

Cultural differences, participative leadership and communication style

A study of two international software companies

Marianne Friedrich

Industrial Economics and Technology Management

Submission date: July 2017

Supervisor: Endre Sjøvold, IØT

Norwegian University of Science and Technology Department of Industrial Economics and Technology Management

Preface

This master thesis presents research conducted during the spring of 2017, at the Norwegian University of Science and Technology (NTNU). The thesis has been written at the department of Industrial Economics and Technology Management, within the field of Strategy and International Business Development.

I wish to express my gratitude for several contributions to this project. First of all, I would like to thank my supervisor, Professor Endre Sjøvold, for his valuable feedback and support throughout the semester. I am also grateful to the two case companies, Visma and Confirmit, for helping me gather empirical data through surveys and interviews. In particular, I send my thanks to the people who welcomed and helped me when I visited the offices in Oslo and in Latvia. Last but not least, thank you to all of the respondents, in particular the interviewees, who took the time to participate in the study. Thank you for sharing your experiences with me.

June 30th 2017

Marianne Friedrich

Abstract

This thesis looks at the influence of cultural differences on software development teams. It consists of two articles. The first article explores employee expectations and preferences towards participative leadership (PL), and the second article looks at differences in communication style, focusing on openness and directness. A multimethod approach was used to gather empirical data from two case companies, with both a questionnaire, an SPGR survey and in-depth interviews. Data was mainly collected from Norway, Sweden, Russia, Lithuania, Latvia and the Netherlands, with some respondents from other countries.

The findings exposed several divergences in expectations between nationalities towards the level of participative leadership, but indicated that preferences are much more similar across the countries. Regarding communication, there seems to be a difference in openness between Eastern and Scandinavian countries, while directness is more related to the individual country, and cannot be clustered as easily. Finally, the age of respondents was also discovered to have an impact, both on preferences for PL and on communication style.

Theories on national culture, agile software development and virtual communication have been applied to the data to better understand the context that affects the cross-cultural teamwork. The thesis contributes to literature by adding both support and some nuances to previous theories, as well as new insights for the countries studied. Additionally, the findings have managerial implications for multinational companies and multicultural teams.

Sammendrag

Denne masteroppgaven studerer påvirkning av kulturforskjeller på softwareutviklingsteam. Den består av to artikler. Den første artikkelen utforsker ansattes forventninger og preferanser for deltagende ledelse, det vil si hvor mye de ansatte inkluderes i beslutningsprosesser. Den andre artikkelen studerer forskjeller i åpen og direkte kommunikasjon. Både kvalitative og kvantitative metoder har blitt benyttet for å samle data fra de to casebedriftene, ved hjelp av en spørreundersøkelse, SPGR og dybdeintervjuer. Empirisk data ble hovedsakelig samlet i Norge, Sverige, Russland, Latvia, Litauen og Nederland, med noen respondenter fra andre land.

Funnene avdekket flere divergerende forventninger mellom nasjonaliteter når det gjelder deltagende ledelse, men tilsier at preferanser er mye likere enn forventninger. Når det gjelder kommunikasjon så er det en forskjell i åpenhet mellom de østlige og de skandinaviske landene, mens direkthet er mer relater til individuelle land, og er vanskeligere å gruppere. Sist men ikke minst viste det seg at alder er en viktig faktor, både når det gjelder kommunikasjonsstil og når det gjelder preferanse for deltagende ledelse.

Dataene har blitt koblet til tidligere teorier om nasjonal kultur, smidig utvikling og virtuell kommunikasjon, for å bedre forstå konteksten som påvirker krysskulturell samhandling. Denne oppgaven bidrar til litteraturen ved å legge til både støtte og nyanser til tidligere teorier, samt ny innsikt angående de utvalgte landene. I tillegg har funnene implikasjoner for ledelse av internasjonale bedrifter og multikulturelle team.

Table of contents

INTRODUCTION	2
THEORY	5
DEFINING NATIONAL CULTURE	5
MODELS OF NATIONAL CULTURE	6
THE IMPORTANCE OF CONGRUENCE WITH MANAGERIAL PRACTICES	8
SOFTWARE DEVELOPMENT	10
GLOBAL SOFTWARE DEVELOPMENT	11
CHALLENGES OF VIRTUAL COMMUNICATION	14
METHODOLOGY	15
RESEARCH DESIGN	15
Literature review	16
SAMPLE COLLECTION	17
RESEARCH INSTRUMENTS	17
DATA COLLECTION	19
DESCRIPTION OF THE DATA MATERIAL	19
Analysis	20
VALIDITY AND RELIABILITY	21
INTRODUCING THE ARTICLES	23
ARTICLE 1: PARTICIPATIVE LEADERSHIP	26
ARTICLE 2 : DIRECT AND OPEN COMMUNICATION	52
DISCUSSION	81
CULTURAL DIFFERENCES	81
HIERARCHY AND ORGANISATIONAL CLIMATE	82
DETERMINING GOOD LEADERSHIP	82
THE ROLE OF COMMUNICATION IN DECISION-MAKING	83
COMBINING THE RESEARCH FINDINGS	84
IMPLICATIONS FOR AGILE METHODS	85
CHALLENGES OF VIRTUAL COMMUNICATION AND EFFECTS ON TEAM WORK	
RECOMMENDATIONS	87
LIMITATIONS AND FURTHER RESEARCH	88
CONCLUSION	89
REFERENCES	90
ADDENDIY	06

Table of tables

TABLE 1.1: HOFSTEDE'S MODEL OF NATIONAL CULTURE	6
TABLE 1.2: HALL AND HALL'S MODEL OF NATIONAL CULTURE	7
TABLE 1.3: THE GLOBE CULTURAL DIMENSIONS.	8
TABLE 1.4: GLOBAL SOFTWARE DEVELOPMENT CHALLENGES	12
TABLE 1.5: RECOMMENDATIONS FOR GLOBAL SOFTWARE DEVELOPMENT	13
TABLE 1.6: EXAMPLE OF NARROWING DOWN THE SEARCH USING BOOLEAN EXPRESSIONS	17
TABLE 2.1: QUESTIONNAIRE RESULTS FOR PL BASED ON NATIONALITY	36
TABLE 2.2: SPGR RESULTS	40
TABLE 3.1: QUESTIONNAIRE RESULTS FOR COMMUNICATION BASED ON NATIONALITY	63
TABLE 3.2: DIFFERENCES RELATED TO SENIORITY IN VISMA	68
TABLE 4.1: POSSIBLE CRITERIA ONE CAN USE TO EVALUATE A PROJECT MANAGER	82
Table of figures	10
FIGURE 1.1: NATIONALITY OF SURVEY RESPONDENTS	19
FIGURE 1.2: GENDER OF RESPONDENTS.	19
FIGURE 1.3: AGE OF RESPONDENTS	20
FIGURE 1.4: TIME WORKED AT THE COMPANY	
Figure 2.1: Hofstede - Russia	30
Figure 2.2: Hofstede - Latvia and Lithuania	31
FIGURE 2.3: HOFSTEDE - NORWAY AND SWEDEN	31
FIGURE 2.4: NATIONALITY OF SURVEY RESPONDENTS	34
Figure 3.1: Hofstede - Russia	58
FIGURE 3.2: HOFSTEDE – LATVIA AND LITHUANIA	
FIGURE 3.3: HOFSTEDE - NORWAY AND SWEDEN	59
FIGURE 3.4: HOFSTEDE - NETHERLANDS	59
FIGURE 3.5: NATIONALITY OF SURVEY RESPONDENTS	62

Introduction

Context

"In a world that offers global opportunities as well as global threats, understanding and managing cultural differences have become necessities " (Gelfand, Erez, & Aycan, 2007, p. 489). In order to manages successfully in a multicultural setting, subordinate values must be taken into account, whether it is on a company level or a team level (Gibson & Zellmer-Bruhn, 2001; Hofstede, 1984; Mir & Pinnington, 2014). Only leaders who are aware of employees culture practices can make conscious, educated decisions regarding their leadership practices (Chhokar, Brodbeck, & House, 2013).

An aim of this paper is for people to understand what to expect from their partners abroad, whether they are outsourcing or cooperating with teams in different branches of the same organisation. Expecting the teams abroad to work and communicate the same way will only lead to frustration, and only by knowing the values and work practices of the other party can the full potential of the cooperation be reached.

While there has been extensive research on the management of multicultural and virtual teams in recent years, the focus of this thesis is on trying to understand each country separately, to understand each team member's expectations. My assumption is that only by researching the differences in expectations can you come up with a management style that suits a diverse team. Apart from tolerance and open-mindedness, it would be difficult to give any specific advice for multicultural teams, since it would depend entirely on the cultural composition of that team.

Of course, practices are not consistent throughout a country. They also depend on industry, as illustrated by the findings of House, Hanges, Javidan, Dorfman, and Gupta (2004). The industry I have chosen to focus on is the IT industry. Software development is increasingly crossing national and cultural boundaries (Tan, Smith, Keil, & Montealegre, 2003). The use of technology increases in all industries (PwC, 2015) and technology competence becomes more and more intertwined with companies' business processes. Tekna-magasinet (2016) claims that in a globalised world, a good use of technology and IT becomes crucial in order to obtain or keep competitive advantages.

Research question

This paper builds on a literature study written during the autumn of 2016, a study of the effect of national culture on project management, with a focus on the IT industry. The literature study revealed several areas of divergence in management practices and expectations, ranging from different attitudes towards planning or risk management, to different perceptions of a leader's role and behaviour, such as authority, straightforwardness, and honesty. For this master thesis,

I chose to focus on two topics: participative leadership, which will be presented in article 1, and communication styles, which will be presented in article 2.

The research questions are as follows:

Article 1: How are expectations and preferences for participative leadership affected by cultural differences?

Participative leadership refers to the level of employee involvement in decision-making. It is universally endorsed according to House et al. (2004), whereas Hofstede (1994) and Newman and Nollen (1996) state that PL is much more effective in countries with low power distance, and that is can even be counterproductive in countries with high power distance.

Article 2: How do cultural differences affect open and direct communication in software development?

When it comes to communication, I am looking at openness and directness in particular. These are aspects that are tightly related to decision-making, as a high level of participative leadership requires employees to openly and directly express their opinions if they disagree with a decision. Directness has previously been connected to Hofstede's individualism/collectivism index (Yin & Kuo, 2013), but the need to include other factors has been highlighted (Merkin, Taras, & Steel, 2014). I will look at communication and participative leadership with regards to power distance and individualism, but will also research whether employee expectations and preferences are influenced by demographic factors such as gender and age, or by organisational climate.

Thesis structure

This thesis consists of two scientific papers encompassed by a general overview. In the overview, general theory about cultural differences, software development and virtual communication is presented, providing a contextual description for the two case companies. There is a detailed methodology section, explaining the reasons behind the research design, presenting the steps in knowledge development and discussing the validity and reliability of the study. Thereafter, the two articles are presented, addressing the topics of PL and communication. Finally, the discussion in the overview brings the two articles together, by incorporating the findings with the general theory on Agile software development, cultural differences and virtual communication.

Presentation of the case companies

Two case companies have contributed with empirical data: Confirmit and Visma. They are both multinational software companies with headquarters in Oslo, and they both employ Agile development. Virtual communication is widely used, and teams are often multicultural.

Visma

Visma is a large company offering business software in several different industries. They have offices in many locations around Europe, and have experienced rapid growth in the last couple of years, especially in Eastern Europe. According to one of the interviewees, there has been quite some opposition to some of these organisational changes, but it has "calmed down" now. According to some of the interviewees, Visma is quite a large company, with a certain level of bureaucracy, where it can be difficult to implement changes. Organisational changes and decisions regarding work methods are described as "top-down".

Since organisational culture can vary from one team to another or between departments, one specific section of Visma was chosen to participate in the study: the cloud HRM programme. The project fits well with my research question, since it is concerned with the development of new software, with developers and managers in Norway, Sweden, Lithuania, Latvia, Ireland and the Netherlands. There are a total of about 110 employees involved in the programme.

Confirmit

Confirmit is a smaller company than Visma, but they still have branches in Norway, Russia, England, North America, China and Australia. Some of those are only sales offices though, with software development happening mainly in Norway and Russia. Confirmit develops survey software solutions, including analysis and reporting tools. Two teams were chosen to be part of the study: Hub and Reporting. Both consist of around 30 team members, located either in Oslo, Moscow or Yaroslavl in Russia.

According to interviewees, Confirmit has a very flat structure, and it is relatively easy to implement organisational changes, due to the company's smaller size.

Both Confirmit and Visma have been growing in the past couple of years, often through acquisition of companies in new countries. When companies expand to new cultures, it can be very useful to understand the values they encounter. For example, it is important to understand people's communication style, and what level of autonomy the new employees expect.

Theory

Defining national culture

In a world characterised by increasing global cooperation, researchers have identified 4 types of distance that hinder communication. These can be described as geographical, temporal, linguistic and cultural distance (Casey, 2009). Geographical distance refers to the physical separation of team members or partners, temporal distance refers to the problem of communication with people in different time zones, while linguistic differences limit the ease of coherent communication, when two parties speak two different languages. While geographical and linguistic differences are an obstacle for the two case companies in this thesis, cultural differences - the fourth type of distance - will be the main focus of this paper.

A wide range of definitions has been used to describe culture (Gelfand et al., 2007). It can for example be described as a collective programming of the mind (Hofstede, 1994) or patterned ways of thinking, feeling and reacting. Trompenaars (1996) views culture as composed of shared assumptions and beliefs, values and norms, and action and language patterns that distinguish one group from another.

A common way to research the similarities, differences and effects of culture is by comparing national cultures (Ali, Tretiakov, & Crump, 2009). This is especially relevant in organisational contexts, as national culture is essential for employees' understanding of work, and the way in which they expect to be treated (Newman & Nollen, 1996).

However, many researchers argue that the concept of national culture is problematic or too simplistic. Myers and Tan (2003) reason that there is no necessary alignment between culture and the nation-state, as many nation-states consist of a variety of races, cultures and languages. In addition to all the minorities living within a country, it is also important to remember that these cultures are also made up of individuals, with individual differences (Casey, 2011; Milosevic, 1999). One must therefore be careful not to be blinded by country-wide stereotypes. Nevertheless, there seem to be common characteristics that distinguish one country from another, and there has been abundant research on the subject, validating the concept.

National culture is especially interesting in the study of cross-cultural organisational behaviour, that is "the study of cross-cultural similarities and differences in processes and behaviour at work, and the dynamics of cross-cultural interfaces" (Gelfand et al., 2007, p. 480). Globalisation and changes in the work context have increased the importance of this type of research.

According to De Bony (2010), there are two opposing research currents when it comes to national culture and management. On the one hand there are cross-cultural studies which measure countries along predefined dimensions such as individualism, power distance, and so

on. These studies are based on the assumption that dimensions are common in nature and that national cultures are comparable. The other stream of research is often referred to as an emic current. It argues that a culture is unique, and that there are therefore no common dimensions and no possible direct comparisons between cultures.

Since the first type of study is the most widely used, and also the one that allows for comparison across cultures, this paper will be based on the assumption that there are dimensions along which one can measure cultural characteristics. Many dimensions have been developed in order to compare cultures, and in the following section, the most famous models of national culture will be presented.

Models of national culture

Hofstede

Hofstede's model (1984) consists of five dimensions of culture: power distance, uncertainty avoidance, collectivism vs. individualism, masculinity vs. femininity and long term orientation, with a sixth dimension of indulgence added later.

Table 1.1: Hofstede's model of national culture (geert-hofstede.com, 2017)

Power distance	expresses the degree to which the less powerful members of a society accept and expect that power is distributed unequally
Individualism vs. collectivism	Individualism can be defined as a preference for a loosely-knit social framework in which individuals are expected to take care of only themselves and their immediate families. Its opposite, collectivism represents a preference for a tightly-knit framework in society in which individuals can expect their relatives or members of a particular in-group to look after them in exchange for unquestioning loyalty.
Masculinity vs femininity	Masculinity represents a preference in society for achievement, heroism, assertiveness and material rewards for success. Society at large is more competitive. Its opposite, femininity, stands for a preference for cooperation, modesty, caring for the weak and quality of life. Society at large is more consensus-oriented.
Uncertainty avoidance	expresses the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity. Countries exhibiting strong uncertainty avoidance are more intolerant of unorthodox behaviour and ideas.
Long term vs short term orientation	measures how much companies focus on the past vs the present or the future
Indulgence vs restraint	Indulgence stands for a society that allows relatively free gratification of basic and natural human drives related to enjoying life and having fun. Restraint stands for a society that suppresses gratification of needs and regulates it by means of strict social norms.

There are several well known models in use, but at least in information systems research, Hofstede's model dominates the field, and the trends indicate it is unlikely to lose its dominant position in the near future according to Ali et al. (2009). In their literature review they found that more than 50 percent of the papers reviewed used Hofstede's culture dimensions. The dominance of Hofstede's model is also supported by Gelfand et al. (2007) who reviewed over 1000 articles on cross-cultural organisational behaviour. They authors add that the dimension researched the most is collectivism-individualism.

Hall and Hall

Hall and Hall (1990) developed cultural dimensions that have been primarily applied to research on communication. The concept of high and low context countries is of particular relevance to this paper.

