by many organisations and leaders. But despite its popularity there are also academic researchers who are concerned and have found limitations in it. Although it is a well-addressed theory in the management literature there is not much research on its actual justification of the propositions and assumptions related to the model. Questions whether this model is applicable and useful are being raised and the utility of the model is still questioned (Graeff, 1983; Fernandez & Vecchio 1997; Vecchio & Boatwright, 2002).

Furthermore, Shonhiwa (2016) claims that it is still unclear what Hersey and Blanchard mean by highlighting a decrease in commitment in state R2 and R3 (see figure 3). He states that it is not mentioned in the model how and why this decrease of commitment happens and that there is a lack of research in the area. Another critique against the model concerns the difficulties in measuring the level of maturity in a follower and in a group of followers more generally. It is not evident that the level of maturity is the same in an individual than in a group and this thin line is proclaimed to be hard to assess. This is also something the academic research on the model lacks (Shonhiwa, 2016).

Nevertheless, there is much research on the SLM's implications in the context of organisations and teams meeting face-to-face, but with a dramatically changing working environment with increasingly more focus on the work in virtual settings, it will be interesting to see how this rather old model is played out in a modern context.

3.9 Summary of the Literature Review

Some of the main critical points in this review will be further investigated. When it comes to the form of leadership in VTs, there are many divergent opinions; some argue for the efficiency of shared leadership, while others claim that leadership should contain one single person. Another important aspect is the orientation of leadership and if relationship-oriented or task-oriented leadership should be deployed. Does the maturity of the team and its members play a crucial role in the formation of the leadership style as Hersey and Blanchard (1982) argue? Competence and domain expertise seem to play an important role in today's leadership in VTs. It therefore becomes poignant to explore these aspects' relevance in the context of leadership in VTs and how they are integrated within leadership forms. The above-mentioned factors are the main focus of this study and will be investigated in a case company. Below follows an explanation of how the study was conducted.

4. Methodology

This section will explain the philosophical grounding where my position as a researcher will be clarified, followed by the design of the research and how the data collection was gathered. Lastly, an analysis of the data will be presented together with a critical dimension to the study.

4.1 Philosophical Grounding

In the methodology a description of how the researcher has gathered the research material and how one has worked and come forward to the findings are explained (Bryman & Bell, 2015). Since the view of reality of the researcher is affecting the study and the findings, I will for this reason describe what type of philosophical standpoint I have taken. One can compare two stances, while the positivistic scientific tradition looks at the researcher and the object of research as independent from one another, I took the stance of a post positivist approach which accepted my own background as well as my pre-understanding and opinions that could affect what has been observed and how it was analysed (Prasad, 2005; Styhre, 2013). This self-awareness gave a critical perspective to the research process as well as to the results.

Throughout the writing of this study I used an abductive approach when analysing the empirical material. This is usually suggested when aiming at discovering new variables or relationships (Styhre, 2013; Dubois & Gadde, 2002). The research was based on my pre-understanding of the research field as well as my own assumptions of a connection between the form and orientation of the leadership and its competence. Empirical findings were interpreted through the lenses of the author's theoretical pre-understanding in search for the best explanation, while allowing the research process to go back and forth between the empirical data and the theory (Alvesson & Sköldberg, 2018). During the process an eye were kept on the relevance of the chosen theories, with an awareness of the risk of seeking too simple explanations and avoiding the more complicated (Douven, 2011).

4.2 Research Design

In order to understand how the leadership in VTs works in reality the study has collected empirical material through a qualitative case study where the interpretative approach was used. An interpretative approach assumes that reality is socially constructed by subjectivity (Alvesson & Sköldberg, 2018). This approach gave me, as a researcher, when interviewing the respondents, a possibility to interpret and try to understand how it is to work and lead in the

context of VTs. With an interpretative approach the interviews were on my part characterised by listening, giving room for follow-up questions and allowing the respondents to develop and deepen their views (Styhre, 2013). The chosen research design also gave me an insight and understanding of the meaning of the statements of the respondents and how they perceive different things in terms of the subject at hand (Merriam, 2002). The collection of the empirical material was something that helped me come closer to the research topic, analyse it critically and subsequently arrive at a conclusion. The empirical findings were gathered through a case study, which is normally executed by an in-depth analysis of a social phenomenon or a unit (Merriam, 2002). This particular case study analysed team members and leaders in VTs at the case company ALFA (see section 5.5).

When discussing tendencies showing connections between expertise and orientation of the leadership, the SLM model of Hersey and Blanchard (1982) was applied. Theories of a single leader (see *the T-shaped portfolio of skills model)* (Hüsing et al. 2013) and of shared leadership was used as references when discussing tendencies of connections between expertise, orientation and the form of the leadership.

4.3 Selection of a Case Company

In order to gain information and understanding about how an increasing demand for domain expertise is affecting the virtual work and leadership in today's organisations, I contacted a company which I knew was working much in the context of my research area. According to Yin (2009) it is of major importance to select an organisation that is representative and can be interpreted in the context of the research topic. The case company ALFA, which is being described more thoroughly further down (see section 5.1), is a large IT-consultancy and business development firm working with high-tech solutions. This type of company gave, according to me, the right research focus, which I hoped would provide valuable information on the challenges connected to the leadership in VTs.

4.4 Collection of the Empirical Material

4.4.1 Interviews

The empirical study contained eight respondents from ALFA, who were carefully selected in terms of roles, country locations and their possessed competence background. Tracy (2010) claims that interviewing different types of interviewees in the same working sphere may be

advantageously, since it can result in a broader and better understanding of the subject at hand. It gives the researcher a possibility to hear diverse opinions and creates better opportunities to analyse and compare. This is called multi-vocality.

The different respondents were approached through e-mail with the help of two supervisors at ALFA, who had large networks within the company.

Since I wanted to investigate what implication an increasing demand of domain expertise can have in the leadership of VTs, I decided to interview both team members and leaders working in VTs. The reason for this was to get a more complete picture with different perspectives.

The structure of VTs can vary. The respondents can simultaneously work in several different teams, which normally consist of four to five persons. These teams are part of a larger *Project* (see description in section 5.2). My aim with interviewing these respondents was to get different views and opinions on the subject at hand, and to find out if there were any discrepancies in the respondents' different opinions. A *Project* often consist of both Indian and Swedish team members, which was the reason for me interviewing respondents from both India and Sweden. The cross-cultural dimension gave the study a new angle for the analysis. However, it should be stated that this study did not make any evaluation on the relationships between the Swedes or between the Indians. The main focus was instead to search for differences, comparisons and challenges in the leadership in virtual settings.

The reason for selecting eight respondents was partly due to the rather time-consuming work to gather and categorising the findings, especially since I wrote this thesis on my own. The material from the eight interviews is rich, with a large quantity of data. Furthermore, Edwards and Holland (2013) also claim that it is important to not have too much empirical data in form of interviews, since it may lead to a too time-consuming process in the composing of the empirics. Instead, they mean that it is of major importance to be able to manage, analyse and interpret all the collected data rigorously. With this in mind, and with the empirical findings I received, I believe that the material was sufficient enough.

The empirical data was solely conducted through in-depth interviews, which is one of the most widely used types of data collection in qualitative research (Edwards & Holland, 2013). The

respondents' insights and experiences played an important role, although criticalness and reflexiveness were applied in the analysis (Alvesson, 2003).

The interviews were semi-structured, which, according to Kvale (1996), collects insights from the respondents to create a meaning of explained phenomenon. I prepared some general questions for a clear structure of the interview. The structured interview method also helped me to not miss out on anything important. During the interviews I was constantly trying to refer the answers to the theories and concepts I had read and written about earlier on, without explaining the actual terms for the respondents. The responses were compressed to solitary helpful words and committed to a notebook to enable new significantly formulated follow-up questions. The follow-up questions were of a dynamic setting and therefore varied (Edwards & Holland, 2013).

The interviews were all done through Skype and telephone and lasted for approximately one hour. The author was leading the interviews in Swedish respectively English depending on the respondent's language proficiency, and through asking the interview questions that was about the form, orientation and competence in the leadership of VTs (see appendix). The questions followed an almost identical form and order to enable comparisons and different interpretations about the subject at hand. Furthermore, all the interviews were being recorded, which gave me the possibility to focus on taking notes and writing down follow-up questions simultaneously as we were talking, and not think about writing down every single word-for-word. Normally, I would have preferred to do the interviews face-to-face at their office to be able to see face expressions (see Bryman & Bell, 2015; Kvale, 1996), how they moved during the interview, and their workplace. But since asking the questions, taking notes and doing the follow-up questions, all at the same time, on my own, I must admit that it was an advantage to do it through Skype and telephone since it fostered my attention and concentration on the most important thing - the interview itself.

After each and every interview they were all carefully transcribed with help of a slow-motion effect in a software programme called Audacity. This gave the respondents a chance to later on take part of the material if wanted. Further on, the transliteration was coded down into four categories (see section 5.5) to create the best possible pre-requisites for the analysis part (Styhre, 2013).

However, in the process of evaluating the data, and with the abductive approach (Alvesson & Sköldberg, 2018), I made an interesting finding which opened up a further dimension to the study. After reflecting on how the respondents returned to the subject of cultural differences in the teams, describing how it affected the collaboration in the team work, I began to realise that these differences also seemed to be of great importance when trying to get a grip of how leadership in VTs works.

During the interviews it became early on clear that the cultural differences perceived by the respondents was experienced as barriers in the communication and collaboration within the teams. Several aspects of this theme were brought up more or less spontaneously during the interviews, as if the respondents had a need of expressing it. Cultural differences seem to exist naturally when working across country-border, but a lack of a mutual understanding and communication can turn it into a problem.

When listening to the respondents and to the challenges cultural differences seem to create, it is striking how closely linked this aspect of the global VT work is to the research question. The growing demand for domain expertise (see section 3.1) has turned many firms multinational when recruiting competence all over the world, which in turn, has led to new challenges.