Table 1.2: Hall and Hall's model of national culture, as cited by Ali et al. (2009 p.247),

Speed of messages	A fast message is one which is easily decoded and acted on, whilst a slow message requires more effort.
Context	In high-context cultures, communication occurs through explicit statements in text and speech, while in low-context cultures, other communication cues such as body language and silence are emphasized.
Space	In a high territorial society, members will protect their ownership, and in low territorial society members will share their ownership.
Time	Monochronic time describes those societies that prefer to accomplish tasks sequentially and to adhere to schedules, whereas polychronic time cultures are characterized by a tendency to engage in several activities occurring at the same time and lack of regard for schedules.

The GLOBE project

The GLOBE research program (Global Leadership and Organizational Behaviour Effectiveness), performed by House et al. (2004), is perhaps the most significant study on the topic of cross-cultural leadership. Over 10 years, GLOBE researchers collected and analysed data on cultural dimensions and leadership attributes from over 17,000 managers in 62 societal cultures (Hwang et al., 2015).

The Globe study looked at 9 dimensions of culture and 6 global leadership dimensions. The cultural dimensions are presented in table 1.3.

Table 1.3: The GLOBE cultural dimensions (R. House, Javidan, Hanges, & Dorfman, 2002)

Uncertainty avoidance	the extent to which members of an organization or society strive to avoid uncertainty by reliance on social norms, rituals, and bureaucratic practices to alleviate the unpredictability of future events
Power distance	the degree to which members of an organization or society expect and agree that power should be unequally shared
Societal collectivism	reflects the degree to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action
In-group collectivism	reflects the degree to which individuals express pride, loyalty and cohesiveness in their organizations or families
Gender egalitarianism	the extent to which an organization or a society minimises gender role differences and gender discrimination
Assertiveness	the degree to which individuals in organizations or societies are assertive, confrontational, and aggressive in social relationships
Future orientation	the degree to which individuals in organizations or societies engage in future- oriented behaviours such as planning, investing in the future, and delaying gratification
Performance orientation	the extent to which an organization or society encourages and rewards group members for performance improvement and excellence
Humane orientation	the degree to which individuals in organizations or societies encourage and reward individuals for being fair, altruistic, friendly, generous, caring, and kind to others

The importance of congruence with managerial practices

As seen above, there are many different ways of describing culture. The purpose of these models is to help studying and understanding the different cultures, because only through understanding can one create management practices that fit both the organisation and the employees.

Until the 1990s, the dominance of American management theory lead to the belief that one fits all (Newman & Nollen, 1996). However, most recent research supports the cultural contingency theory, i.e. the assumption that management concepts are culturally endorsed and must be implemented in a way that is consistent with the cultural context (Marcus W Dickson, Den Hartog, & Mitchelson, 2003; Gibson & Zellmer-Bruhn, 2001). Newman and Nollen (1996) explain that the difference between cultures limit the transferability of management practices from one country to another. In a study of 176 work units in 18 countries, they analysed

management practices and later financial performance of the different work units. They discovered better financial results in work units where described management practices fit with the dimensions of national culture, even controlling for prior performance and external economic factors. The management practices being analysed before the financial performance provides evidence for a causal link. They could therefore conclude that multinational enterprises need to adopt their management practices to the national cultures in which they operate in order to achieve high business performance.

Are there any universally good practices?

Even if work unit performance is higher when management practices are congruent with the different national cultures, this does not eliminate the possibility of some practices being universally endorsed. The GLOBE research program found that among the studied leadership dimensions, charismatic, team-oriented, and participative leadership were positively endorsed in all countries studied, while self-protective leadership was negatively endorsed (House et al., 2004). Furthermore, in a study analysing the influence of leadership behaviours on perceived job performance, Hwang et al. (2015) observed that charismatic and directive leadership behaviours were positively related to perceived job performance of leaders in all countries studied. Directive leadership is here defined as "clarifying performance expectations and assigning tasks" (Hwang et al., 2015, p. 268). Newman and Nollen (1996) also support this result, asserting that clarity of policies and direction seems to be a good management practice regardless of national culture.

Nevertheless, despite these apparently universally endorsed leadership behaviours, House et al. (2004) concluded that there are substantial variations from one society to another in the strength of these positive and negative endorsements. Additionally, general principles might hold across cultures, but the enactment of these principles can vary (Gelfand et al., 2007). For example, even if charismatic leadership is universally recognised a positive trait, the definition of charisma can vary substantially. Den Hartog and Verburg (1998) studied charisma and rhetoric of international business leaders. They found several documented differences in what is considered charismatic. For example, a voice with "ups and downs" indicates enthusiasm in Latin American cultures, whereas a monotonous tone is associated with the perception of respect and self-control in Asian cultures. In some cultures, interrupting the speaker is a way of showing great interest, whereas in other cultures it is considered impolite. Finally, the content of the speech also varies, with some cultures focusing more on logical appeal, while others may focus on emotional appeals and appear as a great motivational speaker that way.

Related to the different enactment of leadership principles, Marcus W Dickson et al. (2003) discovered a decline in the volume of research focused on identifying "simple universals" in their literature review of leadership in a cross-cultural context. The focus today is often on finding differences that can be explained by the various cultural dimensions.

Software development

Even though national culture has a large influence on employees' understanding of work, there are also other factors influencing employees' expectations, in particular the norms of the industry in which they work (House et al., 2004). The software industry is an industry undergoing rapid changes and fast technological development. Furthermore, current trends in software development indicate that projects are becoming increasingly globalised (Herbsleb & Moitra, 2001), thereby making it a very interesting area for cross-cultural studies.

Definition

Put simply, software development describes the process of developing a software product. There seems to be no standard definition of software development, but most development processes include the following activities (Technopedia.com, 2016; WhatIs.com, 2016):

- Requirements gathering
- Detailed specification of the software requirements
- Design
- Implementation
- Testing
- Maintenance

There are several models of software development. The waterfall model is a sequential process, in which the above steps are performed one after the other. However it is not suited to deal with changing requirements, and integration problems are often observed only at the last stage (Thangasamy, 2012). The waterfall model only works well for projects with minimal change and low complexity. Many companies are therefore transitioning towards Agile methods of software development, an iterative process where change is allowable at all stages.

The Agile philosophy evolved based on four key values, as defined in the Agile Manifesto (Sutharshan & Maj, 2011, p. 13):

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

Scrum is one of the more famous frameworks in Agile development, and one that is applied by both Visma and Confirmit. It consists of iterative development and delivery, and is based on Sprints, fixed time periods, often ranging from a week to a month depending on the team. During the Sprint, developers work to finish tasks from a backlog (Schwaber, 2004). There are daily Stand-up meetings, meeting of ideally 15 minutes or less, where each team member gives

her task status and highlights any challenges she is facing (codeproject.com, 2015). At the end of the Sprint, there is a Sprint retrospective, a meeting where the team analyses and discusses the Sprint, with a focus on how they can improve the teamwork for the next period.

Global software development (GSD)

I this section, I will look at challenges and advantages of GSD, followed by some critical success factors. First of all, it is important to differentiate between some different concepts:

A virtual team can be defined as "a group of geographically, organisationally and/or time dispersed workers brought together by information and telecommunication technologies to accomplish one or more organisational tasks" (Powell, Piccoli, & Ives, 2004, p. 7).

A multicultural team on the other hand can be defined as a team which members are from a diverse cultural background (Stahl, Maznevski, Voigt, & Jonsen, 2010). In this paper, the focus is on differences in national culture, and the definition can therefore be simplified to a team which members are from different countries.

A multicultural team can be co-located, consisting of some employees who are working temporarily or permanently away from their country of origin, or it can be dispersed. At the same time, a virtual team can be either culturally "homogeneous" with for example team members who are dispersed geographically within the same country, or the team can be multicultural. In a company practicing global software development, it is common to find both virtual and multicultural teams. That is the case in both Confirmit and Visma.

Advantages of GSD

There are several drivers for the trend of global software development. Firstly, companies wish to benefit from the availability of qualified workers in other countries, thereby making use of scarce resources. Additionally, these resources often come with a cost advantage (Herbsleb & Moitra, 2001; Krishna, Sahay, & Walsham, 2004; Sangwan, Bass, Mullick, Paulish, & Kazmeier, 2006). This is especially the case for Norwegian companies, where labour costs are high. Secondly, the time-to-market can be shortened using "follow-the-sun" or "round-the-clock" development, with someone always working on the project. And thirdly, when distributing globally, it can be wise to also develop globally, getting better knowledge of local conditions and customers (Herbsleb & Moitra, 2001).

This globalisation is facilitated by the continuous development in communication infrastructure and technology (Sangwan et al., 2006), allowing people to talk, chat, and have videoconferences with people from many locations at once. However, communication still remains a challenge in GSD, and it is only one of many.

Challenges

Table 1.4 presents challenges frequently encountered in global software development.

Table 1.4: GSD challenges (Herbsleb & Moitra, 2001; Sangwan et al., 2006)

Problem	Problem description	Source
Building a shared mental model	Building a shared mental model of the product is much easier when you can drop in on colleagues, ask some questions and see a demo, and is more difficult is dispersed teams.	Sangwan et al.
Electronic communication	Most of our communication is through body language and non-verbal cues, which leads to frequent misunderstandings when relying on electronic communication.	Sangwan et al.
Lack of informal communication	It is more difficult to get hold of people, and many phone and skype calls must be planned in advance. There is also a lack of informal communication such as "corridor talk" and coffee breaks which help people be aware of what's going on with the rest of the team. The more uncertain the project is the more important this communication channel is.	Herbsleb & Moitra
Change control	The need to control software change requests, and to ensure that all parties are aware of changes, is crucial in GSD.	Herbsleb & Moitra
Process differences	Different ways of coding or documenting, and different definitions of for example what a unit test is, can lead to frustration and extra work.	Sangwan et al.
Infrastructure differences	Teams at different sites may have different build environments, different version control tools, incompatible data formats, etc.	Sangwan et al. Herbsleb & Moitra
Cultural differences	Cultural differences in communication style, sense of time, attitude towards authority, and need for structure poses challenges.	Sangwan et al. Herbsleb & Moitra
Resistance to GSD	With a transition to GSD and especially outsourcing, many employees fear a loss of control, the need for extensive travelling, or the possibility of losing their job.	Herbsleb & Moitra

Recommendations

In order to reduce the effect of the GSD challenges, researchers present some general advice for project managers, a compilation of which can be found in table 1.5.

Table 1.5: recommendations for global software development (Björndal, Smiley, & Mohapatra, 2010; Herbsleb & Moitra, 2001; Krishna et al., 2004; Sangwan et al., 2006)

Advice	Description	Source
Facilitate communication	Communication can be facilitated in several ways: teams should agree on what media to use for different situations (email, video conference, telephone, chat,), and they should plan how often to have meetings to keep each other up to date. Additionally, dedicated rooms and communication equipment should be always up and running to facilitate unplanned communication.	Sangwan, Herbsleb, Björndal
Invest in collaborative tools	Coordination can happen through communication, but also through common processes, tools and management practices. The proper use of common tools and practices (such as regular code sharing) will reduce communication needs.	Sangwan
Invest in planning	Change is more difficult to handle in GSD. It is therefore recommended to reduce the amount of change required later by spending much time on planning. Early activities such as architecture design require frequent interaction and should not be distributed.	Sangwan
Create independent modules	It is important to keep track of dependencies in the development, and design modules that can be developed as independently as possible. Highly interdependent tasks are recommended to be performed by a co-located team.	Sangwan, Herbsleb, Björndal
Travel	Travelling, face-to-face communication and exchange of staff members is useful for improving understanding and communication between teams from different countries, especially in the early phases of a project.	Sangwan Krishna, Björndal
Cultural training	Before the project start, teams should learn about each other's language, values and cultural practices. During the project, it can be useful to reflect on ongoing experiences, and discuss perceived differences with colleagues.	Krishna, Björndal

Implications for management

One important challenge in global software development is cultural differences. For a project manager to understand his or her subordinates, she must have a certain knowledge of their cultural background. In fact, Müller and Turner (2007) found that project managers working in

their own culture tended to be more successful than expatriate managers in the same country. It is therefore suggested to assign project managers from local teams. In the case of dispersed teams with only one main project manager, Krishna et al. (2004) recommend the use of "bridgehead" teams, where some people have roots or experience from both cooperating countries. Research has shown that when project managers help facilitating communication and knowledge transfer, multicultural teams can perform as well or even better than homogeneous teams (Gelfand et al., 2007).

Challenges of virtual communication

As presented above, communication is one of the main challenges of global software development. Article 2 in this thesis studies communication in multicultural teams. The focus is not on virtual communication, yet I feel the topic needs to be addressed briefly, since both Visma and Confirmit have teams cooperating across sites.

Several researchers have highlighted the social nature of development work. Through the observation of programmers every day work, Perry, Staudenmayer, and Votta (1994, p. 45) could report that "over half the subject's time was spent in interactive activities other than coding". In fact, developers often seek information from their co-workers about why code was written in a particular way, or what a function is supposed to do. They regularly have to postpone a task because their colleague, the only source of knowledge, is unavailable (Ko, DeLine, & Venolia, 2007).

In virtual teams, the social nature of development work can become even more noticeable. Feedback or responses from colleagues can take longer due to a lack of informal communication or "corridor talk" (Herbsleb & Moitra, 2001), and coordination of meetings. Additionally, insufficient communication and the lack of a shared mental model can lead to misunderstandings, which in turn often entail double work or reduced quality (Björndal et al., 2010).

It should of course be mentioned that insufficient communication can be experienced even at collocated offices. Distances do not need to be global to be important (Herbsleb & Moitra, 2001). However, in global projects, managers can no longer "manage by walking around" (Sangwan et al., 2006). Additionally, the complexity of projects tends to increase with GSD, as there is often more staff involved and a large list of features to be developed, making it hard for supervisors to get a good overview of activities.

Finally, a challenge of virtual teams is that when people do not meet face-to-face, they tend to stick to stereotypes much more, first impressions stick, and strange behaviour quickly gets a negative interpretation (Herbsleb & Moitra, 2001; Endre Sjøvold, 2014). It would therefore be very beneficial to meet at least once at the beginning of the project, get to know each other, and

discuss the understanding of different behaviours. In general, it is important for a team to clarify early on how to communicate with each other (Endre Sjøvold, 2014).

For teams in multinational companies such as Confirmit and Visma, cultural differences, virtual communication and Agile software practices are all part of shaping the teamwork. This thesis will help understand what effect these factors have.

Methodology

Research design

The research design in this master thesis has a cross-sectional design, with elements of both comparative design and case study design. It is a cross-sectional design because it captures one point in time and is the study of more than one case. It could be considered a multiple case study, but Bryman (2015, p. 68) "would prefer to reserve the term "case study" for those instances where the case is the focus of interest in its own right". In this study, Visma and Confirmit are not the units of analysis; rather it is the respondents that are the unit of analysis, while companies provide a backdrop and context for the findings. Furthermore, the study has a comparative design, since the same research methods are used in different countries.

There are several reasons for this design. The comparative design is chosen to answer the research question of how national culture affects employees, making it necessary to compare different cultures. The cross-sectional design was chosen to provide a broader foundation for theory building as opposed to the study of just one case (Yin, 2013). An experimental design could have been considered to answer the research questions, but would have been difficult to implement due to geographical distances and time constraints, in addition to the fact that it is much more "invasive" and is therefore not guaranteed to capture the everyday lives of employees (Bryman, 2015).

While cross-sectional designs often focus on quantitative methods, you can sometimes include interviews to get a better sense of causality and internal validity (Bryman, 2015). Qualitative data helps explain and provide context for quantitative findings, and makes sure the findings are not a methodological artefact (Edmondson & McManus, 2007). Indeed, for this master thesis, a multimethod design has been chosen. According to Edmondson and McManus (2007), a hybrid method is the most suitable when the field of research is neither nascent, nor mature. For mature concepts, where there are well established constructs and measures, quantitative methods are the most suitable. Conversely, for nascent theory and new constructs, qualitative methods are the most suitable. I would argue that my area of research is intermediate by that definition, because even though several researchers have studied participative leadership, they all use different measures and therefore slightly different constructs. The same goes for

directness and openness of communications, which are constructs that are difficult to measure quantitatively.

Several researchers criticise the use of mixed methods, saying that quantitative and qualitative methods belong to separate and incompatible paradigms. Yet most researchers take the view that they can be combined, and in fact, "mixed method research has become an increasingly used and accepted approach to conducting social research" (Bryman, 2015, p. 628). By using both questionnaire and interviews, I can use triangulation to get a more complete understanding of the effect of national culture (Bryman, 2015; Edmondson & McManus, 2007).

The quantitative part of the study precedes the qualitative part, so that the interviews can go indepth and elicit a deeper understanding. Yet both methods are given equal weight in the analysis and in the presentation of findings. There is a slightly larger focus on quantitative results in article 1 and on qualitative results in article 2, due to which methods uncovered the most interesting findings for the respective research questions.

The qualitative part of the study is especially important because the research question poses the question of "how": (how are expectations and preferences affected by cultural differences?) The effect of national culture cannot be *explained* through merely quantitative methods. However, the effect can be *measured* using quantitative methods, by studying how many people feel a certain effect, which is also important, since each person is shaped by national culture in a slightly different way.