Nevertheless, speaking of cultural differences and how it may foster both possibilities and challenges, one of the eight interviews I held was challenging in many ways. The interview was with an Indian respondent who had to make the interview after his work day in his private household due to time differences and other circumstances. In this interview I had difficulties in understanding his quite heavy accent, especially since it was much noise coming from the background disturbing the focus of the interview. On top of this poor environmentally and linguistic circumstances, the Skype line broke several times due to internet and other technical problems. This was a telling example of how it can be when working virtually. The team members of ALFA work in a Swedish-Indian setting through Skype Office and in different time zones. It made it even more clear how communication and possible cultural differences can become great challenges when working remotely.

Although much information was given me when talking with the respondents, the data collection must still be perceived as relatively small concerning the large amount of companies there are on the market working in the context of VTs. Therefore, I have been careful when

drawing any general conclusions, although I believe the findings can contribute to the research in this field and hopefully be of value for companies interested in the subject at hand, by providing useful examples and tendencies.

4.4.2 Data Analysis

The collected data in form of semi-structured interviews embodied the whole study's empirical findings and served as a practical example of how leadership works in reality in the context of VTs. The empirical material gave me a great deal of information which I further on started to analyse and interpret to be able to correlate it to the research topic and question (Backman, 2016). Since the data was abundant I started to analyse what the respondents said and formulated different subcategories. As Bryman & Bell (2015) recommend, I made notes concerning the most important answers and aspects the respondents gave me, and the reason for doing this was because it created an easier overview, which is necessary for the reader of the study, but also for myself when analysing the material. Moreover, it helped me as an author to always keep on track regarding the research question.

The four main themes the respondents were discussing was the cultural differences affecting the communication, the form of the leadership interpreted as single and shared leadership, the orientation of the leadership (see task- and relationship), and finally the question about competence in the leadership. These four categories have been constituted in the presentation (see 5.5). Furthermore, the responses were later on placed under the right category with additional sub categories explaining more in detail what the different sections were about. This process was in itself a time-consuming task since it required much patience and a holistic view of the material.

Since an abductive approach was used (Styhre, 2013; Dubois & Gadde, 2002), I have worked with theory and empirical material in a back and forth process. Theory has formed the framework and certain assumptions underlying my research question, while, at the same time, I have kept an open mind to any emerging empirical data of interest to my field.

4.5 Research Ethics

In an attempt to make the respondents more comfortable and open in the interviews, the company, projects, teams and respondents were anonymised and replaced by fictive names

(Saunders et al. 2016). The author was also aware of that the respondents are taking risks by answering potential sensitive questions that possibly could harm their relations with specific persons in the company, and considering that, the respondents were informed of the anonymisation both in the initial approaching stage and once again before the start of the interview.

4.6 Critical Dimensions

Below follows an elaboration around the critical approach I have taken.

4.6.1 A Reflexive Study

It is important to know while doing qualitative research that there might be weaknesses in the method used. The trustworthiness in qualitative research is important to question, both for the actual author, but also for the reader of the study. I have tried to stay reflexive throughout the study by always have in mind that the respondents' answer may be biased and misinterpreted. This criticalness is something Alvesson and Sköldberg (2018) claim to be important, both in terms of how I as the author look upon myself when doing research, but also what the actual findings view and how it affects the result. Another important aspect to keep in mind as an author is that there are no real truths in a qualitative research. This makes it important to bring focus on the social context and the respondent's themselves (Alvesson & Sköldberg, 2018). However, I am aware of that my pre-understandings on the research topic could have influenced the study. By acknowledging this I hope it would give give a more valuable understanding.

One needs to be aware of that the respondents' answers could be biased to benefit the company or the actual respondent in some occasions, why reflexivity and criticalness is of major importance. In order to decrease the mentioned risk, I tried to ask questions that were not very typical and straightforward on the topic and instead, I tried to talk around the questions in a way that probably was perceived in a more comfortable way. Another risk one needs to think about when doing qualitative research of this type is the potential biases the respondent may have in the researched area. Here, the anonymisation and talking around the questions hopefully helped the respondents to not focus on these aspects.

4.6.2 Credibility and Validity

Since qualitative studies may not reveal all facets of an object, I wanted to take a critical and reflexive standpoint to the research to stay as trustworthy as possible. Furthermore, the collected findings from the respondents is something one needs not to take for granted, therefore a sceptical view was applied on the analysis of the empirical material. Another aspect I have been aware of when doing the interviews is that several factors can affect the reliability of the study negatively. Silverman (2011), for example, claim that how the questions are being asked by the interviewer, the environment of the interview, and motivation and stress of the respondent, can cause situations where the answer might not be fully reliable. Therefore, I tried to steer the interviews towards a calm setting by encouraging the respondents to find a quiet place on a time that suits them, which was luckily the case in seven out of eight interviews (see the troubled interview above).

4.6.3 Generalisability and Applicability

A study of this type can normally not represent a whole sector or area of research. To question whether it is possible to generalise a study's empirical findings to other similar companies is also something Bryman and Bell (2015) point out. My standpoint, as a researcher, is trying to have a careful and humble approach. I do believe that this study cannot be completely generalised into other similar companies, but view some of the results and tendencies being applicable on other comparable companies working in the same settings, can hopefully be an inspiration for organisations facing similar challenges regarding leadership work in VTs.

5. Empirical Study

Below follows a presentation of the case company and the empirical findings of the study. First there will be a description of the company, here called ALFA, and the different roles in the VTs of the company, followed by an introduction of the respondents. The final section comprises a presentation of the empirical material based on the following categorisations: cultural differences affecting the communication, forms of the leadership, orientation of the leadership, and competence in the leadership. The categories have been carefully selected based on fundamental concepts and theories of the study and will further on be used as guidelines in the analysis.

5.1 Presentation of Case Company ALFA

ALFA is a multinational KIF consisting of employees with different kind of domain expertise. They deliver high tech business solutions to firms and industries. ALFA claims themselves to be one of the world's leading ICT and business development companies. The company works in an environment of global and, what they call, blended teams - here meaning VTs with team members of at least two nationalities.

In this study there will be a focus on blended teams with team members from ALFA Sweden and ALFA India. Part of ALFA India was originally a company of their own and a delivery centre to ALFA, purchased by ALFA six years ago. About one year ago a restructuring of ALFA was made, introducing an agile way of working and a flattening of the organisation with a more distributed leadership.

Within ALFA several names are used for their process of production (*Product, Product Service, Product Delivery, Release, Sprint*). In this study the terms *Product* or *Project* will be used, depending on the context. A *Product* or *Project* of ALFA normally consist of several different *Scrum Teams*, each one consisting of usually three to ten team members (or sometimes more). Ideally, a *Scrum Team* have all the needed expertise available within the team, but when working on complex *Products* demanding detailed knowledge and skills of, for example, unfamiliar software systems, external expertise is sometimes hired.

The agile work method was introduced by ALFA approximately one year ago resulting in that the *Scrum Teams* now are so-called agile. This means that they are self-organising and cross-

functional. With the agile approach there is a regular testing of the product during the development process. Imperative key words in the process are transparency, inspection and adaptation. Working agile also means that roles and responsibilities are being subordinate to the results, along with a readiness for swift decisions and an open mind towards any necessary change of directions. One of the respondents compares agility to the building of a city; instead of working on a city until it is ready, before the inhabitants move in, one starts building a couple of blocks and let people move in successively, while continuing building. The agile approach also implies that the teams have regular contact with the *Client* for testing and updating the *Product*. This has led to a larger responsibility in the *Developing Team* who are expected to have continuous communication with the stakeholders (for instance the *Client* as well as the leaders) about the process. This has also contributed to a flatter and more collaborative team-work between *Developers* and leaders.

Developing a *Product* is often a complex process, sometimes with a duration of several years. A *Product,* once ready*,* can also need continuous maintenance with integration of new data. Larger *Projects* are constituted by several different roles and responsibilities. Since the restructuring of ALFA, the hierarchical structure has turned flatter, even if the leader-roles and their functions are still there.

Below follows a short description of the most important roles in a *Project*.

5.2 The Roles in the Development of a Product

Except for the *Client*, the *Director & Client Executive, Team Product Owner* and the *Specifier*, who usually are situated in Sweden, the roles are spread out over the teams and occur both in India and Sweden.

The *Client* is the customer.

The *Director & Client Executive* is responsible for customer and employee satisfaction and the profitability of the delivery of a *Product*.

The *Specifier* is often someone with long domain expertise experience, with the task of stating explicitly and in detail the needs of the *Client*, resulting in a *requirement specification* of a *Product*.

The *Business Analyst (BA)* has the role of clarifying the *requirement specification* of the *Client*. A BA's expertise often supports the *TPOs* (see section 5.5).

The *Team Product Owner (TPO)* is the owner of the development of a *Product* and responsible for ensuring that the product meet the expectations of the *Client*. The *TPO* serves as the connection between the *Developers* and the *Client* and usually works closely with the *BA* when specifying the *Product*.

The *Head of Product Group (HPG)* collect information from the different *Scrum Teams* and report the status of the process to the *TPO*. It also oversees the market and financial aspect of a *Product* and hold the resources for the different *Scrum Team*s.

The *Scrum Master* serves as a facilitator in a *Scrum Team,* coordinating knowledge and technology. The *Scrum Master* report to the *HPG*.

The *Developers* constitutes the *Scrum Teams* and are responsible for designing, programming and testing the software.

The *Tester* is responsible for testing the software throughout the process of production.

The *Agility Coach* supports the ongoing transformation to agile teams.

5.3 The Respondents

All respondents have participated in several VTs of varied compositions and have a rich and varied experience of working globally as well as virtually. Some of them are for the time being working in the same team, and some are simultaneously working in other teams as well.

In the case of the respondents in this study, three are Indian situated in India, five are Swedes situated in Sweden. The reason for the close collaboration between Swedes and Indians is

explained by ALFA Sweden by the high-tech expertise such as coding knowledge available in India.