Literature review

The purpose of a literature review is to acquire and demonstrate an understanding of the selected topic, by looking at how the topic has been researched previously, compile and summarize key ideas, and show a critical awareness (Hart, 1998). It also gives you an idea of whether there are any controversies or clashes of evidence (Bryman, 2015).

A preliminary literature review was performed, majorly during the autumn of 2016, and later, a subsequent search was performed after the data collection and analysis, in order to gain an understanding of some of the findings encountered. Two main search methods were used during my literature review: keyword search and nesting. For the keyword search, two search engines were primarily employed to uncover interesting articles: Scopus and Oria. Oria is NTNU's library search engine, and searches many databases simultaneously, in all possible areas of study. Its advantages are the vast variety of sources covered, and of course the possibility of advanced searches compared to e.g. Google Scholar. However, Scopus presents the possibility of even more advanced searches, using proximity operators and long Boolean expressions. Using a combination of both databases would therefore provide good results.

Since the amount of published material is vast, it was important to narrow down the search by using filters or Boolean expressions with specific key words.

Table 1.6: Example of narrowing down the search using Boolean expressions

Search string in Scopus	Number of results	
TITLE-ABS-KEY(indirect communication)	6 660	
TITLE-ABS-KEY(indirect w/2 communication)	638	
TITLE-ABS-KEY(indirect w/2 communication AND cultur*)	65	

Furthermore, the aim of the literature review was to cover a variety of perspectives, as well as a methodological variation. I therefore looked for a balance of past literature reviews, empirical qualitative studies, and quantitative studies.

Sample collection

Sampling is an important stage of any investigation, as it is impossible to study all individuals or cases who would be appropriate for the study. A purposive sampling was used for this study, meaning that the research question gave an indication of which units (organisation and people) should be sampled (Bryman, 2015). For the sampling of context, two international software development companies were chosen. Since organisational culture can vary from one team to another, some specific teams or "projects" were chosen from the two companies. A questionnaire was sent out to all members of the selected teams, in order to provide a broad fundament for the quantitative analysis.

For the interviews, a new sampling was required. The sampling of interview subjects sought to give a representative image of the total participants, by aiming for a balance between the nationalities of survey respondents, their gender, position, and time they had spent at the company. Some interviews also revealed who I would need to talk to further. For example, initial interviews with Scandinavians revealed differences with the Dutch, which made it appropriate to interview someone from the Netherlands as well.

Research instruments

Questionnaire

Before designing the questionnaire, I looked up several guides on how to make a questionnaire, and looked for inspiration on how to phrase questions among previously published articles. After studying the advantages and disadvantages of even and odd numbered Likert scales, the even number was chosen in order to make people think about the statements, because a lot of

the questions are things you do not usually think about, and selecting a neutral option would therefore have been an easy way out.

After each question was carefully considered and formulated, I asked for input both from my supervisor and from acquaintances. In an unformal "focus group" with two students and two software engineers who have English as their working language, we discussed our interpretation of the different questions, they helped me understand which questions would be more difficult to answer than others, and they often came up with improvements for the formulation of the questions. Afterwards, I sent the questionnaire to 3 acquaintances who filled it out and returned it to me with comments, two of whom are software developers and one who is Eastern European, since a lot of the actual respondent would be Eastern Europeans. The questionnaire was thereby carefully designed and tested before the actual study.

Interview guide

Compare to an unstructured or a structured interview, Bryman (2015) recommends using a semi-structured interview if you are doing multiple-case study research, since some structure is needed to ensure cross-case comparability, while it also allows some flexibility; "questions that are not included in the guide may be asked as the interviewer picks up on things said by the interviewee" (p.471).

When creating my interview guide, the focus was of course on the research question and what topics I wanted to know more about, but some related topics were also included, such as psychological safety. After reading the guide, feedback was given by my supervisor on which questions were sensitive, and which questions could be asked in a more open or general fashion. The interview guide was then tested by performing a skype interview (which I assumed would be the most challenging) with a friend who is a software engineer at Telenor Digital. Not only did this highlight several aspects of my interview technique that needed improving before the real interviews, it also gave me insight from a third company, which adds to my understanding of the results.

SPGR

SPGR is most commonly used to analyse team dynamics, but can also be applied in other contexts, since it measures behaviours. In this case, respondents were asked if a good leader should present certain behaviours seldom, sometimes or often. In order to make the question more concrete, the instruction was to rate "a good leader in your current job situation", rather than an "ideal" leader.

Data collection

This paper is based purely on primary data. An online survey was sent out consisting of my self-made questionnaire as part 1 and the SPGR as part 2. Subsequently, in-depth interviews were conducted, both in Oslo, in Riga, and over Skype. The data collection is described further in the two articles.

While observation was not a part of my research design, I did get to participate in a meeting and a group lunch at the Latvian office, and did thereby get a chance to talk with more employees at the office in an informal setting, and to get a more nuanced understanding of their everyday lives.

Description of the data material

The online survey was sent to 110 people in Visma and 58 people in Confirmit. The number of responses was 52 in Visma and 41 in Confirmit, giving a total responses rate 55.4 %. For the SPGR, the response rate was slightly lower, with a total of 84 answers, corresponding to 50.0%.

Figure 1.1 to 1.4 show the distribution of gender, age groups, nationalities and time at the company for the total of the respondents. The profiles for gender, age and seniority are also fairly representative for the companies separately, apart from the fact that Visma has many employees who have started in the last year, while Confirmit has only one (among the survey respondents).

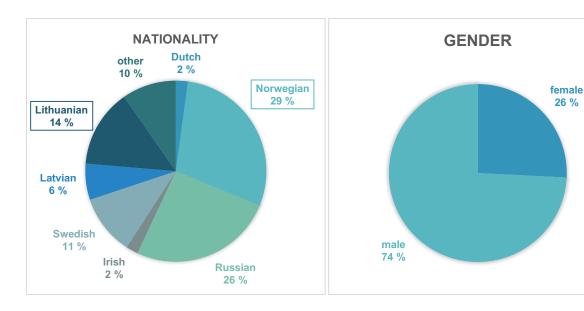
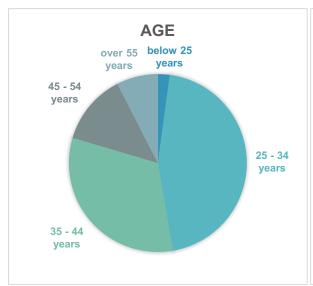


Figure 1.1: nationality of survey respondents

Figure 1.2: gender of respondents



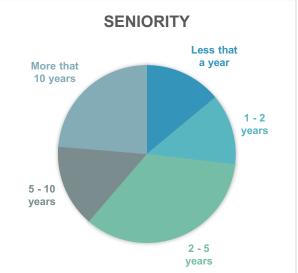


Figure 1.3: age of respondents

Figure 1.4: time worked at the company

Of the Norwegian respondents in figure 1.1, 12 work in in Confirmit and 15 work in Visma.

Analysis

Ouestionnaire

The sample size and nature of the data gathered have implications for what type of quantitative analysis you can conduct (Bryman, 2015). The analysis methods should not be more complicated than the data available; there is little point in doing advanced regression analysis on a non-standardised questionnaire, or to do dimension reduction with a sample size of less than 200 respondents (Comrey & Lee, 2013). The analyses used in this paper are based on student t-tests, averages and standard deviations. While these are not complex operations, they were repeated numerous times to analyse the answers with regards to each one of the background factors while keeping the others stable. For example, in one tab of the spreadsheet all the respondents were grouped by gender, before average and t-test for each survey question was calculated. In the next tab, all respondents were grouped by nationality, before averages and t-tests were calculated. And so on for "current office", "time at the company", "age", "team" and "position". This was done both for Visma and for Confirmit. Furthermore, the analysis was performed once before the interviews, to give inspiration to the interview guide, and once after the interviews, when the totality of responses had been gathered. This results in a total of around 30 different spreadsheets with analyses, 2 of which can be found in appendix 3 as an illustration.

Interviews

For the qualitative study, detailed notes were taken based on the interview recordings. These notes were then grouped thematically as suggested by Bryman (2015), with colour coding to delimit the different interviewees.

Even though it is common to transcribe interviews, it is not well defined how interview data should be analysed. Due to multiple research methods applied in this study, I decided not to spend a disproportionate amount of time on transcribing interviews, and rather spend more time on reflecting over the findings and compare them with previous literature. Additionally, the strength of qualitative methods is discovering new aspects of a topic, not to quantify them.

SPGR

Respondents were asked if a good leader should present certain behaviours seldom, sometimes or often. The results were analysed by the SPGR software, and represented by 12 vectors, on a scale of 0 to 4 (E Sjøvold, 2002). The respondents were then grouped by nationality. After checking that there were no significant differences between Norwegians in Visma and Norwegians in Confirmit, the two groups were merged. Averages, standard deviation and t-tests were calculated for the different nationalities.

Validity and reliability

In the following section, the validity and reliability of this paper will be discussed. Some limitations in the research design will be described, as well as efforts done to mitigate these effects. Some say that the concepts of validity and reliability are most suitable for quantitative research, and have come up with parallel concepts for qualitative research (Bryman, 2015), but for simplicity's sake, I will only discuss validity and reliability.

Construct validity

There are several sub-categories of validity. Construct / measurement validity refers to whether the devised measure actually reflects the concept it is supposed to be denoting (Bryman, 2015). In this regard, language differences become a challenge, especially for questionnaires where the respondent cannot easily ask about the meaning of words or concepts. To mitigate this effect, all survey questions were developed with both Norwegian and English speaking people, and the constructs were discussed to check that we all had similar definitions of them. Nevertheless, even two people from the same country can have slightly different connotations to words, such as for example autonomy or hierarchy.

To increase construct validity, interviews were done in the interviewee's mother tongue when possible, i.e. for the Norwegians and Swedes. Finally, construct validity can be improved using several sources of evidence (Yin, 2013), and in that regard, the multimethod design of this study becomes a strength.

Internal validity

Internal validity deals with causality; does the independent variable have an impact on the dependent variable, is it actually the other way around, or are there external factors which cause the variation in the dependent variable?

In order to determine the influence of different factors, I analysed not only the effects of national culture, but also the effects of gender, age, office location, team, position (leader vs other), and time spent at the company. This would either uncover interesting effects, or exclude that factor from having an impact on the responses. A strength of my study is that being in the same company reduces the external factor of organisational climate when studying national culture.

A limitation affecting the validity of a study is response bias, with some nationalities being more prone to use the extreme points of a Likert scale than others (Markus W Dickson, Aditya, & Chhokar, 2000). Related is the concept of self-report bias, where a respondent can consciously or subconsciously bias their results. This phenomenon seems to be especially prevalent for questions that are of high sensitivity (Donaldson & Grant-Vallone, 2002). Finally, there is acquiescence bias (Watson, 1992), a tendency for respondents to agree with the survey question. I have tried to mitigate the self-report bias and the acquiescence bias by making the survey questions as neutral as possible so that socially desirable responding does not apply (Nederhof, 1985).

External validity

"External validity is concerned with the question of whether the results of a study can be generalised beyond the specific research context" (Bryman, 2015, p. 47). Sampling has an important influence on external validity. Convenience sampling rather than randomized samples reduces generalisability. Unfortunately, I did not have free access to everyone within the collaborating company, and did therefore interview a convenience set of research subjects. For example, since I had the opportunity to visit the Visma office in Riga, it was convenient to interview people there, which is why 5 interviews were conducted with people from Latvia. On the other hand, no-one from Lithuania volunteered for Skype interviews, and after asking several times, I therefore had to accept that I would not be interviewing anyone from Lithuania. Nevertheless, I did try to increase external validity by requesting a varied base of interviewees in terms of age, gender, roles, and seniority.

External validity is increased by using theory in single case studies, and by using a replication logic in multiple-case studies (Yin, 2013). So for example, when studying differences in questionnaire answer based on the age of respondents, tendencies discovered in both case companies have higher external validity than findings from just one company. Additionally, the instructions for the questionnaire were for respondent to think of their expectations towards work life in general, not their current job, in the hope that it will increase generalisability of the findings beyond the context of the company.

Reliability

Reliability indicates whether the results of a study are repeatable (Bryman, 2015). The methodology section of this paper specifically addresses the question of reliability by presenting the different "steps" of the study, so that it can be replicated by other researchers. The question is then whether the same research method in the same context would yield the same results. In particular, the conclusions drawn from the qualitative data can be affected by the researcher's preconceptions, or his ability to identify patterns (Berg 2001). In order not to have too much preconceptions, I only looked up literature on each country after I had analysed the results. I also did not check the SPGR results before the interviews, so that the interviews would be conducted with an open mind. Concerning the quantitative part of the study, the SPGR has high reliability (Endre Sjøvold, Jae, Ho, & Park, 2007), but the purpose-made questionnaire would need further testing to determine its reliability.

Ethical concerns

Discussions about ethical principles in social research can be broken down into four main areas (Diener & Crandall, 1978) as cited by Bryman (2015, p. 135):

- 1. whether there is a harm to participants
- 2. whether there is a lack of informed consent
- 3. whether there is an invasion of privacy
- 4. whether deception is involved

In my study, there was no harm done to participants during the collection of the data, and I do not think the data collected could be very harmful to companies or respondents if made public. The questions concerned communication and decision-making at work, and did therefore not invade the private sphere. There was informed consent, with questionnaire instructions highlighting that the survey was voluntary and that respondents could stop at any time. Finally, there was no deception involved, as I started both the questionnaire and the interviews with explaining the purpose of the study.

Introducing the articles

Following this methodology section are the two articles. Article 1 focuses on participative leadership while article 2 presents the findings concerning direct and open communication. Half of the questionnaire is therefore presented in article 1 and the other half in article 2. Following the two articles is a section discussion the findings with a more holistic view, to show the interconnectedness between communication and decision-making.

When selecting how to present the results, the main focus was on the findings concerning nationality, and of course findings that were supported both by the qualitative and quantitative interviews. In the discussion part, I have focused on the findings that could be explained or at

least related to previous literature. Due to the vast amount of data, some results concerning age, gender are omitted because they seemed less consistent with other findings, or less relevant to the research question. For example, the following results were left out:

- In Visma, the youngest generation expect in larger degree to be able to choose their own tasks than the older generation.
- In Visma, only people having worked for less than a year would put some trust in overconfident leaders (they are neutral to the statement with a score of 3.7, while the others disagree with a score of 2.3-3.0). In Confirmit it is actually the opposite. The people having worked there for less than 2 years have the least trust in leaders who don't ask for advice, with a score of only 1.6, while the other groups are around 3.4. At Confirmit, the newest people are also the ones disagreeing the most with quick leader decisions.
- During the interviews, several people indicated that Dutch managers have much more of a tendency to micro-manage than Scandinavian managers. However, as there are few Dutch people in Visma's HRM program (thereby participating in the study), I did not have to opportunity to study that indication in more detail.

Notes and clarifications

Some things that should be noted concerning the articles:

- There is some repetition in the two articles, in particular the methodology section and the section describing the case countries.
- The interview quotes in Norwegian and Swedish have been translated to English in the articles, and are therefore not direct quotes.
- In order to protect the anonymity of the interviewees, I will write "he" instead of "she" when a pronoun is required, even if the interviewee in question is in fact a woman. I could have chosen the opposite, but this solution seemed more logical, since three quarters of the interviewees were men.
- "Norwegians" refers to the Norwegian respondents, not the Norwegian population, and similarly for the other nationalities. Similarly, "the Scandinavians" refers to respondents from Norway and Sweden, and "Eastern countries" refers to Latvia, Lithuania and Russia, not the whole of Eastern Europe.
- The respondents are grouped by national culture, defined in the survey as the country in which they spent most of their childhood. So people who work in Norway but are not of Norwegian nationality are therefore not part of the group called "Norwegian". However, for the purpose of readability, the word Norway and Norwegians may be used interchangeably in the analyses.

- For the sake of simplification, I write things such as "the Lativans expect..." or "the younger age groups prefer...", but of course, I am only referring to averages, as there are many individual differences.
- For the survey, significance is measured between Norway and the other countries, since both Visma and Confirmit have headquarters in Oslo. I could have calculated differences between all the countries, but it would be too complex to analyse, present and discuss orderly in the scope of this thesis.

A basic hypothesis in the study was that some cultural differences are independent of companies. The hypothesis was supported by the fact that there were no significant differences in the survey between the companies as a whole, or between the Norwegian groups in the two companies. I therefore merged all the Norwegian respondents to form 1 group of Norwegians. I can thereby compare countries, independently of companies.

Participative leadership - you may not prefer the expected

Abstract

In order to provide good leadership in multicultural teams, one must be aware of the expectations of the different employees. In this paper, I have looked at the effect of national culture on expectations and preferences for participative leadership (PL), with a focus on Agile software development. The countries studied were Norway, Sweden, Russia, Latvia and Lithuania. Both qualitative and quantitative methods have been employed. The findings indicated that most respondents wish to be included in decision-making and have a high preference for PL. On the other hand, several significant differences were also revealed; Firstly, Russians have the lowest expectations towards participating in planning and scheduling of tasks, and they have the highest tolerance for "controlling" leaders. This is in particular the case for the oldest generation, who were strongly influenced by Soviet work values. Secondly, Norwegians are significantly more motivated by autonomy than the other nationalities, while the Eastern countries, especially Lithuania and Latvia, expect more detailed instructions. Lastly, the quantitative findings also suggest age as an important factor, with a positive relation between the age of respondents and their preference for PL.