Below follows a short introduction of the respondents.

Magnus - (ALFA Sweden)
Magnus works as a *Developer* in a *Scrum Team* that is part of a large *Project*. The *Scrum Team* has both Swedish and Indian team members.

*Andrea – (*ALFA Sweden)
Andrea has worked both as a *Developer* and a *PTO* and have long experience of global VTs.

Viktor - (ALFA Sweden)
Viktor works as a *Scrum Master* but also has the experience of being a *TPO*. Moreover, he has a cross-functional responsibility as coordinator for the *Scrum Teams* in his *Project*. Besides that, Viktor is involved in different testing milieus.

*Victoria – (*ALFA Sweden)
Victoria works as an *Agility Coach* to several VTs and sets up and implement guiding lines for the transformation to agility. She also supports the *HPGs* in their daily work.

Brian - (ALFA Sweden)
Brian works as a *Client Executive* and a *Director of Consulting*, responsible for approximately several consultants and is regularly working in global VTs. Within his responsibilities are customer and employee satisfaction and the profitability of the different *Products*.

Aaray - (*ALFA India)
Aaray is a *Scrum Master* and has worked in ALFA for many years in several global VTs. Aaray is currently involved in a *Product* that has been going on for a number of years.

Rudra - (ALFA India)
Rudra is a *Director of Consulting* and is leading large blended teams with team members from India and Scandinavia (Sweden, Finland and Norway). He is in charge of approximately 200 people.

Vijay - (ALFA India)

Vijay is working as a *Scrum Master* on a large-scale *Product* containing five *Scrum Teams*. The teams are blended with an Indian *Scrum Master, a Swedish TPO*, and *Developers* from both India and Sweden.

5.4 Formal Regular Meetings in the Virtual Context

Daily Stand-ups. Every day the *Scrum Team* attend to a virtual meeting, checking out the latest development of the *Product*.

Monday-meetings. Weekly virtual meetings held with all team members of the *Product*'s *Scrum Teams*. The *TPO* presents a priority list.

5.5 Presentation of the Empirical Material

The literature review has afforded a careful choice of the most relevant and important literature in the context of VTs and leadership. What becomes clear and which can be seen in the interviews, is how multiple cultural differences cause obstacles in the collaboration of the teams, and, how on top of these obstacles, the teams are struggling with further dividing factors caused by the work setting itself (such as differences in time and location). These challenges push the teams to continuously try to adapt and solve the arising disturbances in the communication as well as in the collaboration. It has also become clear for this author that the form of the leadership (single or shared) has a profound effect on the structure in VTs and how the work is being done. A third perspective can be seen in the orientation of the leadership (task and relationship-oriented) and how it influences the team members ability to cooperate and deliver good results. The following subsection is concerned with the competence and the increasing demand of domain expertise in the leadership in VTs, and what consequences it has for the role of the leaders. The different sections can sometimes be experienced as fleeting because of the subjects' interrelatedness. Each subsection ends with an italicised summary.

5.5.1 Cultural Differences Affecting the Communication and Collaboration

Cultural differences are commonly occurring when working in global VTs. All respondents, the Swedes as well as the Indians, brought up the theme of cultural differences, either

spontaneously or as a response, expressing concerns that the differences created hindrances in the collaboration and the communications of the teams.

As described in the Methodology (see section 4), the focus on cultural differences was not originally planned, but discovered along the way and eventually integrated in the text in the tradition of an abductive approach. The theme is closely connected to the research question, since one consequence of an increasing demand for expertise has become to hire expertise from other continents. Below follow some reflections on cultural differences.

Obstacles in communication due to cultural differences

Magnus, a Swedish respondent, seems confident about that the roots to the misunderstandings and clashes that occur in the communication between the Swedish and the Indians, has to do with culture. He explains how he has learned how to "wrap things up" to adapt to the Indian way of communicating.

> If not wrapping things up, misunderstandings can arise […] this is also happening the other way around, I mean, when the Indians are telling us something important, sometimes we simply do not get it. If one compares these two cultures (the Indian and the Swedish), we (the Swedes) are very much straight-on to the point. If I, for example, discover a bug in the product, I must put it forth in a rather soft way, so they (the Indians) will not take it personally.

Another Swedish respondent describes an unwillingness of the Indian colleagues to report delays and problems that occur in the working process, while the Swedes in the same group, overzealously report problems.

> In India there is a different and maybe larger proudness in one's own work, for instance if someone in India does something wrong they do not always tell you […]. The reason for hiding the problem is the potential fear of losing your face or being treated as someone who does not have enough competence in the area.

When asking an Indian respondent if there have been any problems with deadlines and delays he says: "Not really, I cannot really answer that", and adds that it has not gone to a situation where things have escalated further up in the organisation.

Another aspect of the obstacles in communication is a tendency from the Swedish part to misinterpret what the Indians say. Andrea, a Swedish leader, remarks on the difficulty in understanding the message of the Indians, when a "yes" or a "maybe" often actually means a "no". On the other hand, she describes the Swedes as over-cautious. When the Swedes promise something, they try to give it a little extra time, just to be sure to make it and be able to keep the deadline. The Indians are not doing this. When the Indians are being asked about a deadline they answer "Ok. Let's try it". Often it does not mean anything, the respondent remarks, or rather, when the Indians say that they will try to do their best, it often means - "no". Andrea claims that it is exactly there you must start in the role of a leader; "to interpret and from the very start understand that some vague remark actually means no".

From the Indian side of the team misunderstandings are being perceived as well. One Indian respondent, Rudra, acknowledges the obstacle in the communication with the Scandinavians (in this case the Finnish), leading to problems in the delivery of a *Product*.

> These differences are big and will stay for a long time […]. The Finnish people, for example, are less talkative and less expressive compared with the Indians, and this can become a hindrance in the collaboration. The Indians have a trend of better saying" yes" than" no", while the Finnish have a formal reaction to everything.

Aaray, another Indian respondent, confirms this. He also thinks that the problems with communication within blended teams to a greater extent is caused by cultural differences. In contrast to Rudra though, he does not consider these problems serious, saying that no one has been transferred as a consequence of this.

The language also plays an important role. Aaray explains how Indians start to learn English rather late in life - at least in the generation of the respondent who is in the age group 30-45 years old. According to him, younger generations speak better English, especially compared to people from the Indian countryside, who carry a very specific accent which may be hard to understand. He remarks on the barriers sometimes felt when communicating with the Swedes. "Often, what happens when we send an email and the person to person contact is not there, we always feel there is a barrier between us, and as long as there is a barrier, we will not be able to talk freely."

Another obstacle in the collaboration (and the communication) of the Indians and Swedes is the Indians unfamiliarity with the Swedish system (such parameters are in some cases integrated in the *Product*), especially since the two cultures are so widely different. As one respondent remarks, if you do not have the basic knowledge of, let say, how Swedish authorities work, nor do you understand all the details of the *requirement specification.* As an example, she describes how the Indians just not get the term *paternity leave* (when a company needs to hold an employee's position after becoming a parent), since there is no such thing in their culture.

Hierarchical cultural differences between Sweden and India

Many tendencies in the empirical material point towards a difference in how the organisation in Sweden and India is hierarchically structured and also, differences in how the Swedes and Indians respectively experience and deal with a hierarchical order. One respondent seems surprised by the Swedes negligence of a hierarchical order. Vijay says:

> If there is one thing to particularly point out, Swedish people do not follow hierarchies! So, it is not like a boss-member-relationship. They (the Swedes) are being treated equally, so any developer for instance can have a discussion with a higher positioned member in Sweden, but that is not the case in India. We (the Indians) are more culturally hierarchy- and structured-oriented. Traditionally the manager in India will assign a task to the members and once they are done, they will wait until the next task is being sent. Members will not come forward with their own suggestions or assignments. That is not the case in Sweden, they are more proactive and are probably bringing more responsibility voluntarily.

Brian, a Swedish respondent, talks about cultural differences as an obstacle when assigning leaders to the Indian VTs. In the Indian part of ALFA, he explains, there is more of a hierarchical structure where a person's seniority is the decisive factor for promotion, or for being offered a role as a leader.

> In India it is all about seniority when it comes to assigning the leader in VTs. If assigning the most competent person for the role in India, the senior persons would probably not accept it.

Brian says that there have been employees in India who even have quit their jobs as a consequence of not being assigned a leader role when being the most senior person.

Language

Andrea, one of the Swedish respondents, explains how linguistic barriers create misunderstandings that can have dire consequences. For instance, when the *Scrum Teams* contact the *Client* directly, the *Client* sometimes does not understand the questions or problems formulated, due to the confusion of tongues. This naturally causes problems. As a solution the role of the *BA* was extended to also function as an interpretative bridge and mediator between the Indian *Scrums* and the Swedish *Specifier*.

Proposed solutions by the respondents regarding cultural differences

Vijay tells about how ALFA let Indian team members travel to Sweden and vice versa, to experience and learn from each other's cultures. He himself has been participating in a cultural training programme called *Glocal Village*, which helped staff to understand how a certain country is being administered.

Vijay continues by saying: "On the daily "stand-ups" we try to ensure that everyone speaks their message as clearly as possible, and if someone has difficulties in communicating what they mean, they can over speak to the Scrum Masters who can speak for them, or even make the call to the counterpart."

This has obviously been noticed by the Swedes. Magnus seems to have interpreted this discreteness of the Scrum team members as being cultural and hierarchical, rather than a problem of language. He says:

> When the team have their Monday meetings everybody in the Swedish part of the team, despite their role, make equally his or her stand on the subject, having more or less equal time to present their thing. In the Indian part the Scrum Master speaks for the whole Indian team.