Introduction

National culture affects people's understanding of work and the way in which they expect to be treated (Newman & Nollen, 1996). Attempts at exporting managerial tools, processes and leadership skills worldwide have little chance of success unless subordinate values are taken into account (De Bony, 2010; Hofstede, 1984). It is therefore important to implement management practices in a way that is consistent with the cultural context (Gibson & Zellmer-Bruhn, 2001; Hofstede, 1984; Mir & Pinnington, 2014).

One of the practices that vary around the world is employee involvement in decision-making, also referred to as participative leadership. It is an interesting topic to study because on the one hand, high levels of PL where consensus is the goal can lead to decisions having a broad base of support among employees. However, those decision-making processes take a long time. On the other hand, there are autocratic decisions which can lead to dissatisfaction among some subordinates, but are much quicker, and in some cases necessary because it is impossible to consult people for every little decision to be made.

The expectation for participative leadership varies around the globe. For example, according to Hofstede (1984) low power distance countries expect more PL than high power distance countries. PL also affects employee motivation in different ways. On the one hand, autonomy (the freedom from external control) can improve employee motivation and job satisfaction (Baard, Deci, & Ryan, 2004; S. Kim, 2002). But on the other hand, too much autonomy or a lack of guidelines can lead to frustration. The impact of autonomy on motivation can depend on national culture (Iyengar & Lepper, 1999), making autonomy and PL important concepts to understand in a multicultural workplace.

My research question is therefore:

Participative leadership: how are expectations and preferences affected by cultural differences?

An industry where this is of high importance is the IT industry, as software development is increasingly crossing national boundaries (Tan et al., 2003). Empowerment of employees is an essential topic in software development, especially for Agile methodologies (Sutharshan & Maj, 2011; Tessem, 2014). It is therefore important to research whether the high level of participative leadership employed in Agile methods is effective in all cultures.

Research gap

While high levels of employee participation in decision-making is taught as something to strive for in many Western cultures, researchers cannot agree on whether it is ideal in all countries. House et al. (2004) claim that even though it is in varying degree, participative leadership is positively endorsed in all countries. On the other hand, the findings of Hofstede (1984) and Newman and Nollen (1996) indicate that encouraging employee participation in decision-making is effective in countries with low power distance, but is ineffective in countries with high power distance. Furthermore, Hwang et al. (2015) discovered that in many countries (low-power distance countries included), a high level of PL does not increase the perceived job performance of the leader in the eye of the employee, and they therefore suggest that people may respond to more directive and non-participative approaches despite claiming to prefer participative leaders. The contradictory findings concerning participative leadership show the need for further research on the topic.

PL is complex, and my assumption is that the level of PL expected and desired by employees can be influenced by their age, gender, personality traits, experience and organisational climate, in addition to national culture. Yet I discovered few or no studies focusing on these factors. While one study looked at the level of PL employed by managers of different age groups (Oshagbemi, 2008), I found no study looking at how different age groups respond to PL. My paper focusing not so much on managers and their leadership style but rather on employees and their expectations and preferences will therefore bring something new to the field.

Aim of the study

The aim of the study is to investigate how expectations and preferences for participative leadership are affected by cultural differences.

Expectations may be different from preferences, because employees can prefer high levels of autonomy without expecting it, and vice versa. Through quantitative and qualitative methods, I will therefore try to find out both whether expectations vary across cultures, and whether these expectations are necessarily linked to preferences.

The findings will reveal whether the European cultures are different enough to indicate a need for an adapted management style. For example, should central management involve employees in decision-making more in one country than another? Or does the organisational culture of these multinational companies mitigate that need. I will also be interesting to see whether the effect of national culture is stronger than that of organisational culture or demographic factors such as age and gender.

The study will add to existing literature concerning Norway, Sweden, Russia, Latvia and Lithuania, as well as provide either nuances or further support to the models of Hofstede (1984) and House et al. (2004). My study differs from some of the others in that it doesn't measure actual participative leadership (through reports by either employees or supervisors) and relate the findings to financial performance, subordinate performance or subordinate satisfaction, as opposed to for example Newman and Nollen (1996) and Hwang et al. (2015). Instead I ask the employees directly what they expect when it comes to participative leadership, and I can that way get a deeper understanding of how it influences their workday and their motivation.

Theory

Participative leadership

Participative leadership is defined as the degree to which managers involve others in making and implementing decisions (House et al., 2004). This definition is the one that will be used in this thesis. However, in past literature, the concept of PL has been defined in many different ways. Hwang et al. (2015, p. 268) defines PL as consulting with, asking for suggestions, and obtaining information from subordinates for important decisions. On the other hand, this is what Oshagbemi (2008) would characterise as consultative leadership: the extent to which the manager discusses matters with her subordinates or others before she decides what to do (p.1906). Conversely, he defines participative leadership as the extent to which the manager shares a consensual decision-making process with her subordinates or others to achieve her objectives. The latter scenario describes one in which the decision is a joint one between the managers and subordinates.

Going into even more detail, Sagie and Aycan (2003) distinguish between several different types of participative decision-making (PMD), such as face-to-face PDM, collective PDM, and paternalistic PDM. Face-to-face PDM is the normal leader-subordinate interaction where an individual is included in decision-making. Collective PDM is an alternative approach to employee participation, often through unions. This approach is according to the author most widespread in some countries in Western Europe, such as Germany, Sweden, and Norway. Lastly, paternalistic PMD, often found in high power distance countries, does not genuinely transfer any power to the employees. The leader is trusted and expected to make the right decisions, and only consults with the employees out of curtesy.

Cultural variations

The level of participative leadership varies between cultures (Dorfman et al., 1997; House et al., 2004; Hwang et al., 2015; Newman & Nollen, 1996; Oshagbemi, 2008). House et al. (2004) found that even though it is in varying degree, participative leadership is positively endorsed in all countries. On the other hand, Hofstede's findings indicate that people from countries of low power distance would expect to be included in important project decisions and be able to affect their workday, whereas for high power distance countries, the ideal leader is a "benevolent autocrat" (geert-hofstede.com, 2017). Challenging the leadership, such as highlighting issues with the proposed plan, would not be as well received as in low power distance countries. This finding is supported by Newman and Nollen (1996). In a study of 176 work units in 18 countries, they analysed management practices and later financial performance of the different work units. They discovered better financial results in work units where described management practices fit with the dimensions of national culture, even controlling for prior performance and external economic factors. One of the findings of the study was that encouraging employee participation in decision making is a good idea in countries with low power distance, but is ineffective in countries with high power distance. The employees would be confused, and consider their leader not to be authoritarian enough.

Furthermore, in a study of how leadership behaviours influence the leader's perceived job performance, Hwang et al. (2015) discovered that in 4 of the 5 countries studied, the US being one of them, participative leadership was not associated with improved perceived job performance of the leader. This is contrary to the findings of Dorfman et al. (1997), who found a positive effect of participative leadership in the US, and of House et al. (2004), who indicated that PL is positively endorsed in all countries. The explanation offered by Hwang et al. is that people may respond to more directive and non-participative approaches despite claiming to prefer participative leaders.

Another possible explanation for why the studies generate diverging results is the different research designs and measures used by the various researchers. For example, Hwang et al. (2015) measured participative leadership through a purpose made questionnaire, and used ratings provided by each participant's supervisor, while Newman and Nollen (1996) used data from the firms regular employee attitude survey, answered by the employees.

Influencing factors

Finally, it should of course be mentioned that both the use of and the preferences for participative leadership can be related to other factors than national culture. For example, in a study of 400 UK managers, Oshagbemi (2008) found a relation between the age of managers and their leadership style. The older a manager, the more consultative and participative leadership processes he/she engages in. Younger managers seemed less concerned with getting the approval of the majority of workers.

Furthermore, individual attributes also influence a person's leadership style. In a study where managers were to describe the level of subordinate participation they would employ in different decision-making situations, Jago (2016) found there to be more within-person differences than between-person differences. One must therefore be careful not to over-attribute managerial behaviour to cultural causes.

Nevertheless, the focus of this paper is not so much the study of managers and their leadership style. The focus here is on employee expectations and preferences, a topic that seems less studied. For example, I did not come across any studies on how different age groups respond to participative leadership.

Effect on employee motivation

A good reason to study participative leadership is that it has proven to affect both employee satisfaction (Baard et al., 2004; S. Kim, 2002), employee performance (Jungert, Koestner, Houlfort, & Schattke, 2013), and commitment to the organisation (Yousef, 2000). Positive effects have been found across many countries (Deci et al., 2001; Yousef, 2000). However, the amount of autonomy given to employees can have different impacts on their motivation depending on national culture. Iyengar and Lepper (1999) discovered that while personal choice was crucial for motivation among Anglo Americans, Asian Americans were more intrinsically motivated when others made the choice for them, especially among children.

The software industry

In addition to variations based on national culture, the use of participative leadership is dependent on industry. In software development, and especially for agile methodologies, empowerment of the employees is a central concern (Sutharshan & Maj, 2011; Tessem, 2014). Much of the agile development practices aim to enhance participation, through Stand-up meetings, Sprint planning and Sprint retrospective. The individual thereby gets to participate not only in programming, but in estimation, architecture and process improvement (Tessem, 2014). In a study of Norwegian and Canadian developers, Tessem concluded that both agile and non-agile software developers are highly empowered, but that agile developers have a higher sense of being able to impact the organisation. However, Sutharshan and Maj (2011) point out that agile development might not be as well suited in all cultures, especially in high power distance cultures.

Description of the case countries

Hofstede

Several models have been developed over the years to describe cultural differences. Among the models of national culture, Hofstede's is by far the most referenced and studied by subsequent researchers (Ali et al., 2009; Gelfand et al., 2007). Many find Hofstede's model to suit all areas, and have explanatory power both for individual and organisational behaviour (Ali et al., 2009). The validity and stability of Hofstede's cultural dimensions have been supported by numerous researchers (Tan et al., 2003), and particularly interestingly for this paper, Hofstede's dimensions have been shown to possess explanatory power in Information Systems research (Ali et al., 2009; Tan et al., 2003).

While several researchers have criticised the model, because of its derivation from old data, lack of generalisability and over-simplification of culture (Ng, Lee, & Soutar, 2007), most researches acknowledge this criticism, but consider the validity of the framework strong enough to provide useful insight on national cultures (Bredillet, Yatim, & Ruiz, 2010). The general acceptance of Hofstede's model and the fact that it has been shown to provide useful insight in IS research makes it a good foundation for this thesis.

The following section is a description of my case countries taken directly from geert-hofstede.com (2017), which provides a useful tool to compare national cultures. In the presentation of each country I will focus on the power distance and individualism scores, since they are the most related to PL according to previous research.

Russia

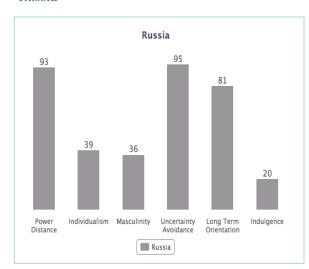


Figure 2.1: Hofstede - Russia

Russia, with a score of 93, is a country with high power distance. According to Hofstede, behaviour has to reflect the status roles in all areas of business interactions: be it visits, negotiations or cooperation; the approach should be top-down and provide clear mandates for any task.

Russia's relatively low score of 36 on the masculinity dimension may be surprising, but Russians at workplace as well as when meeting a stranger rather understate their personal achievements, contributions or capacities. Dominant behaviour might be accepted when it comes from the boss, but is not appreciated among peers.

The Baltic states

Latvia and Lithuania will be presented together, as they have very similar scores on Hofstede's dimensions, and are also described in a similar way on geert-hofstede.com (2017).

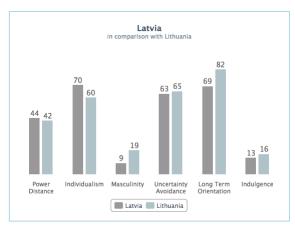


Figure 2.2: Hofstede - Latvia and Lithuania

With a relatively low score on the power distance dimension, Latvians and Lithuanians show tendencies to prefer equality and a decentralisation of power and decision-making. Control and formal supervision is generally disliked among the younger generation, who demonstrate a preference for teamwork and an open management style. However, similar to the other Baltic States, there is a sense of loyalty and deference towards authority and status among the older generation, who has experienced Russian and Soviet dominance.

As Feminine cultures, Latvians and Lithuanians are modest and keep a low profile. Conflicts for Latvians

are usually threatening, because they endanger the wellbeing of everyone, which is also indicative of a Feminine culture.

For Lithuania, Hofstede emphasises the high level of Uncertainty Avoidance. In the work environments of countries with a low Uncertainty Avoidance, one can be a good manager without having precise answers to most questions that subordinates may raise about their work. Among Lithuanians it is the other way around; a manager is a manager, because he knows everything and is able to lead. This takes the uncertainty away and also explains why qualifications and formal titles should be included on business cards.

The Scandinavian countries

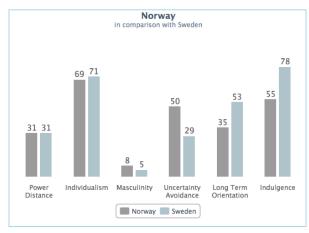


Figure 2.3: Hofstede - Norway and Sweden

Sweden and Norway both have a low score of 31 on the power distance dimension, which means that they are characterised by the following style: Being independent, hierarchy for convenience only, equal rights, superiors accessible, coaching leader, management facilitates and empowers. Power is decentralized and managers count on the experience of their team members. Employees expect to be consulted. Control is disliked and attitude towards managers are informal and on first name basis. Communication is direct, participative and consensus orientated.

Both countries are Individualist societies, with scores of 69 and 71. This means that the "Self" is important and individual, personal opinions are valued and expressed. Communication is explicit.

Sweden and Norway score respectively 5 and 8 on the femininity dimensions, and are the two most feminine countries in the world, according to Hofstede's finding. An effective manager is supportive to his/her people, and decision making is achieved through involvement. Managers strive for consensus and people value equality, solidarity and quality in their working lives. Conflicts are resolved by compromise and negotiation and Swedes are known for their long discussions until consensus has been reached. Incentives such as free time and flexibility are favoured.

Project Globe

In addition to Hofstede's description of the case countries, I will also present some of the findings from the GLOBE research program (Global Leadership and Organizational Behaviour Effectiveness). The main study was performed by House et al. (2004) and is perhaps the most significant study on the topic of cross-cultural leadership. Over 10 years, GLOBE researchers collected and analysed data on cultural dimensions and leadership attributes from over 17,000 managers in 62 societal cultures (Hwang et al., 2015).

The results indicated that uncertainty avoidance (UA) relates negatively to the endorsement of participative leadership, and that countries with high UA tend to prefer assertive leaders. Furthermore, they show that the Nordic cluster scores high on participative leadership while the Eastern European scores low, when comparing the countries of the world (House et al., 2004, p. p. 682).

In general, I will not go into detail on the GLOBE model of national culture here, but rather focus on their in-depth study of certain countries, which was performed by Chhokar et al. (2013). Each country is unique, and the GLOBE researchers have studied the historical and economic context of each country, to better explain the cultural differences in the workplace. All the descriptions below are from the GLOBE book of in-depth studies of 25 societies (Chhokar et al., 2013). With a selection of only 25 societies from around the world, it is natural that all my case countries do not feature in that book, but Russia and Sweden do, and their description can therefore help me better understand my findings from those countries.

Sweden

In Sweden, control is exercised through a common understanding of the problem, rather than through giving direct orders (Edström & Jönsson, 1998) as referenced by Chhokar et al. (2013). Compromise solutions are favoured, and consensus is both a condition for dialogue and a desirable outcome, enabling a wide support once decisions have been made. Consequently, decision-making in Sweden is naturally participative according to Swedish managers, and decisions are rarely enforced on a basis of formal authority. In fact, out of the 61 countries studied in the Globe project, Sweden scores the highest of all on institutional collectivism. Institutional collectivism is defined as *social arrangements at the societal level that promote conformity and interdependence among (groups of) individuals, and a concern for collective rather than individual interest* (p.41).

The authors distinguish between institutional and in-group collectivism, the latter being closer in definition and measure to Hofstede's collectivism index. In fact, despite Sweden being ranked 1st on institutional collectivism by the GLOBE project, it is ranked 60th out of 61 on in-group collectivism! The latter means that in line with Hofstede's findings, personal ideas and opinions are respected, and autonomous leadership is important.

Sweden also scores 2nd on uncertainty avoidance, even though the "Should Be" score is lower, indicating that people would wish to be less uncertainty avoidant. Uncertainty avoidance is defined as *the extent* to which a collective strives to avoid uncertainty by relying on social norms, structural arrangements, rituals and bureaucratic practises to alleviate the unpredictability of future events (p.42).

Russia

In Russia, the system that existed until the mid-19th century was characterised by a strong centralisation of power in the hands of the state and lack of democratic traditions. The tradition of respect for authority is still strong in contemporary Russian society. "Strong leaders have been valued in the history of the state" (p. 818), and the definition of ideal leadership is often based on stereotypes of heroes: results, success, inspiring with personal ability, creativity, courage and risk taking. However, the authors found

that leaders in more technical domains were defined differently to leaders in society, with a much stronger emphasis on technical skills and expertise.

The Globe study found that Russia scores relatively low on participative leadership compared to other countries, and ranks the highest on autocratic leadership. The most important skill is considered to be administrative competency, and the ability to make serious decision.

Nevertheless, there is a substantial gap between the "As Is" and the "Should Be" scores on power distance, despite the Globe country trend towards lower power distance. The researchers notice a difference among young people, and say they are unlikely to blindly obey a leader, and that despite the remaining power distance, the young are ready to express their own ideas and defend their principles. In fact, Russia is a changing society according to the authors, and that was certainly the case when the main part of the data was gathered, in the late 1990s. With changing laws, economy and political context, the authors noticed a decline in traditional collectivistic values. They say that the evolutionary process in Russia is influenced among other things by "emulation of the Western managerial principles, policies and practices" (p.830).

Research method

Research design

In order to answer the research question, a multimethod design has been chosen, consisting of both a quantitative part and a qualitative part. The quantitative study provides breath, by analysing the opinions of a large number of respondents, while the qualitative study provides depth.

Data collection

Questionnaire

A structured online survey method was used to assess respondents' expectations and preferences for participative leadership. The first section asked for background data such as age, gender, nationality and position at the company. In the second section, respondents were asked to rate their agreement with 22 statements, using a 6 point Likert scale that ranged from strongly disagree to strongly agree. Three questions were of a similar logic, but where the scale represented the options between "in a very high degree" and "not at all". The instructions for the respondents were to try not to think specifically about their current job when rating the statements, but rather work life in general. The survey can be found in appendix 1.

The Survey was created in SelectSurvey. It was sent through a link in an email, distributed via team leaders at the case companies, and answers were gathered automatically.

SPGR

An SPGR survey was sent out using the same approach as above, and appeared to the respondents as a last section of the questionnaire. The question asked how frequently a good leader should show the listed behaviours. SPGR is an operationalisation of the Spin theory for groups, a standardised instrument with high validity (Endre Sjøvold, 2014).

Interviews

15 interviews were conducted, with 4 people from Norway, 4 from Russia, 5 from Latvia, 1 from Sweden and 1 from the Netherlands. When possible, I conducted the interviews face-to-face, by travelling to Oslo and also to Riga. The other interviews were done via Skype, with video when possible, in order to observe the respondents' facial expressions and body language.

The interviews were recorded, so that detailed notes could be taken later. The length of the interviews ranged from 17 to 59 minutes, with an average of 37 min.

Demographics

The online survey was sent to 110 people in Visma and 58 people in Confirmit. A total of 93 surveys were completed, giving a total response rate of 55.4 %.

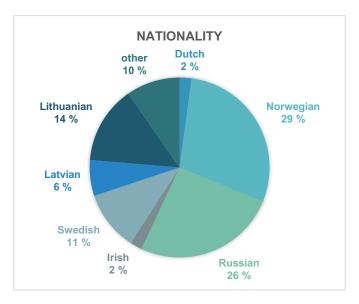


Figure 2.4: Nationality of survey respondents

26% of the respondents were women and 74% were men, which is quite balanced given the gender distribution in the IT sector in general. For the interviews, there was also a balance between the nationalities of respondents, gender, position, and time spent at the company.

Analysis

Questionnaire

The analyses were conducted in Excel, using student t-tests, averages and standard deviation. While these are not complex operations, they were repeated numerous times to analyse the answers with regards to each one of the background factors.

SPGR

For the SPGR, the respondents were grouped by nationality. After checking that there were no significant differences between Norwegians in Visma and Norwegians in Confirmit, the two groups were merged. Averages, standard deviation and t-tests were then calculated for the different nationalities.

Interviews

For the qualitative study, detailed notes were taken based on the interview recordings. These notes were then grouped thematically, with colour coding to distinguish the notes of the separate interviewees.

Concluding

Finally, the quantitative and qualitative findings were related to each other, and then they were compared to the literature. I also looked up new literature in order to explain some of the findings.

Validity and reliability

The construct validity is of importance when it comes to participative leadership, because the concept has been defined and measured in slightly different ways in previous literature. By asking directly what people expect concerning decision-making I am hoping to achieve a high construct validity, compared to for example observing PL and relating it to proclaimed job performance.

Internal validity in cross-sectional design is quite low, but can be improved through case study elements in the research design, where you look in detail at the context of the results (Bryman, 2015). For example, the Visma office in Riga being newly established can explain some of the findings from Latvian respondents, rather than assuming the findings are associated with national culture. In general, I have analysed both demographic and organisational factors, in order to determine whether it is actually national culture or something else influencing the answers.

External validity is increased by looking at two case companies instead of just one (Yin, 2013), providing a better base for theory building. Nevertheless, apart from Norway the two companies did not have any offshoring countries in common that were part of the study, limiting the generalisability of the findings concerning each nationality.

Finally, reliability should be fairly high, as I mostly only reported quantitative findings that were statistically significant or qualitative findings that were mentioned by several interviewees.

Presentation of the data

The survey questions concerning participative leadership are presented in table 2.1, along with the averages for each nationality. Significance levels between Norway and the other countries are represented by asterisks.

In the text, themes are addressed thematically, combining qualitative and quantitative findings. Table 2.2 presents the SPGR-findings, which are then compared with what the interviews revealed as desired leadership characteristics. Finally, the analysis of demographic and organisational factors is addressed, with a presentation of the most interesting findings.

Results

Table 2.1 presents the questionnaire questions along with the average response for each nationality. In order to keep the logic of the questionnaire, the questions are presented in the table more or less in the same order as in the survey, but questions may be discussed in a different order. The respondents were instructed to think of work life in general rather than focusing on their current job.

Table 2.1: Questionnaire results for PL based on nationality

		Norway	Sweden	Latvia	Lithuania	Russia
1	To what extent do you expect to participate in the planning and scheduling of tasks	5.2	5.4	4.7	4.8	4.2**
2	To what extent do you expect to be able to choose your own tasks	4.4	4.5	4.2	4.8	4.4
3	To what extent do you expect precise instructions on how tasks are to be performed	2.3	2.9	3.8**	3.8***	3.0*
4	I would consider someone to be a good leader if they obtain good results, even if they are very controlling as a leader	2.4	2.2	3.0	3.3*	3.7***
5	I would put more trust in a leader who is always certain of his/her actions than one who asks for advice	2.1	2.8	3.8**	2.8	3.8***
6	If a leader asks for my opinion it shows respect and consideration for my thoughts	5.5	5.5	5.0	5.6	4.6**
7	I expect my leaders to encourage employees to express their opinions – even contrary ones	5.6	5.7	5.0	5.4	5.0*
8	If there is a conflict of opinion, I find it best if the leader makes a quick decision	2.8	3.4	4.0*	3.6*	3.6*
9	If there is a conflict of opinion, I find it best for everyone involved/in the team to have an open discussion	4.8	4.3	4.8	5.1	4.8
10	I get demotivated when I am unsure how to perform a task	2.7	4.1**	2.2	3.2	3.1
11	I get more motivated when I can decide how to perform tasks without getting specific instructions	5.2	4.6*	4.0**	4.6*	4.4**
12	I think a higher degree of autonomy would improve my results (compared to current situation)	3.6	3.8	3.6	3.6	3.5
13	I think more instructions would improve my results	2.3	3.1*	3.4	3.2*	2.8

p < 0.05. **p < 0.01. ***p < 0.001 (two-tailed).

Planning and decision-making

Answering the question of what they expect from work life in general, the Russians expect to participate significantly less in the planning and scheduling of tasks than the Norwegians (4.2 vs 5.2). On the other hand, on question 2 - *To what extent do you expect to be able to choose your own tasks* - all the countries studies have similar averages around 4.5.

In the qualitative part of the study, respondents had an opportunity to go into more detail on the level of participative leadership in their current job, and to compare it with previous experience they may have had.

In Confirmit, most employees feel quite involved in decisions: "You make comments at any time, and perhaps arrive at a better solution. They are very agile". The decision-making is also highly influenced by Scrum methodology:

A task is discussed when it comes to the dashboard, and during daily stand-ups. The supervisor/ scrum master may ask who wants to be in charge of a task, people decide together who will be in charge, and then we discuss together how to approach the task and how to solve it.

In Visma, a much larger company, team structure and decision-making depends more on what area you are working in. The interviewed team in Latvia does not feel they have much opportunity to influence higher level decisions, since most Service Owners, Product Owners and Architects are situated in Oslo. However, at the team level, there are brainstormings and meetings where solutions are discussed, and several team members point out that they have the opportunity to influence the teamwork thanks to the Sprint retrospective.

When it comes to planning, several of the Russians and the Latvians describe Scandinavians as having a better planned and less rushed work day than what is common in their countries. One interviewee says that Confirmit is a unique company is Yaroslavl. People don't necessarily come to Confirmit for the autonomy but especially for the lower time pressure and "time to think".

Russian management if often: "do it like this, do this for yesterday". In other Russian companies, I think the leader's main responsibility is to hurry people up.

One of the Latvians also says that "Sweden has a different working style compared to Latvia, without rush; everything happens by the plan", as opposed to Latvian companies where "management can ask you to do things by the next morning".

Conflict resolution

If there is a conflict of opinion (Q8), Norwegians disagree that it's best if the leader makes a quick decision (2.8). This is significantly different from Russia (3.6), Lithuania (3.6) and Latvia (4.0) who are either neutral to or in agreement with the statement. Furthermore, all nationalities agree with statement 7: *I expect my leaders to encourage employees to express their opinions – even contrary ones*, but there is a significant between Norway (5.6) and Russia (5.0). Both of these findings seem to coincide with previous literature, as will be further discussed later.

Interestingly, on statement 9, all nationalities agree that in a conflict of opinion the team should have an open discussion, meaning that there is no inverse correlation between an open team discussion and a "quick leader decision".

The qualitative findings indicate that consensus based meeting are a quite common both in Confirmit and in Visma. Most interviewees seem to appreciate this. Still, Visma employees from both Norway and Latvia pointed out that even in a democracy, it is sometimes necessary with a leader who can cut through and make a decision: "if everyone is to have consensus you'll get nowhere".

Hierarchy and strong leaders

In table 2.1, there is a significant difference between Norway (2.4), Lithuania (3.3) and Russia (3.7) on how they view controlling leaders. The Russians could consider controlling leaders to be good leaders if they obtain good results, but the Norwegians disagree with the statement. The significance between Norway and Russia is even at 0.0003.

On statement 5 - I would put more trust in a leader who is always certain of his/her actions than one who asks for advice - Norway also scores significantly lower than Russia and Latvia (2.1 vs 3.8). The

Norwegian respondents would therefore put more trust in a leader who asks for advice, while the Russians and Latvians would on average put more trust in a leader who is always certain of her actions.

One of the Latvian interviews also highlights this (although his viewpoint may be extreme):

Interviewer: Do you expect your leader to ask for advice? Answer: "No I am not expecting that he asks for advice. I can ask <u>him</u>, but if he is leader then should be very good"

When a leader asks employees for their opinions it can be viewed as a sign of weakness by some, or it can be interpreted as showing respect and consideration for the employee's thoughts. Among the countries studied here, all agree with the latter statement, but the Norwegians agree significantly more than the Russians (5.5 vs 4.6).

The differences between Norway and the Eastern countries, Russia in particular, can be related to the historically different organisational structure. The Latvian and Russian employees indicate that Visma and Confirmit have a very flat structure, which is less frequent in Russia and Latvia. However, some developers point out that the IT-industry often has less hierarchy than other sectors.

All the interviewees say they are glad to be in a company with a flat structure where they can influence decisions. It can be illustrated by this quote from one of the Russian respondents:

I don't think quick leader decisions is a good idea, because often people don't like that decision. They can often see better ways to solve the problem. People are more keen on working on a task that was not a quick decision by a leader, because we have more freedom with the tasks we create on our own.

On the other hand, there was one Latvian respondent who missed clear roles and responsibilities, and another who misses the discipline that came with Soviet values:

In my previous companies there were clear roles, you knew who was responsible for what, you knew what you were supposed to do and what you were not supposed to do.

In the Soviet Union, work started at 8 o'clock, and everybody was at work; there was no question about it. There was no question about discipline, and that increased productivity. Now we need to find other ways to increase productivity.

Instructions

On Q3 - To what extent do you expect precise instructions on how tasks are to be performed - both Latvia, Lithuania and Russia have a significantly higher average than Norway. This finding is supported by the observations of two Scandinavian leaders, who notice that the Latvians and Lithuanians expect more detailed instructions and also detailed knowledge on the part of the leader.

Norway stands out a little bit when it comes to management; the leader is not necessarily the specialist in the area. Further East in Europe it is the one with the most experience who is the leader, the one with all the answers.

When asking whether more instruction would improve the respondents results at work, there are some significant differences. Norwegians disagree (2.3), while Latvians, Lithuanians and Swedes are more neutral. Swedes (3.1) and Lithuanians (3.2) score significantly higher than Norwegians.

The significant difference between Sweden and Norway might be surprising, but as indicated by both Swedes and Norwegians, many Swedes do not want to start anything before it is properly planned and discussed, and they know exactly what to do.

Norwegians are more: "let's go and then we'll solve any problems that arises". In Sweden there is more consensus. You discuss things more before you start.

Motivation

When I asked the interviewees what motivates them in a job, there were a variety of answers, including problem solving, team spirit, salary and learning new technologies, with little distinguishing the answers of Scandinavians or Eastern Europeans. However, one noticeable factor was that several of the Norwegians mentioned autonomy or freedom as a motivator, but this was not mentioned by any of the Russians or Latvians.

This is in line with the answers on statement 11 - I get more motivated when I can decide how to perform tasks without getting specific instructions - where Norway (5.2) scores significantly higher than all the other countries. The Latvians have the lowest average of 4.0, thereby only slightly agreeing with the statement.

On the other hand, Latvians (2.2) disagree that they get demotivated when they are unsure how to perform at task, whereas Swedes are the only nationality to agree, having a significantly higher score than Norwegians (4.1 vs 2.7). Possible explanations will be discussed.

Autonomy and responsibility

On the question of whether the respondents think more autonomy would improve their results, all nationalities have an average around 3.5 (neutral). However, one thing that appeared from the qualitative study is that Norway and Sweden give more autonomy and responsibility to their employees. A Scandinavian manager says:

You cannot micromanage everyone, especially in large teams. You need to be able to trust the senior developers to drive the team, if you provide the guidelines.

While a participative leadership style seems to be welcomed by most of my interviewees, the slightly similar but also different concept of autonomy is more contested, because it also entails responsibility.

People are so scared of making mistakes. If you rather wait for instructions then you get a mandate, and if anything goes wrong it is not you who are the problem.

I don't think trying to make people more responsible has a good effect. Responsibility is liked to guilt and pressure, you place blame on each other, and then we don't feel like a team anymore

The younger Russian interviewees are happy to have a large amount of autonomy. However, they can feel the hierarchical mind-set among some of their older colleagues. This actually coincides with quantitative findings concerning age groups, as will be discussed further.

In Latvia, opinions concerning autonomy are split. The level of autonomy is perceived to be sometimes higher, sometimes lower than in other companies. One of the Latvian workers says he sometimes wishes he has more autonomy, but at the same time this style of working is fine, because if anyone questions your work, you can just say it wasn't your choice.

Desired leadership

SPGR

In addition to the questionnaire, the respondents filled out an SPGR survey, where they were asked to rate which behaviours a could leader should show seldom, sometimes or often. The results are presented in table 2.2.

Table 2.2: SPGR results

		Norway	Sweden	Russia	Latvia	Lithuania
S2 Empathy	Supportive, showing interest for others	3.4	3.5	3.0	3.2	2.8
D2 Acceptance	Cautious, show acceptance of the group	3.4	3.8	3.3	3.6	3.2
N1 Caring	Taking care of others, attentive to relations	3.1	3.2	2.7	3.6	2.9
N2 Creativity	Spontaneous, entertaining, derailing	0.2	0.3	0.4	0.6	0.8**
O1 Criticism	Critical, opposing	0.1	0.1	0.1	0.0	0.7***
W1 Resignation	Sad appearance, showing low self-confidence	0.1	0.1	0.1	0.0	0.3
W2 Self-sacrifice	Passive, reluctant to contribute	0.00	0.0	0.2	0.8***	0.7***
O2 Assertiveness	Assertive, self-promoting	1.1	0.9	1.5	2.0*	1.7*
C1 Ruling	Controlling, attentive to rules and procedures	1.0	0.8	2.2***	1.8*	1.6
C2 Task- orientation	Analytical, task-oriented, conforming	3.4	3.2	3.5	3.6	3.3
D1 Loyalty	Obedient, accept tasks, dutiful	3.2	3.1	3.1	3.0	2.5
S1 Engagement	Energetic, inviting others to contribute	3.8	3.6	3.5	3.8	3.6

^{*}p < 0.05. *p < 0.01. **p < 0.001 (two-tailed).