Signs of inequality between the Swedish and Indian team members

After a part of the Indian ALFA, originally being a delivery centre with another name, was purchased by ALFA, the habit of still seeing this part of ALFA India as the delivery side seems to occur from both sides, even if they now belong to the same company. Even if ALFA tries to bridge any gaps or inequalities between the Indian and the Swedish part of ALFA, Victoria explains that the function of ALFA India is still basically a delivery centre, and that it still is

tricky for some of the Swedes to not look at the Indians as a delivery centre. She continues by adding:

> There might be a feeling from the Indians that they are a unit supporting and delivering to Sweden, and that they by some of the Swedish are still called *off-shore,* even though we are really working on removing these factors and terms such as *on-shore* and *off-shore*, and instead focusing on one united ALFA.

Being a former delivery centre and still doing the same thing; developing *Products,* the feeling of being subsidiary occurs also from the Indian side. According to Rudra, the Indians sometimes look at the Swedes as customer of theirs, rather than collaborators in the same team and firm.

This could be an explanation why the Indians, according to one Swedish respondent, not always take their responsibility in the process of a *Product*. Often, he needs to explain the smallest details in the *requirement specification* to the Indians, he says, since the Indians do not take an initiative when at lost in the next step. He also complains about a lack of leadership in his Indian *Scrum Master*.

> It is not exactly someone informing me what is going on in the Indian part, it is rather me informing my Scrum Master what is happening, what the plan is and so forth. I definitely would find it more comfortable ta also have a Scrum Master on the Swedish part […] but then one never knows how it would work in practise.

Magnus comments on how the Indian colleagues do not have the same opportunities to the small everyday-talks, and how these chats often bring clarity and move things forward. This could at least partly be the cause for the Swede's experiences of the Indians not keeping up with the work.

> It is more like they keep on working until a tester is applied and inform them that something is wrong. But this is the purpose with agile teams, to catch up with anything wrong early, but we have not noticed that it is really working yet.

The Indians as well complain about not meeting face-to-face with their Swedish colleagues. Rudra says that when co–location occurs, it helps the alignment and collaboration and brings down the big barriers. "It is basic. If you have one person in another part of the world, he will

never get the right picture of the work being done on the other side of the world." But global VTs are per definition not co-located.

Other obstacles in the collaboration

Another complication is the time difference making the syncing of the blended teams difficult. "The "daily stand-ups" are sometimes not about today, but about tomorrow", one respondent declares. Faltering lines (usually Skype) is also brought forth by the interviewed, as aggravating the communication.

As we can see there has been tensions built up in the groups, partly due to a frustration of not meeting face-to-face, partly due to cultural differences, or other reasons, such as an old hierarchy of ALFA India being a delivery centre. On top of the cultural differences, other factors reinforce these tensions, such as time differences, linguistic gaps and disruption in the electronic connections.

5.5.2 Forms of the Leadership (Single and Shared Leadership)

Restructuring of ALFA towards an agile way of working

The new agile working approach is an ongoing process of successively moving the responsibility and managerial thinking of the leaders towards greater self-responsibility, both individually and team wise, and a flattening of the organisation. Before the restructuring of ALFA, most of the leader roles were occupied by the Swedes. With the change a new structure was introduced with an increased interaction in all directions, horizontal as well as vertical. This is something all of the respondents except one, emphasises as something positive. In all the *Projects* the respondents refer to, there are now several leaders, both in India and Sweden.

When asked if the previous structure was more hierarchical Victoria says:

> Absolutely. There is now more room for the teams, but it is an ongoing journey towards a state where the teams are having more mandate. The purpose for the change is to give more responsibility to the teams, but I think that we are rather immature in this. It easily becomes a sticking point if you have layers of layers of leadership. With an agile way of working it is more focus on the team work and the team.

Viktor as well claims that the change towards agility has been good but adds how suddenly bringing in new Indian staff had its challenges. He refers to a shift when ALFA India went from being seven or eight to around 50 Indians in a month. "It shook everything around. The whole structure in India and in the communication between the Swedes and Indians dramatically changed."

Leaders in both Sweden and India explain that the new kind agile and problem-solving structure definitely has led to a greater degree of shared leadership. Aaray says that the main reason for moving away from a centralised leadership situated in Sweden is "to let everyone's voice be heard and be represented in the right way". This is something Aaray believes is a good thing, although he between the lines still seems to request a strong leadership in respective country. "I think it is a good thing if it is a leader in India that Swedes can look up to, and vice versa". He thinks such mutual crosswise respect would create a sense of unity. His expectation on the new setting is that it will bring both sides closer to one another. Aaray also explains that with the new structure most of the small problems will be handled since there will be a lot of supporting factors that will ensure a continuing engagement. Earlier he has mentioned a fear of staff leaving the firm.

On the question why he does not think it was good to have one leader with control and understanding of the totality of a *Project,* Aaray refers to the cultural differences and how the job market and the team dynamics works differently in India and Sweden.

Vijay, another Indian respondent, as well expresses a positive attitude towards the less hierarchical and more collective way of working. "We are working agile (now) and it is the team (members) who is solving problems together. With the changes there has become less focus on the single individual". He further claims that the structural change from one single leader in Sweden to several leaders on high levels on the Indian as well as on the Swedish side (HPGs), has been helpful in creating a faster workflow:

> The reason for having two of these roles (HPGs) instead of one, is the cultural differences. Since we are working in distributed teams (VTs) we need to have representatives from both sides.

One can discern how this greater self-responsibility is received positively by many of the respondents, especially on the Indian side. Rudra, himself being a leader, thinks the Indian side

of ALFA used to be hierarchical, "but it has disappeared with the change", he says. When asked if he considers the new structure to be a good thing, he answers:

> Oh yes, big time. No doubt about it at all! It gives them (the Indian Scrum Teams) a lot of empowerment. As a delivery centre the teams (Indian) are normally action takers, but here, with this new structural order, the delivery centre also becomes a contributor. So that is a huge difference, which is good.

Victoria explains how the new direction demands that everybody moves forward. There is now no one standing outside and directing the team members, she says and makes an analogy.

> It is like football, there is no one telling the players where they are going to be and to whom they are going to pass. The problem is that when you let somebody else than the players themselves take the decisions, the process slows down. Therefore, it is better for the players to take the decision themselves, but at the same time, a leadership for the Product is needed, because it is in that role you define the goal.

A Swedish team member describes the shared leadership in her team, with HPGs in both Sweden and India, sharing information and having shared responsibility for the *Developers* in both India and Sweden. On the question if she thinks it is positive to have this kind of shared leadership dispersed in respective country she answers that it is important to have leaders in respective country and work as a team. "Earlier, it might have been more hierarchism in the organisation, but in these new agile teams we are building it away."

Another Swedish respondent, Brian, expresses the advantages he believes comes with the distributed leadership:

> When it comes to VTs it is an advantage to have some sort of leader role on each and every place where the team is active, at least according to me." He finds it especially important when problems are not raised early enough, as in the case of some of the Indian colleagues. "The next release in the progress can be suffering. In this case, as a solution, it can be a good idea to have shared responsibility in the different parts of the distributed teams (VTs).

According to Brian, the size of a VT matters when it comes to the structure of the leadership. In smaller teams it becomes counterproductive with a shared leadership, while in larger teams "it

would not be possible to have one single person knowing everything going on in the smaller (many) teams".

What can be observed in the interviews above, is how all the respondents except one (see next section), believe and expect the new structure to bring greater equality and a smoother working process. It is well worth to note how both the Indians and the Swedes are positive towards the deconstruction of the Swedish hierarchy and the implementation of a shared cross-cultural leadership.

5.5.3 The Orientation of the Leadership (Task and Relationship)

A lack of personal relationship with the co-workers of other cultures

All the respondents agree on that the relationship-orientation is very important when working in the context of VTs, and some remark of a lack of personal relationship with remotely situated colleagues. Magnus complains about a lack of spontaneous occasions with small talks and jokes, by which one get to know each other. He believes this lack of personal exchange makes a paying of respect to one another even more vital. He says: "When not sitting together (in the same location) it becomes more of a client - supplier relationship and working in this way becomes a bit boring."

Magnus indicates that the new way of agility perhaps is not perfectly fit for global collaborations and that the lack of casual everyday conversations could have an impact on the outcome of the assignment. For this reason, he is not over-enthusiastic about the structural change in ALFA, so far.

The importance of relationship building activities

Andrea is putting the debt on herself for the problems she experienced in the beginning of her leadership. She believed the Indians could adapt to the Swedish way of doing things, but it was impossible. One must meet each other halfway, she says.

When being asked what is needed to tackle the sometime dysfunctional communication, Magnus emphasises how leaders on both sides (in this case the *Scrum Master* in India and the *TPO* in Sweden), need to be very straightforward and open about how things are going. According to him, they should constantly push their teams to talk to each other and have an

open dialogue. He adds that the leaders should inspire the team members to talk openly not only in job-related matters, but also about things outside the job. When asked whether this implies a more relationship-oriented leadership approach, his answer is emphatically "Yes, exactly!"

Rudra, a high leader in ALFA India, thinks the relationship building aspect in a leadership is very important for the creativity, especially when there are many new employees. He says that "most of the innovations come from that, when people just speaking freely."

When discussing the softer relationship-building aspects in the leadership with the Swedish leader Victoria, she says:

> It is really important to meet and do things together to create an understanding of each other's cultures. The soft values are crucial and going back to what we spoke about on-shore (Swedish ordering side) and off-shore (Indian delivery side), it becomes even more important to try to eliminate these terms. […]. The team dynamic is crucial, and the relationships are central.

Rudra explains that apart from the skills required for the work (domain expertise), support of the alignment of the collaboration (relationship-orientation qualities) is the most important competence in the leadership of VTs. He expresses how he now strives towards creating a more autonomous working climate on the Indian side, with greater self-organisation in the teams. When hiring people (for example Scrum Master's) he looks for what collaboration skills they have. The management must always be supportive, he says.