The results indicate that there are several differences between the countries, which can be summarised as follows:

- No nationalities want too much spontaneous behaviour from their leader, but Latvians and Lithuanians seem to have a higher acceptance for it.
- When it comes to being critical and opposing, the only nationality to accept it in this study is Lithuania, with a significantly higher score than Norway (0.7 vs 0.1)
- A very interesting finding is that a passive, non-contributing leader is not at all considered a good leader in Norway or Sweden, with an average of 0.0 in both countries. The acceptance for a passive leader is significantly higher in Latvia (0.8) and Lithuania (0.7)
- At the same time, Russia, Latvia and Lithuania are much more in favour of assertive leaders than Norway and Sweden. The Eastern countries also want leaders who are attentive to rules and procedures and who take control, while Norway and Sweden score lower.
- Finally, an interesting finding is that fact that all nationalities want an energetic leader who invites others to contribute. The different countries all have a similar score for that behaviour, around 3.7 on the scale of 0 to 4, and therefore seem positive to participative leadership.

Qualitative findings concerning ideal leadership

During the interviews, I asked an open question: "how would you describe an ideal leader?". The respondents answered a variety of aspects, ranging from technical skills and goal setting, to honesty and people skills. While I did not notice any difference between nationalities while interviewing, a subsequent analysis of the interview notes reveals that: the young Russians focus on the fact that good leaders should show high PL and not make all the decisions, while an older Russian respondent says that a good leader is one who makes the difficult decisions. These two aspects are not necessarily opposed, since all leaders have to make some difficult decisions, but it highlights what the different respondents focus on. The Norwegians don't even mention this aspect of leadership, possibly because they take it more for granted. Norwegians focus more on the everyday communication with the leader. They want a leader who is easy to talk to, who has time for you, and to whom you can give both good and back feedback.

Many of the Latvians mention the leader's role as team motivator, and while one Norwegian leader says the Eastern countries have a higher expectation towards the technical experience of the leader, my interviews indicate that all nationalities want a leader who can give them advice on technical issues, including the Norwegians.

Finally, an interesting observation is that in Latvia, 1 respondent says he has 20 years' experience now, so he doesn't need a leader any more, while another respondent says he has never had a good leader. This could mean that while all respondents can have similar ideas of ideal leadership, having a good leader in your current job might be less crucial in some cultures than in others.

Other parameters influencing attitudes towards participative leadership

In the quantitative study, other factors than national culture were also found to influence people's expectations towards participative leadership, both demographic factors and organisational culture.

Gender

In Confirmit, there are no significant gender differences. However, in Visma, there were a few questions that yield significant differences. Firstly, women seem to be more opposed to quick leader decisions than men (2.9 vs. 3.6), and secondly, they disagree that more instructions would improve their results (2.5), while the men were more neutral (3.3).

Age

In Confirmit, both Russian and Norwegian interviewees can notice an age difference, and indicate that the older generation of Russians have a higher wish for hierarchy.

The quantitative analysis based on age groups indicates that the oldest generation (over 55 years old) is a special case. That is probably because all respondents in that group are Russian and located at the Moscow office, and can therefore not be generalised to other nationalities.

The group of respondents >55:

- o do not expect to choose their own tasks
- o are more positive to controlling leaders
- o score neutral on wanting more instructions (as opposed to everyone else being negative),
- do not want more autonomy
- o are much more positive to quick leader decisions

One of the Russian interviewees confirms this by saying:

I'm afraid that it's our history, that people who are, let's say older than me, prefer strictly instructed ways of working to the freedom. It is not really a desire for instructions, but when you are told exactly what to do the probability of making mistakes is lower. So they choose less responsibility over more freedom.

However, when ignoring the special case of >55, the following tendencies can be noticed in Confirmit:

- o the older you are, the less instructions you expect
- o the older employees have lower tolerance for controlling leaders (based on question 4 and 5)
- o the older you are, the more you expect leaders to encourage contrary views

In both companies, a lack of instructions seems to motivate people more the older they get. The scores for the three age groups <34, 35-44 and 45-54 are 4.5, 4.9 and 5.1 respectively in Visma, and 4.3, 4.9 and 5.4 in Confirmit.

Furthermore, in Visma, respondents above 44 years old prefer an open team discussion in the case of a conflict of opinion, and have a significantly lower tolerance for quick leader decisions than the younger respondents (2.4 vs 3.6), thereby coinciding with the findings from Confirmit.

Position

Between leaders and other roles in the company, the only difference is that leaders expect to participate in the planning and choosing of tasks in a higher degree, and they expect slightly less instructions, both in Confirmit and in Visma. However, the difference is only significant for Visma, and only on question 1 and 2 (in table 2.1), thereby making the position of a person less influential than their national culture.

Time at company

In Visma, there is a tendency to expect less instructions and to wish for slightly more autonomy the longer you have worked at the company. New employees (<1 year) report to be less motivated by autonomy, with 4.0 against an average of around 5.0 for the other groups. For the statement - *I expect my leaders to encourage employees to express their opinions, even contrary ones* - the newest people at the company also have a lower score than the older ones. (average of 4.7 vs 5.5)

Office

In order to highlight the possible effect of organisational culture, I analysed the difference between Russians in Moscow and Russians in Yaroslavl. Two significant differences appeared, which can seem quite contrasting. On the one hand Moscow employees are much more positive to controlling leaders than Yaroslavl (4.1 vs 2.9 on Q4), but on the other hand, the people in Moscow want more autonomy compared to their current situation than do the people in Yaroslavl (3.9 vs 2.9). Possible explanations will be discussed.

Team

Finally, team culture can also have an impact on answers, and I therefore compared results from the two teams in Confirmit: Hub and Reporting. There are a few differences:

- The Hub team scores significantly higher on expecting to be part of planning and scheduling
- Although both teams disagree, the Reporting team scores significantly higher on wanting more instructions compared to the current situation (2.8 vs 2.0).
- In the case of a conflict of opinion, the Reporting team seems to be more in favour of leader decisions, while the Hub team is more in favour of team discussions.

It can therefore seem like respondents in the Hub team have a slightly higher preference for PL.

Discussion

Planning and decision-making

Describing their current situation, both Visma and Confirmit employees feel quite involved in decisions, at least at the team level. Agile principles are revealed to be an important contributing factor: "People decide together who will be in charge of a task, then we discuss together how to approach the task and how to solve it". Sprint planning, stand-up meetings and sprint retrospective were described as arenas were employees felt involved in decision-making, in line with the findings of Tessem (2014).

Nevertheless, from the questionnaire it is apparent that the Eastern Europeans expect to participate less in the planning and scheduling of tasks that the Norwegians and the Swedes do. This is consistent with the GLOBE findings, where the Nordic cluster scores high on participative leadership, while the Eastern European cluster scores quite low (House et al., 2004, p. 682). It is further supported by the SPGR results, revealing that the Eastern respondents have a higher acceptance for ruling/controlling leaders than the Scandinavians do. The in-depth study of Russia by Chhokar et al. (2013) also shows that the country scores quite low on PL, and have a high score on autocratic leadership. On the other hand, the use of participative leadership in Scandinavia is according to Hofstede related to the low power distance, in addition to the feminine aspect of society, where solidarity and involvement is valued.

According to some of the Russian and Latvian employees, management style in other companies in their countries is sometimes characterised by giving orders ("do like this") and time pressure ("do it for yesterday"). They describe planning in Scandinavia as less rushed, and as being in general a work-style with lower time pressure and "time to think". In fact, Swedes are known for their long discussions until consensus has been reached (geert-hofstede.com, 2017), and the Scandinavian interviews reveal that Swedes do usually not like rushing into anything. The SPGR results also show that they have a lower acceptance for spontaneous behaviour from the leader. This can be connected to the fact that Sweden is ranked 2nd out of 61 countries on uncertainty avoidance according to Chhokar et al. (2013). They define uncertainty avoidance as the extent to which a collective strives to avoid uncertainty by relying on social norms, structural arrangements, rituals and bureaucratic practises to alleviate the unpredictability of future events (p.42). Consensus-oriented meetings could in this case be considered a bureaucratic practice.

The long discussions considered necessary in one country can be considered a waste of time in a neighbouring country (De Bony, 2010). From the qualitative study it seems that is sometimes the case with Norway and Sweden, where Norwegians feel that Swedes discuss for too long. A Swedish employee says a middle ground between Norwegian and Swedish practices should be strived for though. This is in line with Chhokar et al. (2013)'s description that Sweden's "should-be" score for UA is lower than the "as-is" score, indicating that many Swedes wish to be less governed by uncertainty avoidance.

Then keen observer will notice that on Hofstede's UA index, Sweden scores quite low. While this may seem contradictory to the GLOBE findings, it is explained by the fact that that the two models actually are measuring different components of the UA construct (Venaik & Brewer, 2010). Indeed, according to Hofstede (1984), countries exhibiting strong UAI maintain rigid codes of belief and behaviour, and are intolerant of unorthodox behaviour and ideas, which is quite a different definition compared to that in the GLOBE model, and cannot at all be used to explain the Swedish strive for consensus. This shows the usefulness of looking at several models of national culture.

Conflicts of opinion

On the questionnaire, all nationalities agree with statement 7 - *I expect my leaders to encourage employees to express their opinions, even contrary ones.* I would say that encouraging opposing opinions is a prerequisite for high participative leadership. The significant difference between Norway (5.6) and Russia (5.0) is not surprising, given Norway's lower power distance and higher individualism, where "personal opinions are valued and expressed" (geert-hofstede.com, 2017). In fact, it can be surprising that Russians score as high as they do. This might be because respondents are affected by the organisational climate at the current office. Indeed, both in Visma and in Confirmit, people who have recently started at the company have lower expectations on statement 7. This can mean that even though they expect some leader encouragement when they start, the expectations for work life in general increase after a year or two of supportive climate in their current job.

On the other hand, if there is a conflict of opinion, the average Russian, Lithuanian and Latvian thinks it is ok if the leader makes a quick decision, while Norwegians disagree with the statement. An explanation for this can be the higher level of power distance in those countries compared to Norway, especially in Russia. For Latvia and Lithuania, it can be because conflicts are seen as threatening "because they endanger the wellbeing of everyone" (geert-hofstede.com, 2017).

Interestingly, on statement 9, all nationalities agree that in a conflict of opinion the team should have an open discussion, meaning that there is no inverse correlation between an open team discussion and a quick leader decision. This can indicate that all nationalities wish to be able to utter their opinion and have a discussion, showing high preferences for *consultative leadership* as described by Oshagbemi (2008), but that the difference is in who makes the decision.

Hierarchy and strong leaders

Some cultures are more hierarchical than others. Companies in high power distance countries are often characterised by a paternalistic form of participative decision making, where the leader is trusted and expected to make the right decisions, and only consults the employees out of curtesy (Sagie & Aycan, 2003). This could be a reason why the Russians could consider someone to be a good leader if they obtain good results, even if they are very controlling as a leader, while Norwegians disagree.

In fact, Chhokar et al. (2013) observed that in Russia, the portrayed ideal leaders were stereotypes of heroes, characterised by results, success, courage and risk taking. "Strong leaders were valued in the history of the state" (p. 818). However, the authors noticed a difference among the younger generations, and said that they were less likely to blindly obey orders. For Russia, this is consistent both with my qualitative and quantitative findings. In fact, as presented in the results, the Russians over 55 years old are more positive to controlling leaders and to quick leader decisions, they do not expect to choose their own tasks, and they score higher than the other age groups on wanting more instructions. The interviews further revealed that a good leader for the younger respondents is one with a focus on participative leadership, while for an older respondent, a good leader is the one who makes the difficult decisions. Indeed, Chhokar et al. (2013) found that administrative competency was very important in Russia, and the ability to make serious decision. Yet they also observed a large difference between the "as is" and the "should be" values for power distance, which seems consistent with the divergence between generations.

Conversely, when excluding the >55 age group, both Visma and Confirmit show a tendency where the younger age groups are more accepting of controlling leaders, and are more in favour of quick leader decisions than the older ones. In fact, this seems to be in line with Oshagbemi (2008)'s finding that the older a manager is, the more consultative and participative leadership processes he/she engages in. My study looks at what behaviour the employees expect, not at management behaviour. It is therefore

interesting to see that there is a link: older subordinates wish for more consultative leadership than younger ones, and older leaders practice more consultative leadership than younger ones. Perhaps the longer work-life experience has shown them the importance of getting a broad base of inputs and support.

Instructions and autonomy

The quantitative findings show that Latvians, Lithuanians and Russians expect more instructions on how tasks are to be performed. This is also supported by interviews with Scandinavian managers, who say the Eastern countries tend to expect leaders with high technical expertise who can discuss tasks in detail. According to Hofstede, this can be explained by high uncertainty avoidance, where a leader who has all the answers provides certainty and safety. In fact, it seems consistent with the Globe findings that countries with high UA prefer assertive leaders, something which is also supported by the SPGR results. This could in turn explain why both Latvia and Russia score significantly higher than Norway on the statement - *I would put more trust in a leader who is always certain of his/her actions than one who asks for advice*. Alternatively, this finding can be explained by the historical ideal of strong Soviet leaders, where asking for advice could be seen as a sign of weakness.

Nevertheless, when excluding the >55 group in Confirmit, the older a person is the higher he scores on average on the statement *I get more motivated when I can decide how to perform tasks without getting specific instructions*. This means that the higher age groups are more motivated by autonomy than the younger groups. Perhaps because older employees have more experience, they feel more confident in knowing how to approach tasks.

National culture can also influence the link between autonomy and motivation (Iyengar & Lepper, 1999). Indeed, the survey findings revealed that Norwegians are significantly more motivated by autonomy than all the other countries. This is in line with Hofstede's finding that in feminine cultures, flexibility is highly valued. However, it is interesting to note that Swedes are less motivated by autonomy, and they are in fact the only nationality to agree with the statement - *I get demotivated when I am unsure how to perform a task*. This can be related to the their very high score on the GLOBE uncertainty avoidance index (Chhokar et al., 2013), and they want to be sure what they are doing before starting on a task.

In general, however, it is indicated in the interviews that Scandinavian leaders give more autonomy and responsibility to their employees. This is in line with Hofstede's description that "power is decentralized and managers count on the experience of their team members" (geert-hofstede.com, 2017). The concept of responsibility is closely related to autonomy. I would say that is what distinguishes participative leadership from consultative leadership. The former has a joint responsibility, while in the latter case, the responsibility lies on the leader, who makes the final decision. I would also say that autonomy entails even more responsibility than participative leadership, in that you are personally responsible for your own work. That may be why several cultures prefer less responsibility. As mentioned by some Latvian and Russian subjects, it may sometimes feel like a safer option, because if things go wrong it is not your fault; you only did what you were told to do. Additionally, as pointed out by a Latvian employee, making people personally responsible for tasks in agile development can reduce the feeling of team responsibility, and thereby the incentive to help each other.

In Latvia, the preference for autonomy or responsibility seems to be quite individual, with some interviewees wanting more autonomy and other highlighting the disadvantage responsibility. In Russia on the other hand, the group of employees over 55 years prefer less autonomy and more instructions than the younger age groups. On the other hand, when comparing results from the Moscow and Yaroslavl office, Moscow has a significantly higher average than Yaroslavl on the statement - *I think a*

higher degree of autonomy would improve my results - despite the latter office being known for having a younger group of employees. My theory is that perhaps employees at the Moscow office experience less autonomy than people in Yaroslavl. In fact, one of the respondents mentioned that the Moscow office used to be the headquarter of the old company (which was bought by Confirmit), and that the old "bosses" still work there. Perhaps the Moscow office has retained some of their original hierarchy and power distance. As described by Hofstede, the traditional Russian values are characterised by status roles, where "the approach should be top-down and provide clear mandates for any task" (geerthofstede.com, 2017). A top-down approach could explain why employees would like more autonomy compare to the current situation. This explanation makes a link from national culture to organisational culture. It is only a theory though, and would need further research.

Despite the fact that Scandinavian leaders give more autonomy to their employees, the SPGR results show that a passive, non-contributing leader is not at all considered a good leader in Norway or Sweden, while the acceptance for passivity is higher in Latvia and Lithuania. This can be related to the larger distance between workers and leaders in the Eastern countries. Scandinavian leadership style is characterised by accessible, coaching leaders, an informal attitude towards managers and a direct and participative communication (geert-hofstede.com, 2017). The qualitative study supports this description, since Scandinavian respondents focus much more on everyday communication with the leader than the other nationalities. They want a leader who is easy to talk to, who has time for you, and to whom you can give both good and bad feedback.

Summary of findings

Expectations

With regards to expectations in the different cultures, there are two notable findings from the quantitative study. The first is that the Eastern countries, especially Russia, expect to participate less in the planning and scheduling of tasks than the Scandinavians do. However, the qualitative findings slightly nuance this, with interviewees saying the amount of autonomy in Confirmit is not uncommon in the Russian IT-industry. The difference is that for Norwegians it is often a basic requirement in a job, whereas the Russians would not be shocked to work in a company with more hierarchy.

The second finding is that the Eastern countries expect significantly more precise instructions on how tasks are to be performed than the Norwegians do. This was supported by the qualitative findings. In Latvia, Lithuania and Russia, people expect in a higher degree to be told what to do, while Scandinavian managers delegate more responsibility to their employees. So while the interviews indicate that all nationalities want a leader with good technical expertise, it seems like Scandinavians can accept more administrative leaders, while technical skills may be a necessary requirement in Eastern countries, because they expect more detailed knowledge and instructions.

Preferences

Russians could consider someone to be a good leader if they obtain good results, even if they are very controlling as a leader, while Norwegians disagree. Furthermore, if there is a conflict of opinion, the average Russian, Lithuanian and Latvian thinks it is ok if the leader makes a quick decision, while Norwegians disagree with the statement. This shows that Norwegians have a high preference for participative leadership, while people in the Eastern countries have a higher acceptance for "controlling" leaders.

However, all respondents wish to have an open team discussion in the case of diverging opinions, showing the unanimous preferences for consultative leadership. And from the interviews, it seems most people prefer high levels of participative leadership as well, and the chance to make decisions together. The SPGR results also show that all nationalities want an energetic leader who invites others to contribute. People in Latvia wanting to be more involved in higher level decision-making shows that even if they have lower expectations, it is not a sign of their preference.

It should be mentioned that many interviewees, including Scandinavian ones, mention how consensus meetings sometimes take too long, and that is important to have a person with a mandate to make a decision. However, this does not keep people from preferring high levels of PL.

Yet taking it one step further, to autonomy, and the possibility to make decisions on your own, there are again noticeable differences. The survey findings revealed that Norwegians are significantly more motivated by autonomy than all the other countries, and this was also supported by the qualitative study. Swedes can get demotivated if they are unsure how to perform a task, and some Latvians and Lithuanians are uncomfortable with the level of responsibility that comes with autonomy, preferring the "safer" option of being told what to do. This reveals that not everyone is comfortable with the responsibility that comes with autonomy.

The influence of other factors than national culture

There is a noticeable generation gap in Russia, with the oldest age group being more in favour of "strong" leaders who can make decisions, while the younger score similar to the other nationalities and prefer a certain degree of autonomy. In fact, apart from the special case of people >55 in Russia, it turns out that both in Confirmit and Visma, the older you are the higher the preference for participative leadership and for autonomy. I therefore conclude that the age of employees influences their preference for participative leadership.

Concerning the other factors analysed, there were no significant gender differences across the companies, and surprisingly, few significant differences between the answers of leaders and subordinates. In Confirmit, leaders and other employees had the same expectations towards planning of tasks and choosing their own tasks. This implies that the national culture has more influence on a person's expectations towards participative leadership than their position in the hierarchy.

On the other hand, some quantitative differences could be observed between different teams in Confirmit, and between offices in the same country, showing the influence of organisational culture. Seniority also had some influence on people's preferences for PL, but I believe that is more related to experience than organisational culture, in line with the influence of people's age. However, both the qualitative and quantitative findings reveal that some of the Russians and Latvians who have been in the organisation for a long time are still not used to the autonomy and responsibility that is expected, highlighting how ingrained the national culture is.

Implications and future research

An aim of this study was to answer whether high levels of participative leadership is suitable in all cultures. The findings reveal that all nationalities in this study are in favour of a participative leadership, despite diverging expectations. Yet the fact that older generation of Russians are more positive to "strong leaders" than the other respondents might be an indication that in countries where hierarchy and instructions are an even stronger part of the national culture, high levels of participative leadership could be less suitable. This partially supports the findings of Newman and Nollen (1996) and Hofstede (1984) who found that encouraging employee participation in decision-making is effective in countries with low power distance, but is ineffective in countries with high power distance. Still, further research in

other high power distance countries would be necessary in order to fully support the findings. Additionally, despite Russia being a high power distance country, inclusion in decision-making is preferred by the majority of the respondents. This highlights the fact that one cannot generalise and say PL is ineffective in all countries with high power distance.

Furthermore, the generation gap in Russia shows the changing nature of culture, something which has also been mentioned by Chhokar et al. (2013) and Nishimura, Nevgi, and Tella (2008). The observed difference in Russia might also indicate that younger employees can adapt more easily to a new business culture of high PL, while older people who have worked in a certain way for many years have more difficulty in adapting. This is just a hypothesis though, and would be an interesting topic for future research.

Another contribution by this study are the findings concerning gender, age and position at the company. I encountered no previous study looking at how these groups respond to participative leadership. Since those topics were not the main focus of my thesis, I would say my results are only suggestive, and more in-depth research should be conducted on each of the factors.

Finally, this paper brings something new to the field of leadership studies by focusing on the expectations and preferences of employees rather than measuring or describing differences in leadership style. On a general level, the diverging expectations but similar preferences for PL can indicate that the enactment of leadership style across cultures varies more than the perceived ideal leadership, in accord with the findings of the Project GLOBE.

Recommendations to the case companies

On a general level, most employees prefer high levels of participative leadership, so both case companies should continue involving employees in decision-making as they do today. There is no need to change the level of instructions or autonomy for the Eastern countries, even if their expectations for PL may be lower. If anything, the subsidiaries in Latvia, Lithuania and Russia seem to want more involvement in high-level decision, which they feel are being made at the headquarters in Oslo.

On the other hand, I could recommend a short introductory course during the on-boarding of new employees from a different national culture, where there is a presentation about the culture at Visma / Confirmit. Fun facts about the Norwegian work style could be included, while of course making sure not to stereotype too much. The most important would be to explain what level or responsibility and autonomy is expected, and maybe have a case-exercise where you work in teams to solve a task with little instruction. Clarifying these types of expectations would be even more important when acquiring new subsidiaries, for example in the case of Visma who is undergoing rapid growth.

Limitations

For the quantitative study, respondents were asked to think about their expectations for work life in general, not their current job. Yet it is likely that responses were at least partially influenced by the culture at Visma and Confirmit. This would be the case especially for people who have never worked somewhere else, and for people who have worked at the company for many years. So for example when all nationalities expect to be included in the planning and scheduling of tasks, it could be influenced by the high level of PL at the case companies, something which would reduce generalisability of the results.

Another limitation is perhaps the construct validity for the concepts of autonomy and motivation. Motivation is difficult to measure, so the self-report of how motivated people are by autonomy may not coincide completely with what their actual motivation would be. Additionally, it became clear during interviews that respondents had slightly different interpretations of what autonomy means in a work

context, so in future research, I would provide a definition when using the word in a questionnaire. Nevertheless, the interpretations of autonomy were definitely similar enough that I consider the results to be valid, and it is clear that people from different cultures respond differently to autonomy.

Conclusion

In this paper, I have looked at the effect national culture has on people's expectations and preferences for participative leadership. Involvement in decision-making, autonomy and responsibility are concepts that have had high importance. Software development has been the industry in focus, with a particular emphasis on Agile development. Through two case companies, I have gathered data from branches in Russia, Latvia, Lithuania, Norway and Sweden.

I have found that respondents in Latvia, Lithuania and Russia have lower expectations for participative leadership that in Norway and Sweden. The most significant difference is noticed for Russia, which is consistent with the Baltic countries being closer to the Scandinavian ones on the power distance and individualism index.

People in the Eastern countries might expect more instructions, but that does not mean they do not want participative leadership. In fact, all the interviewees seem to enjoy a flat structure and being involved in decision-making. Nevertheless, when making decision by oneself, some people in Latvia and Russia seem uncomfortable with the level of personal responsibility that comes with higher autonomy.

Another finding in this paper is that the age of employees influences their preference for participative leadership. Firstly, there is a general tendency for more experienced people to prefer higher levels of PL, along with more autonomy and less instruction. Secondly, as a more specific case, there is a generation gap in Russia, where the elder generation who has been influenced by Soviet values expect stronger leaders and less autonomy. This latter finding also highlights how the culture in a country can change over time.

The findings have implications both on an organisational level, for companies operating in the studied countries, and on a team level, in the case of multicultural teams, expatriate team members or expatriate project managers.

References

- Ali, Tretiakov, A., & Crump, B. (2009). *Models of national culture in information systems research*. Paper presented at the Australasian Conference on Information Systems (ACIS).
- Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic Need Satisfaction: A Motivational Basis of Performance and Weil-Being in Two Work Settings1. *Journal of applied social psychology*, 34(10), 2045-2068.
- Bredillet, C., Yatim, F., & Ruiz, P. (2010). Project management deployment: The role of cultural factors. *International Journal of Project Management*, 28(2), 183-193.
- Bryman, A. (2015). Social research methods (4th ed.): Oxford university press.
- Chhokar, J. S., Brodbeck, F. C., & House, R. J. (2013). *Culture and leadership across the world: The GLOBE book of in-depth studies of 25 societies*: Routledge.
- De Bony, J. (2010). Project management and national culture: A Dutch–French case study. *International Journal of Project Management*, 28(2), 173-182.
- Deci, E. L., Ryan, R. M., Gagné, M., Leone, D. R., Usunov, J., & Kornazheva, B. P. (2001). Need satisfaction, motivation, and well-being in the work organizations of a former eastern bloc country: A cross-cultural study of self-determination. *Personality and social psychology bulletin*, 27(8), 930-942.
- Dorfman, P. W., Howell, J. P., Hibino, S., Lee, J. K., Tate, U., & Bautista, A. (1997). Leadership in Western and Asian countries: Commonalities and differences in effective leadership processes across cultures. *The Leadership Quarterly*, 8(3), 233-274.
- Edström, A., & Jönsson, S. (1998). Svenskt ledarskap. *Organisationsteori på svenska Ed. by Czarniawska. B.*
- geert-hofstede.com. (2017). Retrieved from https://geert-hofstede.com/
- Gelfand, M. J., Erez, M., & Aycan, Z. (2007). Cross-Cultural Organizational Behavior. *Annual Review of Psychology*, *58*(1), 479-514. doi:doi:10.1146/annurev.psych.58.110405.085559
- Gibson, C. B., & Zellmer-Bruhn, M. E. (2001). Metaphors and meaning: An intercultural analysis of the concept of teamwork. *Administrative Science Quarterly*, 46(2), 274-303.
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (Vol. 5): sage.
- House, Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*: Sage publications.
- Hwang, S. J., Quast, L. N., Center, B. A., Chung, C.-T. N., Hahn, H.-J., & Wohkittel, J. (2015). The impact of leadership behaviours on leaders' perceived job performance across cultures: comparing the role of charismatic, directive, participative, and supportive leadership behaviours in the US and four Confucian Asian countries. *Human Resource Development International*, 18(3), 259-277.
- Iyengar, S. S., & Lepper, M. R. (1999). Rethinking the value of choice: a cultural perspective on intrinsic motivation. *Journal of personality and social psychology*, 76(3), 349.
- Jago, A. G. (2016). A contrarian view: Culture and participative management. *European Management Journal*. doi:http://dx.doi.org/10.1016/j.emj.2016.10.001
- Jungert, T., Koestner, R. F., Houlfort, N., & Schattke, K. (2013). Distinguishing source of autonomy support in relation to workers' motivation and self-efficacy. *The Journal of social psychology*, 153(6), 651-666.
- Kim, S. (2002). Participative management and job satisfaction: Lessons for management leadership. *Public administration review*, 62(2), 231-241.

- Mir, F. A., & Pinnington, A. H. (2014). Exploring the value of project management: linking project management performance and project success. *International Journal of Project Management*, 32(2), 202-217.
- Newman, K. L., & Nollen, S. D. (1996). Culture and congruence: The fit between management practices and national culture. *Journal of international business studies*, 27(4), 753-779.
- Ng, S. I., Lee, J. A., & Soutar, G. N. (2007). Are Hofstede's and Schwartz's value frameworks congruent? *International marketing review, 24*(2), 164-180.
- Nishimura, S., Nevgi, A., & Tella, S. (2008). Communication style and cultural features in high/low context communication cultures: A case study of Finland, Japan and India. *Teoksessa A. Kallioniemi (toim.), Uudistuva ja kehittyvä ainedidaktiikka. Ainedidaktinen symposiumi,* 8(2008), 783-796.
- Oshagbemi, T. (2008). The impact of personal and organisational variables on the leadership styles of managers. *The International Journal of Human Resource Management*, 19(10), 1896-1910.
- Sagie, A., & Aycan, Z. (2003). A cross-cultural analysis of participative decision-making in organizations. *Human Relations*, 56(4), 453-473.
- Sjøvold, E. (2014). Resultater gjennom team. Oslo: Universitetsforl.
- Sutharshan, A., & Maj, P. S. (2011). Enhancing Agile methods for multi-cultural software project teams. *Modern Applied Science*, *5*(1), 12.
- Tan, B. C., Smith, H. J., Keil, M., & Montealegre, R. (2003). Reporting bad news about software projects: Impact of organizational climate and information asymmetry in an individualistic and a collectivistic culture. *IEEE Transactions on Engineering Management*, 50(1), 64-77.
- Tessem, B. (2014). Individual empowerment of agile and non-agile software developers in small teams. *Information and software technology*, *56*(8), 873-889.
- Venaik, S., & Brewer, P. (2010). Avoiding uncertainty in Hofstede and GLOBE. *Journal of international business studies*, 41(8), 1294-1315.
- Yin. (2013). Case study research: Design and methods: Sage publications.
- Yousef, D. A. (2000). Organizational commitment: A mediator of the relationships of leadership behavior with job satisfaction and performance in a non-western country. *Journal of Managerial Psychology, 15*(1), 6-24.

Communication – directness and openness

Abstract

Good communication is a prerequisite for good teamwork, and in a multicultural setting, it is therefore important to understand how your communication patterns vary from that of your team mates. This paper studies the effect of national culture on directness and openness of communication, in 6 countries: Latvia, Lithuania, Russia, the Netherlands, Sweden and Norway. Both qualitative and quantitative methods have been employed. The findings show that in all countries, both psychological safety and Agile development practices have a positive effect on team communication. Nevertheless, there is a differences in openness between the Eastern and Scandinavian countries; Russians, Latvians and Lithuanians are more likely to catch up on delays before revealing them to co-workers, are more careful with disagreeing with leaders, and they would be more likely to hold back opinions in the fear of hurting people's feelings. This is particularly noticeable for the oldest generation of Russians, who were strongly influenced by collectivistic values. On the other hand, among the countries studies, Russians and Dutch people are considered the most direct in their way of speaking, despite very different cultures. I therefore conclude that many different factors influence communication style, and one cannot generalise based on one model of national culture.

Introduction

According to cultural contingency theory, it is important to implement management practices in a way that is consistent with the cultural context (Gelfand et al., 2007; Gibson & Zellmer-Bruhn, 2001; Hofstede, 1984; Mir & Pinnington, 2014). Communication in the workplace is an area where cultural differences are noticeable. Employees often have slightly different communication styles at work, which are influenced by both personality traits, organisational climate and national culture.

The difference in communication can cause misunderstandings, which in turn can lead to delays. Furthermore, poor communication or a misalignment of expectations can lead to frustrations among the employees, which in turn can hinder a good team climate. It is therefore important to understand how to interpret the communication of your multicultural colleagues and employees.

An industry where this is of high importance is the IT industry, as software development is increasingly crossing national and cultural boundaries (Tan et al., 2003). The use of technology increases in all industries (PwC, 2015) and technology competence becomes more and more intertwined with companies' business processes. That is why communication processes in software development is becoming a very important topic.

My research question is therefore

How do cultural differences affect open and direct communication in software development?

The area of communication is vast, and can encompass everything from frequency, channels, body language, etc. I therefore delimit the scope of this paper to the concepts of openness and directness, which have been shown to be affected by national culture in the past (Ding, 2006; Hall & Hall, 1990; Keil, Im, & Mähring, 2007; Tan et al., 2003). As a simple definition, openness refers in this context to

how willingly you share things with colleagues (ideas, opinions or even mistakes that you have made), while directness refers to the <u>way</u> in which you share these opinions.

Research gap

In the area of software development, the focus is often on technology and technical skills, but several researchers have highlighted the lacking focus on people and processes (Casey, 2011; Jurison, 1999). Moreover, Hummel, Rosenkranz, and Holten (2015) found that "while the importance of communication in Agile international software development is generally acknowledged, empirical studies investigating this phenomenon are scarce"

Concerning the effect of national culture on communication in general, Merkin et al. (2014) found through a meta-analytical review that "previous attempts to integrate cross-cultural literature were made but the results were confined to qualitative reviews or brief notes on the magnitude of the relationship between culture and communication" (p.14). They also found that most research uses the individualism-collectivism index to explain the effect of culture on communication, while the other dimensions have been unjustifiably overlooked. "In particular, the effects of power distance and masculinity–femininity were quite strong in a number of cases and further exploration of the effects of these cultural values may help uncover important previously overlooked relationships" (p.16). This research gap is also highlighted by Gelfand et al. (2007), who in general cross-cultural research would like to see multiple values studied simultaneously, rather than the study of only one cultural dimension.

Finally, Merkin et al. (2014) point out that the majority of studies on communication and culture relies on convenience sampling, often using students, and that looking at actual case companies would provide new insight.

In addition to the research gaps uncovered by previous researchers, I also observed a few things during my own literature study. One is that most research is based purely on Hofstede's dimensions (including the review by Merkin et al.), while there are also other studies which can provide great insight, for example the GLOBE study by House et al. (2004). Secondly, while there are several studies on the communication difference between Western cultures and East Asian countries (Cocroft & Ting-Toomey, 1994; Kapoor, Hughes, Baldwin, & Blue, 2003), I found few studies comparing communication styles within Europe. Finally, communication is complex, and can vary based on the situation, the trust between people, age, gender, etc. Yet I discovered few or no studies focusing on these factors.