Alignment is a key concept for Rudra, which he claims to be the requirement for success, especially in dispersed cross-cultural settings like the VTs in ALFA. The Indian part is now aligned with the company structure in large, he explains, and the specification from the *Client* permeates the whole organisation, top to down. This he claims to be a good thing, although he considers it a challenging when it comes to language- and time-differences.

A task-orientation in ALFA
Working in a VT-setting, developing high tech solutions, seems almost per definition task-oriented. Victoria remarks on that the Indians are definitely more task-oriented than the Swedes, but simultaneously admits that the Swedes have become more task-oriented because of much work to do lately. She believes the task-orientation of the Indians derives from a feeling of more

pressure to deliver since they do not have the same labour laws or security as the Swedes. Victoria says: "It depends on how you look at the leadership […] the importance is the technical leadership, to see how we work crosswise in the teams with the technicalities. But we try to let go of managerialism and expect the teams to be self-governed." She adds that there still is a hierarchical order, and that the softer values in the leadership is more about the ability to put together the right team for the right dynamics.

Viktor explains that working in work settings as VTs by itself creates a stronger focus on result, compared to other settings. He also expresses some worry about the increasing result-orientation that has come with the collaboration with the Indians.

> We do not have the resources to increase the Swedish crew, so we employ more Indians. This is problematic from a leadership perspective. Where do we prioritise, what customers do we want to help? When we look at these figures there is more focus on results compared to before.

From a task-oriented to a more relationship-oriented approach

A more relationship-oriented leadership might foster a better working climate in the VTs. In her role as a TPO, Andrea says her absolute priority is to work towards creating a sense of unity and understanding in the team. Preferably she wants to get rid of the whole idea of a leader. Her earlier leadership style was stricter and more task-oriented, but after discovering how counterproductive that approach was in agile VTs and in relation to the Indians, she radically changed. She explains:

> When working with the Indians you do not get anything good out of such leadership style (authoritarian), but the exact opposite, you see an extremely negative development when having such an approach. If pushing too hard you easily lose the sense of a closely knit collaborative team who have a shared understanding of the challenges and together want to develop and move forward - then a balance of power easily arises, and such balance of power influences the team extremely negatively.

After changing her leadership style to a softer and more listening approach, things have turned to the better and the earlier problems with hiding important information on the Indian part, have disappeared.

> Now the team members have begun to trust each other and know that I am protecting them. Now it is almost the opposite from before, as soon as our Indian colleagues run into a problem I get like ten mails, being asked for explanations and more information.

This softer leadership approach coincides with the company's general flattening of the structures in the *Projects*, and the development towards agility. The aim with the restructuring was, as mentioned before, to inspire the teams to work more self-governed and autonomously with more of a coaching style in the leadership. Andrea says that they have not yet come there, even if certain teams are going in that direction.

Andrea has observed that with a softer way of steering, the team members seem happier and more content - a factor she considers to be the most important thing for a successful VT work. The softer leadership style has also opened up for a more self-responsible and autonomous way of working among her team members:

> The Indians always work ardently, really doing their best every day. And now they also have begun try solutions that sometimes lay far outside their task related area. Earlier this was a problem, they did not really think outside the box. They could for example be aware of obvious problems without reporting them, now they ask immediately. This problem has been much discussed and improved a lot.

The agile way and the more self-confident attitude in the Indians has facilitated the working process, Andrea says. Her function seems now to be one of a mediator, "I listen to the experts of the teams and use their information in contact with the Client", also having the function of adapting a role of bridging the linguistic and communicative gaps, which in turn binds the team together.

Maturity

The maturity of the teams seems important for how the leaders will behave. This is something Vijay addresses:

> The Scrum Master's responsibility is to be the person who educates the team to become a self-reliant team. So, if it is a new team, the scrum master may assign the tasks. But in an ideal world, the Scrum Master should educate each and one member of the team, so they can be self-reliant in the work […] (in this way) the Scrum Master also needs to wear different hands (as in poker) depending on the situation.

This is in accordance with the overall direction of ALFA and, as mentioned above, also confirmed by Andrea, who declared that she is aiming at phasing out herself as a leader.

Another respondent, Victoria, explains that the maturity of the group members plays an important role in how leadership should act, and that leadership seems to vary. "A new team might need more support, but with time, when the group become more mature, the leadership can instead focus on the facilitating and coaching part".

In one *Project* Viktor had a leader role in which he happened to be the most experienced in the team, which automatically turned him into a strong leader. But now, he says, when the team is much more self-governed with several seniors, his leader-role is less accentuated. He continues by saying that when many team members are new, or having new roles, people are much more in need of a leader.

On the question whether self-leadership has to do with readiness and maturity of the group Rudra says:" Absolutely! But I think maturity will be on different levels, it depends on cultural geographies."

As demonstrated in this section, there is concern among the respondents over a lack of personal contact and a need for alignment and a more open communication. They all agree on the new direction taken and seem to join the effort to create more unity in the groups. A softer and more supportive leadership has been introduced to create both more unity and greater autonomy in the teams. But still, two major factors seem to create a strong task-orientation: working in VTs and the technical work itself. As we will see in the next section, this will be even more evident when looking into the competence of the leadership.

5.5.4 About Competence

When Vijay, who works as a *Scrum Master*, is asked about the competence of *Scrum Masters*, he says:

> If we go by the textbook, the Scrum Master is just an organizer, he needs not to have any technical
> background. But for the practical reasons we have selected Scrum Masters who have technical

background […]. So basically, all the Scrum Masters are taken from a technical or developing or testing role, and when they work as Scrum Masters they provide us with developing advantages.

Vijay does not consider it necessary with technical competence but reflects on that it may have advantages if the Scrum Masters have both result- and relationship-focused skills. He returns to what he seems to consider important.

> If the developers do not have enough technical expertise, the Scrum Master with good technical knowledge will be able to help. In other case the Scrum Master will have to look after someone who has the knowledge and that takes time […]. It creates a greater independence for the team which is an advantage.

There seems to be a problem regarding expectations of one another's competence in the blended teams. According to several respondents, the Indian *Scrum Teams* should have the competence to read and interpret the *requirement specification* from the *Specifier* and the *Client*, and to create a *Product* out of it. Andrea describes how she must explain the *requirement specification* for the *Scrum team* in India, and that, in fact, the situation usually requires an even more detailed clarification than she already has given. But if she would dive into this task and give an even more detailed clarification than she already does, it would also mean suggesting the lines of actions in, for example, functionality ("create a green button to click here, and a red there"). But in the role as a PTO she does not have time for that, nor is it in her role to do it. On the other hand, she adds, when the Indians do not understand something fully it is not in their hands to make decisions. Decisions based on an inadequate understanding can aggravate things immensely.

About task and relationship competence
According to Viktor, a Swedish *Scrum Master*, it is always an advantage to have technical skills when you are a *Scrum Master*, since the role, according to him, implies an ability to understand as well as communicate the technical process. When softer leadership qualities are brought up in the interview, he declares his understanding of the value of team building and coaching, saying that "it could be favourable to have some sort of leadership competence."

When asked if there has been any internal leadership training, Victor answers that there has been a supplementary education on how the agile working way, "but there was nothing about leadership … on the other hand, I do not believe leadership competence is a requirement per

se." When asked if he would like to see more of leadership competence education within ALFA, he answers that he does not see anything wrong with developing softer leadership qualities, but on the other hand he does not really see the point in it. He says that even when it comes to top managers within the company, he thinks it is of major significance that they owe technical knowledge and understand what the workers need.

Viktor made very clear that in his opinion the *TPO* should possess domain expertise and the capability of breaking down big features into smaller, so called "user stories" (smaller units of a large product, clarified in the specification). When asked how a relation-building focus may be needed in a *TPO*, Tim answers that it cannot be wrong to have such a focus, but first and foremost the *TPO* must understand the product. "I was surprised when we hired a *TPO* who did not have knowledge about the Product", he says.

The opinion that domain expertise is necessary also in the leadership, is agreed upon by the majority of the respondents. Brian underlines this, claiming it as necessary because of the great need to detect and identify potential flaws in the technical but also managerial issues, in the process of developing a *Product*.

When Aaray, an Indian *Scrum Master*, is asked what kind of competencies the leaders in the company's VTs should possess, he answers "that leaders (Indian) always have grown within the company and will never be hired from the outside […] they have been part of the company for many years". Since leadership competence belongs to the utilities (Aaray's working field), he says, leaders should have knowledge of the utility domain "and of course, we (also) need a lot of people with management skills, and also a fair idea about customer contact." Aaray explains that good people management skills are needed in order for the company to not lose knowledge and staff. He explains:

> The organisation invests so much resources in teaching and introducing the employees in the product […] it is all about managing people, we need to have the right leader, so you ensure that members stay long.

Vijay, another Indian *Scrum Master,* emphasises more control from the *Scrum Master* if the team is not mature: "If the team is not very self-responsible you have to be a boss and bring the

control". He also pointed out how a *Scrum Master* sometimes need teacher-like qualities when mediating in conflicts.

Victoria, *Agile coach* in ALFA, underlines the importance of a dynamic attitude when recruiting and building a team. "It does not only depend on the right competence on the right place", she says, "you do not need a too single focused group […] and this is the *HPG*s responsibility, to recruit the right diverse competence".

As we can see the respondents clearly express how they think technical competence is crucial in leader roles, and that there is some hesitation towards the need of relationship-building competence. In some cases, it also seems to be an adaption of the leadership to the team's maturity. In one case, a leader explains how she must stretch almost beyond her capacity in order to bridge the gaps between the teams understanding and what is required of them.

6. Analysis

Situational Leader Model (SLM) and the concept of shared leadership will be used as a theoretical framework for interpreting and understanding the empirical material in the context of the research questions. When topics connected to the form of leadership are addressed, shared leadership as well as the T-shaped portfolio of skills used by the European Commission in the agenda for educating future e-leaders, will be referred to - the last mentioned adding a political actuality to the subject. This is followed by an elaboration of the form as well as the orientation of the leadership in global VTs. When relevant, other literature will also be used as a reference (see section 3).

6.1 Introduction to the Analysis

As a reminder to the reader, the subject for this thesis is how the increasing demand for domain expertise affects the leadership in global VTs, and what form and orientation the leadership has in this context. The increasing demand for domain expertise can be linked to the last decades of digital transformation, which in turn has led to digital advances in many business sectors (see section 3.1). Globalisation together with digitalisation has also demanded and contributed to new ways of communicating and working in the business world. Many firms have turned multinational when recruiting across borders, and to a great extent people now work both globally and virtually in teams.

In this study I have taken a closer look into the company ALFA, which has been a thought-provoking adventure. The structure of the company is complex and dynamic; with employees constantly adapting to new circumstances, while moving forward towards well-defined goals with hard deadlines. ALFA possesses all the qualities that makes a company exist on the very edge of today's business: it produces high technology solutions, it uses primarily ICT as medium for communication, and it works in agile VTs, which means that there is an intense collaboration across several borders and barriers.

The services offered by ALFA are technological solutions for organisations, which, as mentioned earlier, is called *Products* (or *Projects* when related to the team work surrounding the *Product*). The *Product* is divided into so-called "user stories" (smaller units of a *Product*), each one developed by a blended *Scrum Team,* which work cross-functional and synchronised with the other *Scrum Teams* all the way to the final *Product*. What becomes clear when listening

to the respondents is that the chain from the *Client's* needs to the final *Product*, not always is a smooth and chronological sequence from A to Z, but rather a self-orchestrated coordination of many-fold actions across different levels of responsibility within the firm.

To begin with, we will take another look at the cultural differences that was highlighted in the interviews, and of great concern for all the respondents. The subject of cultural differences as obstacles in the collaboration of VTs was originally not intended to be treated in this thesis, but the urgency of the respondents on the subject was impossible to ignore, and strongly pointed to the orientation of the leadership and the need for the right requisites to overcome these barriers.

6.2 Barriers in the Communication and Collaboration due to Cultural Differences

As an observer from the outside, it is fascinating to gain an insight of what happens with the group dynamics when people from a hierarchical work culture and society like the Indian, and people from a flatter and less hierarchical system as the Swedish, are put together in collaborating dynamic settings such as the VTs in ALFA.

According to both authors in the organisational studies field and several of the respondents in this study, communication is crucial in order for VTs to work effectively. Some authors (see section 3.5) also claim the importance of sometimes meet face-to-face to foster trust and learn about other cultures, when working virtually (Oertig & Buergi, 2006). For Pulley and Sessa (2001), the most important factor and challenge to succeed with VTs, is to create a collective culture that allows communication and understanding. Other academic researchers state that the main challenges for organisations working in cross-cultural settings, is to find global leaders that possess the ability to find new ways to communicate across geographies and time zones (Chutnik and Grzesik (2009).

Almost all the Swedish respondents assign the reasons for the gaps in the communication with the Indians as either because of cultural differences or a work-setting which lacks a face-to-face contact and the opportunities for small chats and more personal relationships. Several of the interviewed complain about them missing the casual and every-day encounters with their remotely situated colleagues. One Indian respondent remarked that it is impossible to not feel

barriers when communicating virtually with persons you do not see, and that it is in the informal chats between colleagues that creativity often happens.

Unclear communication

One of the obstacles to communication that appears in the material, is unclear communication. The Swedish respondents experience an ambiguity from the side of the Indians, where a *yes* or a *maybe* actually, according to them, as well can mean a *no*. One Swedish respondent declares how he must "wrap things up" when speaking to the Indians, in order to not upset feelings and be misinterpreted. Also, the Indians unwillingness to report delays and communicate problems is by the Swedes interpreted as proudness in one's work and a fear of losing one's face. The actual reasons for this unclear communication can be many. As a Swede myself, it is intriguing to hear an Indian leader remarks on how the Finnish team members respond "so formally" to the questions from the Indians, while he gives an impression of considering the Indians having a more positive and relaxed attitude in face of challenges or possibilities. Thus, what is interpreted as *unclear* by the Swedes may not be interpreted in the same way by the Indians, but instead, as in this example, as having a more liberal outlook. Another example that shows gaps in a mutual understanding is when a Swedish respondent interprets the Indian developers lack of speaking out in the weekly Scrum meetings, as an effect of their hierarchical system. But, according to an Indian leader, language and linguistics are central in this context. The Indian developers are afraid of speaking out because of a heavy accent that can make the content of what is being said misunderstood.

Despite of several leaders expressing their sincere intentions towards creating unity in the groups, there still seems to be a long way to go. What is obvious is a lack of open communications where misunderstandings can be cleared out. The need for some kind of binding force seems crucial, an influence that find the right means to bridge the disparities and unite the team members in a shared understanding. For this to happen trust is needed, and a clear comprehension of the different roles and responsibilities. But the current stage of the development does not seem to allow room for this much-needed shared understanding. One Swedish leader explains how she tries to work to overcome the barriers and misunderstandings by being supportive and trying to help team members where help is needed but adds how this actually does not belong to her task as a leader. She says that if she really wanted to secure the process, she would have to guide and supervise the Indian part of the *Scrum Team* even more than she does today - and for this, she simply does not have time. She argues that it is the

responsibility of the *Scrum Teams* to create the product independently, but that this is not the case right now. This points to that the aim of autonomy of the teams, not (yet) seems to have been achieved.

Different cultural approaches to a hierarchical order

Another great difference between the Indians and the Swedes are their respective relating to superiors and subordinates and a hierarchical structure. This is also causing hindrance in the collaboration, according to several of the respondents. One Indian leader remarks about how little the Swedes knows about hierarchical orders, but, on the other hand there are complaints from the Indian side about the limitations of the Indian system. This clash of behaviour and expectations is troublesome for the collaboration, showing itself in both the communication and other areas. For example, the Indian hierarchical system is mentioned in connection with recruiting leaders to the Indian side of ALFA. According to both Swedish and Indian respondents, the Indians do not accept others than seniors and employees with the longest working experience within the firm, to be promoted to leadership roles. The hierarchical system of India seems not only to be a structure of function, but also inhering a strict rule book, affecting the autonomy of the Indian team members. An Indian leader gives the example of how an Indian developer, when finished with a task, can sit and wait for the next order, rather than taking an initiative on his or her own.

Other obstacles in the communication and collaboration

Several respondents point to the problem of language - either the Swedes have difficulties in understanding the Indian accent, or the Indians lack in English linguistic. What is also pointed out is frustrating altering connection and lines (Skype) and, on the Indian part, a lack of specific local knowledge sometimes needed in the *Product*, for instance how the Swedish authorities work.

We will now turn to the leadership of global VTs. Next section starts with a picturing of what consequences to leadership the restructuring of ALFA had.

6.3 Shared Leadership and the Restructuring of ALFA Towards Agility and a Distributed Leadership

As mentioned in section 5.1, ALFA went through an organisational restructuring about a year ago, introducing an agile way of working and moving away from a traditional and hierarchical order, towards a flatter and more dispersed setting with a distributed leadership. The current leadership is now described by the respondents as interacting rather than instructing, and the *Developers,* individually as well as the *Scrum Teams* as a group, are encouraged to grow towards greater self-reliance and autonomy.

This new direction seems to be appreciated by almost all the respondents, *Developers* as well as the ones holding leader positions. Nobody expresses a wish to return to the old order, while a few expresses doubt towards some of the effects the new order has caused. Interestingly, the only respondent expressing serious hesitation towards the functionality of working agile in global VTs, was at the same time very positive towards a softer and more liberal leadership, claiming that it had led to better results for the team. This may be connected to the cross-cultural work setting he is a part of, and the barriers that arise, irrespectively of the leadership.

Despite the generally positive attitude to the restructuring, questions can be raised. Shared leadership, as proclaimed by Peace, Manz and Sims (2009) as the most successful way to lead VTs, was implemented by ALFA to bridge cultural gaps as well as supporting the agile approach, seems somewhat problematic if the teams have not developed enough maturity and self-governess. The leaders must then begin to function as a mediator and translator to compensate for the lack of autonomy, as we could see in the example of a Swedish leader devoting much time to mediate between the *Scrum Teams* and the *Client*.

One senior Indian leader speaks enthusiastically about the alignment of the company. He refers to this alignment both horisontally, for instance the alignment of the Swedish and the Indian *Scrum Masters*, and vertically, when saying: "now, the leadership is on every level" or "the specification from the Client now permeates the whole organisation top-down". The word "permeating" seems in this context mean a distributed and shared leadership with a democratised power. An effect of this alignment, he claims, is that his current role as a leader is to encourage the *Scrum Teams* on their way to become more self-organised.

We will now move from the form of the leadership to its orientation. As we have seen in section 3.7.1, the *Situational Leadership Model* is a tool for regulating the leadership (with the means of a task- and relationship-building leadership orientation), adapting to the maturity of the group. The term maturity is in SLM used equivalent to the term autonomy. In the next section we will apply the SLM to the particular work setting of global VTs, and also reflect on its adequateness to this context.

6.4 Situational Leadership Model applied on ALFA

It can be assumed that the reason for ALFA to move in the direction towards a less accentuated leadership and greater autonomy of the *Scrum Teams,* was the experience of the traditional and hierarchical structure as too rigid for the global, dynamic and agile team-work of the VTs. In SLM one can see how the leadership should adapt to the level of maturity of the group; the more immature the group is, the more task-oriented and directing the leadership should act, and the other way around; the more mature the group is, the more relationship-oriented, or even withdrawn, leadership is proclaimed. In the case of ALFA, the company seems to have started from the other end. Even if great moves were done within the company, for example when expanding ALFA Sweden with 40 new Indian *Developers* and *Scrum Masters* from ALFA India, ALFA Sweden seems to have trusted the new teams, as well as team members, to be mature enough for greater autonomy. As one of the Swedish respondents declares, her aim as a leader is to "phase herself out", and this she does by supporting the *Scrum Team(s)* in developing towards complete autonomy.

When maturity is brought up in the interview, one senior Indian leaders remarked that it is "on different levels, also depending on cultural geographies". The statement can be assumed meaning that maturity looks differently depending on both culture and which level of the organisation you are looking at. As we have seen from several of the other respondents, the Swedes sometimes describe the Indians as "immature", having a low level of self-governing, referring to an unwillingness to report problems and an unclear way of communicating. This proclaimed immaturity can of course be linked to, as all the respondents underline, an issue of cultural differences - the Swedes having a culture with a strong sense of equality regardless of position, while the Indians have as strong sense of a hierarchical order - but it can probably also be derived from an effect of a sense of inequality (subordination) from the Indian side. Despite the efforts of ALFA to "build away" inequalities by for example getting rid of expressions such

as "onshore" and "offshore" and assigning high positioned Indian leaders, the feeling of ALFA India still being a delivery centre to ALFA Sweden, seems to linger on the Indian side. This circumstance could probably also affect the maturity of the Indian teams, if they should somehow still keep a self-image of being subordinate to ALFA Sweden.

Seen from the perspective of the SLM, a well-founded question in the context would be if the employees or teams were ready for a dispersed, softer and more relationship-building leadership. Relevant to the context is also what one of the academic researchers in the field points out; that it is not sure that the level of maturity is the same in an individual as in a group, and that this thin line is hard to assess (Shonhiwa, 2016). Taken this into account, even if the Swedish team members are planted and grown within the culture of the western KWs, and fostered to great autonomy, their high level of maturity and self-governess is not necessarily constructive when working in the context of global VTs with their Indian colleagues.

Relevant to the discussion is also that a more authoritarian leadership style had a very negative effect on the Indian teams, according to both Swedish and Indian respondents. This contradicts SLM, which advocates a strong task-oriented leadership in immature groups. The respondents, both leaders, underline how a softer and more allowing leadership actually led to greater autonomy in the Indian teams. One can therefore question whether the adequateness of the SLM theory depends on a cultural context, a question to which no research has been done, at least not in this author's knowledge.

Next, we will move towards explaining the strong task-orientation of the work as well as in the leaderships in ALFA, still using SLM as a reference.

A strong task-orientation in ALFA

What becomes clear in the material is that knowledge work in global VTs, at least in ALFA, is strongly task- and goal-oriented. In general, KIFs and its KWs (see section 3.2) are considered to work highly individually and independently (Alvesson, 2004). This strong autonomy of the knowledge workers has been raised as a dilemma by researchers in the field (Alvesson, 2004; Newell et al. 2009). A too strong concentration of knowledge in the KWs make the firm vulnerable, if and when the workers eventually quit. And they often do. Knowledge workers change their jobs far more frequently than average workers (Newell et al. 2009).

Several factors contribute to the strong emphasis on task in the VTs of ALFA: Firstly, VTs are themselves, in the very nature of their structure, task-orientated. A Swedish leader declared that working in VTs creates a much stronger focus on the result compared to other settings. Secondly, the sector of ICT engineers is also in its very nature, strongly task-oriented, remarked on by a couple of the respondents. Thirdly, working in agile teams seems to reinforce this task-orientation by striving for a greater autonomy in the teams, expecting everybody to do and take responsibility for their tasks. Finally, and fourthly, the competence of the leaders one is recruiting are almost entirely with technical domain expertise.

One could add a fifth factor, based on the statement of an Indian leader, that Indians are much more culturally task- and structured-oriented compared to the Swedes, although Swedish KWs are well-known to be task-oriented.

We will now look closer at the competence and the leadership within ALFA.

A task-oriented leadership

The strong focus on domain expertise and task-orientation in the VTs in ALFA, seems to encourage a task-oriented leadership. All the interviewed leaders with responsibility, are former experts with domain expertise as their core competence. The situation is one of experts leading other experts, leaving little room for solving the problems occurring in the collaborations. A Swedish respondent remarks on that the Indian side is definitely more task-oriented than the Swedish, but that the Swedes has become more task-oriented lately, because of a heavier workload. He says:" Where do we prioritise, what customers do we want to help? When we look at these figures there is more focus on results compared to before." The same leader believes that the exceptionally strong task-orientation of the Indians is caused by a pressure to deliver, which at least partly, as mentioned, probably can derive from a feeling of subordination, lingering from the past, when parts of ALFA India solely was a delivery centre to ALFA Sweden.

To grasp why there is such an overweight on task-orientation within the VTs in ALFA, it will also be helpful to take a closer look at what competences there are within the company, and what by many of the respondents is perceived as the "right competence" in the leadership. Almost all the respondents who were asked what competence they considered most important in the leadership, declared domain expertise as their highest priority.

The interviewed leaders - as well as other colleague leaders being referred to during the interviews - are all, with one exception, engineers with ICT competence. One respondent says that she was surprised when a *Scrum Master* without domain expertise in the field was employed to the role. Worth to notice is how the role of the *Scrum Master* is defined as a team organiser and support for the team members, but, according to some of the Indian respondents, in fact almost always recruited from the *Developers* or *Testers*. A proceeding like this is probably of great importance for the strong task-orientation of the leadership. If most of the leaders are engineers with domain expertise competence and no horizontal competence, such as team building, communication and trust building, the relationship-oriented qualities can be presumed to be weakened.

Hersey (1985) argues that at the level of middle-managers it is useful, if not necessary, to have leadership that possesses domain expertise in the area he or she is leading. Hüsing et al. (2013) goes further, proposing mastery of at least two domain expertise areas beside the transversal competence, and not just for middle-managers, but also for top leaders, (see *T-shaped portfolio of skills*, figure 1). The reason why Hüsing et al. (2013) put so much emphasis on domain expertise in the leadership, is explained by the digitalisation within almost every business sector, making it difficult to exercise leadership without the necessary expertise knowledge (see section 3.1).

But, according to several of the respondents, a single leadership does not fit agile global VTs. If this is true, that the rigidity of a structure of one single leader does not fit this particular work setting, this could be a problem for EU when encouraging companies to implement the *T-shaped portfolio of skills*, especially since working in global dynamic cross-cultural settings has become increasingly common.

The model of the *T-shaped portfolio of skills* (Hüsing et al. 2013) as well as SLM, with its concepts of task- and relationship-oriented leadership, take both "hard" and "soft" leadership qualities into consideration. Both have a flexible attitude; the *T-shaped portfolio of skills* represents a single leader with multi-competence, who weigh over to either side depending on the context (see the horizontal and the vertical axis in figure 1), and SLM, guiding the leadership towards an adaption to the current situation and the maturity level of the group. This adaptation to the situation is well illustrated by one respondent when he says:

The Scrum Master's responsibility is to be the person who educates the team to become self-reliant. So, if it is a new team, the Scrum Master may assign the tasks. But in an ideal world, the Scrum Master should educate each and one member of the team so that they can be self-reliant in the work [...] (in this way) the Scrum Master also needs to wear different hands (as in poker), depending on the situation.

Another respondent explains that with time, when the group and its members have become more mature, the leadership can instead focus on the facilitating and coaching part.

Many researchers (see Kayworth & Leidner, 2001; Zaccaro & Bader, 2003) claim that the softer leadership qualities are especially needed in the leadership of VTs, since the uniting forces in a group such as meeting face-to-face, having informal chats in the coffee-room etc. are absent. This is very much confirmed by the respondents. The barriers created by a lack of a more personal relationship between team members, points to a need for greater unity and a shared understanding within and between the blended teams.

6.5 Situational Leadership Model and the Need for a Relationship-Oriented Leadership in Immature Groups

As elaborated on above, when looking from the perspective of SLM, the obstacles occurring in the collaboration between the Indians and the Swedes, gives a strong hint of a workforce being strongly task-oriented with low maturity. Although low maturity cannot be found in the empirical material in the sense of low-graded motivation or poor skills, as exemplified in the M1 and M2 (SLM curvilinear model, see figure 3), the many barriers occurring in the communication, coupled with difficulties in solving these gaps within the group, points to a lack of autonomy. The inability for the teams to take a holistic approach to the situation and come to terms with the misunderstanding and cultural differences, shows a need for a leadership that builds trust and create the necessary requisites for a better and more open communication.

Even if the interviewed leader's express intentions towards more team-building to overcome the barriers, it seems that the nature of the knowledge-work in global VTs, with the cultural differences to be bridged and other hindrances to handle, are creating divisions that cannot be solved easily. The lack of a sense of unity in the teams is probably a consequence of not being able to meet face-to-face and in an informal way talk things through, aggravated by barriers

such as great cultural differences, time difference, faltering Skype, linguistics - all making it difficult for the teams to achieve a greater autonomy by themselves.

According to several researchers, there will be required "hard" skills, such as ICT, as well as "soft" skills, in employees as well as leaders in the new working landscape (Bolle et al. 2015; Hüsing et. al. 2013). The need for cross-functional skills has also been recognised by EU (see Hüsing et. al. 2013 in section 3.6.1) and UK's Digital Skills Committee (UK Parliament, 2018), when declaring that employers are in search for fusion skills – a mix of creative, social and technical skills.

It seems as if ALFA has had a flexible approach in trying to adapt both the form and orientation of the leadership to the best of the situation. All the respondents appear to be ardent workers with great motivation, seemingly sharing the same vision. Almost all the interviewed seem to be in for the new directions that has been taken, striving towards a better work climate and a greater unity within the groups. As mentioned above, in the SLM one parallels immaturity with a lack of skills and motivation, but this does not accord with the impression of ALFA. The problems seem not to be a lack of skills and motivation, but rather around issues like trust, openness, straight communication and cultural differences.

Critique of the SLM model

SLM was applied when analysing leadership in ALFA's VTs, partly because of the theory's flexibility and situational approach, which seemed to fit with the dynamic nature of the leadership in VTs - partly because I want to explore if a leadership model developed in the late 1960s, and still frequently used in management, could be applied to the study of modern work settings such as VTs. Although SLM served as a useful analytical filter through which I could understand the many-faceted situations of global VTs, many questions were left unanswered when using the model. Firstly, the Indian teams were defined by the Swedish respondents as not being self-governed, which does not fit into SLM's definition of immaturity and concomitant lack of skills and motivation. In the study, the Indian employees came across as highly skilled and with high motivation, qualities that moreover are shown throughout the organisation. Immaturity lies in aspects such as not reporting problems, being unclear when communicating, being insecure when interpreting the requirement specification, and not taking on the full responsibility expected by them.

Another aspect that contradicts the assumption of SLM, lies in the connection between a task-oriented leadership and immature groups. When one of the leaders in ALFA exercised an authoritarian and task-oriented leadership in what could be interpreted as immature groups – which is what SLM would predict as a viable strategy - it instead failed. It was counterproductive and resulted in strong negative feelings. When the same leader retreated into a more supportive role, the teams turned more self-confident and autonomous. This indicates that greater trust in the teams encouraged their self-assuredness. Finally, SLM does not fully clarify the specific conditions of global VTs. Factors such as cultural differences play an important role for the functioning of teams, which is not considered at all in SLM, which assumes that teams are culturally homogeneous.

To this author's knowledge, no thoroughly study has been made about how cultural differences and the barriers within global VTs is characterised in virtual team work and its leadership. Next, there will be a discussion about the effects of a changing working landscape, and what challenges it is facing.

7. Discussion – A New Working Landscape

The last century of increased urbanisation has occurred because of an intensified centralisation of the labour market to the large cities. The common way of working in offices in big cities, has today started to change with new technology and the enabling of work settings like VTs. The great benefits of VTs given to companies, except saving large facilitation and travel costs, is the opportunity to find and hire the much-coveted domain expertise to low costs.

Looking at it from a societal perspective, if organisations succeed in creating well-functioning VTs, it could have tremendous consequences for the society at large. Since working virtually allow people to become mobile, it could put an end to the urbanisation of the industrial era. Furthermore, from the perspective of the companies, especially the KIFs, building strong process-oriented virtual networks with distributed leadership, could secure both knowledge and the stocks of clients within companies, to a much higher degree than if the consultants deliver individually, as is common in many KIFs today.

But, for this to root and flourish, great challenges have to be overcome. As seen in this study, despite great efforts done by ALFA to bridge cultural barriers and ease tensions within cross-cultural VTs, for instance by the implementation of a distributed and cross-cultural leadership and the offering of various cultural exchange programs, it still seems to be a long way to go before work settings like VTs will work smoothly. Either the existing problems described can be interpreted as teething problems that will outgrow with time, or, as one respondent argue, one can question the effectiveness of global VTs.

What I have learned from doing this research, is the need for a uniting force that can create cohesiveness in the global VTs. And this uniting force points strongly to a leadership with great unifying qualities with abilities to creating trust and openness where there is now dividedness and differences. And exactly how this is going to work and be structured in a complex reality such as dispersed cross-cultural teams, is a question to be forwarded to future research.

8. Conclusion

The final section of this thesis will be a summarise of the main findings from the study, including empirical, theoretical and analytic material. Lastly, suggestions for further research will be presented.

8.1 Findings

Great challenges for leadership in global VTs

As a result of both technological transformation and economic globalisation, new revolutionised ways of working are emerging in the business world. The rise of global VTs is the fruit of companies recruiting technical competence all over the world, having the opportunities for using ICT in their communication.

This study has been focused on leadership in VTs - a leadership faced with multiple challenges. Many leadership scholars argue that it is difficult to fit VTs with traditional leadership models. A central entrance and an underlying argument throughout the investigation, has been the increasing demand for technical competence, which has put a distinctive demand on the leader as well.

When I started to write this thesis, my main target was to see how the great emphasis on technological competence affects the role of the leadership in VTs when it comes to its form and orientation. The trend of employing workforce abroad and working in VTs has put the leadership in a new and demanding context, as complicated and multifaceted as the work setting itself. I assumed that working in global VTs was challenging, with team members at a considerable distance, affected by factors such as linguistic gaps, time differences and faltering lines. What I encountered was far more complex. Following the theme of the growing digitalisation also opened to at least two other, unpremeditated, factors. One was the cultural differences highlighted by the respondents, creating great obstacles in the collaboration of the teams. The other was the agile approach following a restructuring of moving power and decision-making downwards to the teams, with a shared and cross-cultural leadership in both India and Sweden.

Early in the interviews it became clear that the team members identified issues that were not easily resolved. Cultural differences were not the only main barrier, but also different levels of

maturity in the groups, a lack of clear communications, language gaps, faltering lines, time difference, and perhaps the most important according to several of the respondents, a geographical distance which prohibits the team members to interact in a personal and more relaxed way. According to the respondents, an informal way of communicating within the teams is critical for the working process. All these factors were being experienced by the respondents as great obstacles in the collaboration.

In the findings below, I will elaborate on how the settings of global VTs are affecting the leadership in its orientation and form, and how yet unsolved great challenges exist.

A strong task-orientation in the leadership in immature groups does not fulfil its task

There is a strong emphasis on task-orientation in the work process as well as in the leadership in the VTs in ALFA. All interviewed leaders are themselves former technical experts. Many factors underline the overweight on task, such as technological expertise, a heavy workload, the work-settings itself (VTs), an agile approach and last, but not least, the recruiting of leaders based almost solely on their expertise competence.

The many barriers in the collaboration expressed by the respondents, can be expected to necessitate a form of leadership which can bridge the barriers and create cohesion, thereby encouraging team-building towards more trust and open communication. Given the strong task-orientation and the highly prioritised domain expertise competence in the leadership, it is doubtful that this will succeed however.

Recruiting leaders mainly with domain expertise competence can based on assumptions from the Situational Leadership Model, be seen as a problem, considering the many unsolved barriers and difficulties in the communication within the teams. Since the teams do not seem to have enough maturity and homogeneity to solve the obstacles and barriers by themselves, leadership with a greater relationship-building orientation may be necessary to make VTs function.

A pressure to find the right form for the leadership in complex structures like global VTs

To recruit leaders with technological competence seems crucial in ALFA. This we also can see in the model of Hüsing et al. (2013), as well as in the statements of the respondents who give preponderance to the domain expertise in leadership formation. In Hüsing et al's (2013) *T-shaped portfolio of skills model* of e-leadership, the ideal is to have a mixture of transversal

and horizontal competences (implying both domain expertise and leadership competence) in one single leader. When ALFA was restructured, it went from a hierarchical structure with a top-leader situated in Sweden, to a shared leadership with power and responsibility distributed between Sweden and India. One of the reasons for implementing this change was to bridge cultural barriers and to form a uniting and cross-cultural leadership. Another reason was to distribute power downwards in order to make the teams more fit for the agile approach. The respondents are generally positive towards the new leadership model, and the old more authoritarian structure is not embraced by any of the respondents. Some of the interviewed leaders even claimed that a hierarchical top-structure simply does not work in global VTs. Thus, with the restructuring, ALFA moved away from a single leadership (see Hüsing et al. 2013), which they did not consider functional, towards a shared leadership - that perhaps will not work either.

The lack of satisfactoriness as well as the rich potential of the situation of global VTs, very much opens up for further studies in the subject. The field is on the forefront of a rapid technological and economic development, where research can play a significant role. Above my general wish for an extensive research on all aspects of this area, I want to suggest two areas which in my eyes deserves extra attention.

8.2 Future Research

With the main findings presented, I do not claim to generalise them to be valid in VTs in other types of organisations and sectors, although my hope is to encourage companies with the same settings to get inspiration and to understand the challenges that the leadership in VTs are facing. The research area is still unexplored and, while being in its beginnings, it will hopefully attract more attention in today's evolving and digitised business world.

It would be interesting to see future research on these questions in the context of other countries and cultures, since many global companies of today work in multicultural and cross-border settings. The outcome of such study might distinguish from this study, perhaps showing a diversity of factors when it comes to cultural differences.

Another perspective for future research could be applying a gender perspective to the context. Since many IT-businesses are dominated by men, it would be interesting to explore if

there is a relation between the domination of male representatives in high-tech firms and the often highly task-oriented work culture, and if differences in gender has an impact on these questions. Unfortunately, these were aspects that could not be explored in this study.

I hope this study will give readers extended knowledge in leadership in VTs and that it somehow can be used in the purpose of creating good collaborations in the future. Finally, I really hope that this study will be inspirational for upcoming future research in this rather unexplored research area.

THE END

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Appendix - Interview guide

- Can you please explain what role you hold at ALFA and what you work with on a daily basis?
- What experiences do you have working with VTs? (Approximately, how many?, With other countries?)
- How does the leadership look like in the VT you work in?
- Is it one single leader or different leaders sharing the leadership?
- What role do this/these person/s has/have?
- How do you think this specific leadership that you are mentioning functioning in the context of VTs?
- Can you please tell me a little bit about how the collaboration in these VTs work? (Different countries, time zones, cultural backgrounds etc.?)
- If you think about the VTs you work in, which of the two leadership styles are most prioritized, the result and task-oriented or the relationship-oriented leadership (for instance team-building abilities)?
- Have the leader/s of the VTs you have worked with had any expertise competencies. What expertise competencies in that case?
- What competencies do you think the leader/s should have?
- And have the leader/s of the VTs you have worked with had any type of traditional leadership skills (such as being an inspiring leader and a team-builder for instance?).
- If yes, what leadership style in terms of task-orientation or relationship-orientation of the distributed team do you think is the most important one to get the team to work against the same goal?
- Have you experienced any cultural differences that have affected the collaboration within the distributed teams you have worked in?
- If yes, what do you think is needed to solve these problems/issues?
- Have you experienced other problems in the VT setting?
- What kind of problems have you experienced?
- If yes, what do you think is needed to solve these mentioned problems?