I this paper I will therefore address these research gaps. I will perform an empirical study based on actual case companies, and explain the findings using several of Hofstede's dimensions, as well as other models of national culture. Furthermore, I will look for an effect not only caused by national culture, but by the age of respondents, their gender, the time they have spent at the current company and their position in the company.

Aim of the study

The aim of the study is to find out how national culture is related to software developers' directness and openness of communication in the case countries.

This will add to existing literature concerning Norway, Sweden, Russia, the Netherlands, Latvia and Lithuania, as well as provide either nuances or further support to the applicability of Hofstede's dimensions in the general area of communication. It will also be interesting to see whether the effect of national culture is stronger than that of organisational culture or demographic factors such as age and gender.

Through a questionnaire and interviews I will explore and analyse differences and similarities between cultures, and also find out whether cultural differences in communication are viewed as a challenge by employees and/or employers. Practically, this will reveal whether the case companies should adapt their management style to different countries, and whether it would be useful to educate any particular group of employees or managers on how to handle the cultural differences.

Theory

Introduction

Communications styles vary a great deal around the world (Gelfand et al., 2007; Hall & Hall, 1990; Kim, 1994). While assumptions about communication preferences based on people's cultural background must be made with caution, some tendencies can be found. Merkin et al. (2014) are among the researchers who have concluded that culture has a noticeable effect on communication patterns. They discovered that individualism seems to relate positively to direct communication and self-promotion, and that power distance positively relates to sensitivity and face-saving concerns. Another study revealed that perceived importance of clarity was higher in more individualistic cultures, while the perceived importance of avoiding hurting the hearer's feelings was higher in more collectivistic cultures (Kim, 1994).

Furthermore, the language and metaphors used in different cultures will affect people's expectations towards teamwork. Gibson and Zellmer-Bruhn (2001) found that the different definitions of teamwork around the globe could be illustrated by the metaphors people used to describe their teams, derived from the language used during interviews. For example, people in individualistic countries often used language related to sports, and therefore saw teamwork through a sports metaphor. The other metaphors were those of family, community, military and associates. All of these divergent perspectives lead to different expectations about team roles, membership, scope and objectives.

Good communication in software development

Software is often done through teamwork, and software project failures can often be traced to dysfunctional team performance. It is therefore crucial to give adequate attention to people and teamwork issues (Jurison, 1999).

Jurison (1999, pp. 36-37) describes some common characteristics of high performing teams:

- a shared vision or goal
- commitment to the project
- a strong sense of team identity
- mutual trust
- competent team members

Several of these factors are highly related to good communication, in particular trust, a strong sense of team identity, and a shared vision or goal.

In software companies, "effective and honest communication is a foundation for sharing information, building knowledge, and developing competency" (Fulkerson, Thompson, & Thompson, 2015, p. 30). According to Sutharshan and Maj (2011), agile methods are better suited for team management, as they encourage face-to-face conversations over written documentation, thereby improving communication both within the team and with the client.

Hummel et al. (2015) also highlight the importance of direct, informal and face-to-face communication in agile development. They found that a specific subset of Agile practices are the main contributors to direct interaction and collaboration among team members. These practices include co-located office space, daily Stand-up meetings, iteration planning meetings, pair programming, Sprint review and Sprint retrospective meetings.

Through a study of agile and non-agile developers, Tessem (2014) also concluded that agile developers have significantly different information channels, due to the practices mentioned above. Furthermore, he noted that collective team rewards such as free lunches usually are common in agile development, thereby strengthening the team spirit.

Direct communication

Definition

When Hummel et al. (2015) describe the importance of direct communication in software teams, they seem to mean "addressing someone in person rather than passing information through written documentation". However, a more common definition of direct and indirect communication is that indirect communication refers to situations in which the speakers often mean something beyond the words that are said (Yin & Kuo, 2013). While direct communication happens through explicit statements in text and speech, indirect communication is done through the use of for example insinuations, innuendos, hints, metaphors or irony (Yum, 1988).

Advantage and disadvantages

Indirect communication may be useful in reducing interpersonal tension. It can mitigate the effect of potentially embarrassing situations in a workday that encompasses interruptions, criticisms, requests and disagreements (Morand, 2000). However, in a study using eye-tracking technology, Yin and Kuo (2013) found that the directness of speech acts influences participants' attention process, which, in turn, significantly affects their comprehension. Indirect speech acts were more often distorted or misunderstood. This finding is especially interesting because the test subject were Chinese Information Systems (IS) professionals, thereby coming from a culture where indirect communication is prevalent (Ding, 2006), and where the subjects should be quite used to indirect messages.

IT projects are experiencing high failure rates (Standish Group, 2001), and one of the most common reasons are poor communication or misunderstood requirements (Taylor, 2003). In global software development there is the additional challenge of divergent vocabulary and technical terms (Ali & Lai, 2015). It therefore seems especially important to use direct and explicit communication in software development.

Different cultures

Many researchers have studied the use of direct and indirect communication in relation to cultural differences (Cocroft & Ting-Toomey, 1994; Ding, 2006; Hall & Hall, 1990; Kapoor et al., 2003; Yum, 1988). Hall and Hall (1990) differentiate between high and low context cultures. In low-context cultures, communication is more direct and explicit, while in high-context cultures, much of the meaning is taken from the context rather than the statements themselves, and cues such as body language and silence are therefore of importance (Ali et al., 2009). The use of indirect communication is particularly prevalent in cultures which stress collectivism, such as Japan, Taiwan and China (Yin & Kuo, 2013). However, there is no strict classification of countries, with subtleties in each country (Kapoor et al., 2003), and communication styles can change, through the influence of other cultures (Nishimura et al., 2008).

Implications

In a multicultural setting, the preferences for direct or indirect communication have several implications. Firstly, some countries provide implicit and informal feedback, which can cause frustration among people who are used to clear and direct feedback (Gelfand et al., 2007). Secondly, there are several models of conflict resolution, two of which are a direct confrontational model and a harmony model. People in individualistic countries tend to prefer a direct confrontational model where they rely on their own expertise and training to solve problems, whereas people from a collectivistic society prefer styles of avoidance (Gelfand et al., 2007). Finally, in normal, everyday communication, people from cultures where communication is more direct must therefore be aware that their emails for example may seem abrupt or even rude to team members from a different background (Herbsleb & Moitra, 2001).

Open communication

While direct and indirect communication characterises how explicitly you communicate, openness refers to whether you share opinions at all. I define open communication as a type of communication between colleagues where everyone shares ideas and opinions, rather than holding them back. The level of open communication in a team or in a company can be related to both organisational culture and national culture.

First of all, it is important for team members to experience psychological safety. Edmondson (2012, p. 4) highlights the role played by leaders in setting the team or company culture: "In cross-border teaming situations, it's not necessarily easy for people to rapidly share relevant information about their ideas and expertise. [...] Leaders must facilitate [interpersonal exchanges] by creating a climate of psychological safety in which it's expected that people will speak up and disagree".

Trust

As mentioned earlier, mutual trust is another characteristic of a high performing team. There can be different types of trust, for example affective trust, based on emotional ties, and cognitive trust, based on an instrumental evaluation of someone's competence and reliability (Zhu, Newman, Miao, & Hooke, 2013). While both types of trust exist in all societies to a certain degree, the importance given to the different types of trust can vary between cultures. Several authors indicate that cognitive trust is more important for cooperation in individualistic cultures, whereas affect-based trust is more important in collectivistic cultures (Gelfand et al., 2007; Harrison, McKinnon, Wu, & Chow, 2000; Yuki, 2003).

Another concept, especially described in the context of virtual teams, is swift trust, a more fragile and temporal form of trust (Jarvenpaa & Leidner, 1998; Meyerson, Weick, & Kramer, 1996; Mumbi & McGill, 2008). However, for teams aiming to achieve innovation or continuous improvement, a deeper type of trust is needed. Having a proper level of comfort with each other, team members feel free to discuss differences of opinion, values and attitudes, and can then deal with them accordingly (Pinto, 2013). In that type of team, trust is manifested through the willingness to continuously challenge the status quo (Endre Sjøvold, 2014).

Reporting bad news in software development

One of the reasons open communication is important is status reporting. Since complex code or the work of for example a requirements engineer is assessed with difficulty, status reporting is important in software development (Keil et al., 2007; Zhang, Tremaine, Milewski, Fjermestad, & O'Sullivan, 2012). Nevertheless, Keil et al. (2007) state that there is a human tendency to withhold bad news, such as project delays or the discovery of errors that need correction. As Pinto (2013) points out, there is often an incentive for employees to report strong results in order to look good. This makes accurate status reports particularly challenging to obtain in the context of software development, where it is difficult

for anyone else than the developers to know the status of their – often complex – code. The distorted reporting of software project status has in fact been suggested to lead to project failure in several incidents (Tan et al., 2003).

Two studies have looked at factors that can influence people to withhold or report bad news in software projects, and whether there was a cultural difference in the effect of these factors. Keil et al. (2007) looked at the importance of saving face, a concept known for being of particular importance in South-East Asian countries. The interesting finding in this experiment was that a project delay caused by an external vendor increased the Americans' willingness to report the bad news, but had no effect on the South-Korean subjects. A possible explanation was that while assigning the blame on an outside supplier is a culturally adequate strategy for saving face in the US, it would not be considered face-saving in South-Korea, due to their rules of moral conduct (Keil et al., 2007).

The other study, conducted by Tan et al. (2003), looked at the impact of two different factors: the first was whether the organisational climate was likely to reward or punish the bearer of bad news; the second, referred to as "information asymmetry", was the likelihood of being able to hide the information over time. Experiments from the US and Singapore revealed that people from an individualistic culture were more sensitive to organizational climate, whereas people from a collectivistic culture seemed to pay greater attention to information asymmetry. However, their model only explained 10% of the variance in reporting intention. Much therefore remains to be discovered when it comes to factors affecting the decision to withhold bad news, both on a cultural, organisational and individual level.

Reduced openness

Apart from people withholding information, a lack of openness could be caused by many different things. A case that is often encountered in high power distance countries, is that subordinates can be muffled in the presence of authority (Casey, 2009; Muriithi & Crawford, 2003). In a case of software development outsourcing from Ireland to Malaysia, Casey (2009) describes the Malaysian staff as showing an unquestioning attitude towards authority. They rarely expressed and opinion, did not ask many questions, gave very little feedback on their progress, and did not highlight if they were experiencing issues. A consequence of power distance might be that typical teamwork processes such as brainstorming are less effective (Muriithi & Crawford, 2003).

On a more individual level, some people want to be left alone during the development process, as they feel that monitoring or constant reporting restrict their autonomy and creativity (De Bony, 2010).

Description of the case countries

Hofstede

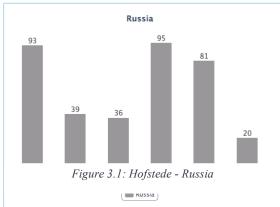
Several models have been developed over the years to describe cultural differences. Among the models of national culture, Hofstede's is by far the most referenced and studied by subsequent researchers (Ali et al., 2009; Gelfand et al., 2007). Many find Hofstede's model to suit all areas, and have explanatory power both for individual and organisational behaviour (Ali et al., 2009). The validity and stability of Hofstede's cultural dimensions have been confirmed by numerous researchers (Tan et al., 2003), and particularly interestingly for this paper, Hofstede's dimensions have been shown to possess explanatory power in IS research (Ali et al., 2009; Tan et al., 2003).

While several researchers have criticised the model, because of its derivation from old data, lack of generalisability and over-simplification of culture (Ng et al., 2007), most researches acknowledge this criticism, but consider the validity of the framework strong enough to provide useful insight on national

cultures (Bredillet et al., 2010). The general acceptance of Hofstede's model and the fact that it has been shown to provide useful insight in IS research makes it a good foundation for this thesis.

The following section is a description of my case countries taken directly from geert-hofstede.com (2017), which provides a useful tool to compare national cultures. In the presentation of each country I will focus on the power distance, individualism and masculinity scores, since they are the most related to communication.

Russia



Russia, with a score of 93, is a country with high power distance. According to Hofstede, behaviour has to reflect the status roles in all areas of business interactions: be it visits, negotiations or cooperation; the approach should be top-down and provide clear mandates for any task.

The relatively low individualism score of 39 is due to the fact that family, friends and not seldom the neighbourhood are extremely important to get along with everyday life's challenges. Relationships are

crucial in obtaining information, getting introduced or successful negotiations. Russians need to be personal, authentic and trustful before one can focus on tasks.

Scoring 95 on uncertainty avoidance, Russians feel very much threatened by ambiguous situations. Detailed planning and briefing is very common. Russians prefer to have context and background information. As long as Russians interact with people considered to be strangers they appear very formal and distant. At the same time formality is used as a sign of respect.

The Baltic states

Latvia and Lithuania will be presented together, as they have very similar scores on Hofstede's dimensions, and are also described in a similar way on geert-hofstede.com (2017).

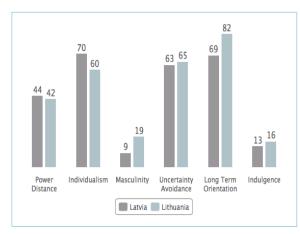


Figure 3.2: Hofstede – Latvia and Lithuania

With a relatively low score on the power distance dimension, Latvians and Lithuanians show tendencies to prefer equality and a decentralisation of power and decision-making. Control and formal supervision is generally disliked among the younger generation, who demonstrate a preference for teamwork and an open management style.

Although there is a hesitancy to open up and speak one's mind, people speak plainly without any exaggeration or understatement, which is in line with a high individualism.

As a Feminine country with a score of 9, Latvians

have a tendency to feel awkward about giving and receiving praise, arguing that they could have done better, or really have not achieved anything worthy of note. As such they are modest and keep a low profile, and usually communicate with a soft and diplomatic voice in order not to offend anyone. Conflicts for Latvians are usually threatening, because they endanger the wellbeing of everyone, which is also indicative of a Feminine culture.

The Scandinavian countries

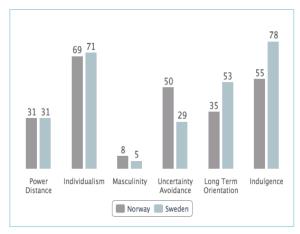


Figure 3.3: Hofstede - Norway and Sweden

Sweden and Norway both have a low score of 31 on the power distance dimension, which means that they are characterised by the following style: being independent, hierarchy for convenience only, equal rights, superiors accessible, coaching leader, management facilitates and empowers. Employees expect to be consulted. Control is disliked and attitude towards managers are informal and on first name basis. Communication is direct and participative and consensus orientated.

Both countries are Individualist societies, with scores of 69 and 71. This means that the "Self" is important and individual, personal opinions are valued and

expressed. Communication is explicit. At the same time the right to privacy is important and respected. Management is the management of individuals, and feedback is direct.

Sweden and Norway score respectively 5 and 8 on the femininity dimensions, and are the two most feminine countries in the world, according to Hofstede's finding. In Feminine countries it is important to keep the life/work balance and you make sure that all are included. An effective manager is supportive to his/her people, and decision making is achieved through involvement. Managers strive for consensus and people value equality, solidarity and quality in their working lives. Conflicts are resolved by compromise and negotiation and Swedes are known for their long discussions until consensus has been reached.

The Netherlands

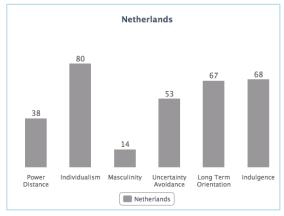


Figure 3.4: Hofstede - Netherlands

The Netherlands has much the same description as the Scandinavian countries on geert-hofstede.com (2017), with low power distance, high individualism and low masculinity. However, as will be shown below, other researchers have a more diverging description for the Netherlands and the Scandinavian countries.

Project Globe

In addition to Hofstede's description of the case countries, I will also present some of the findings from the GLOBE research program (Global Leadership and Organizational Behaviour Effectiveness). The main study was performed by House et al. (2004) and is perhaps the most significant study on the topic of cross-cultural leadership. Over 10 years, GLOBE researchers collected and analysed data on cultural dimensions and leadership attributes from over 17,000 managers in 62 societal cultures (Hwang et al., 2015).

As mentioned previously, several researches have criticised Hofstede for an over-simplification of culture (Ng et al., 2007). In fact, House et al. (2004) found it necessary to distinguish between measures of in-group collectivism and institutional collectivism, since there is a difference in people's attitude towards their family and their company. This is especially noticeable in the case of Sweden, as will be further presented below.

In general, I will not go into detail on the GLOBE model of national culture, but rather focus on their in-depth study of certain countries, which was performed by Chhokar et al. (2013). Each country is unique, and the Globe researchers have studied the historical and economic context of each country, to better explain cultural differences in the workplace.

All the descriptions below are from the Globe book of in-depth studies of 25 societies (Chhokar et al., 2013). With a selection of only 25 societies from around the world, it is natural that all my case countries do not feature in that book, but Russia, Sweden and the Netherlands do.

Sweden

Sweden is described as an egalitarian society, where everyone's ideas and opinions are respected. The trust and good cooperation between labour unions, employers and the state during the past century contributed to the development of the welfare state. In the Swedish context, vagueness, equality and consensus are three of the notions that are crucial to leadership. Control is exercised through a common understanding of the problem, rather than through giving direct orders (Edström & Jönsson, 1998) as referenced by (Chhokar et al., 2013). In fact, of all the countries studied in the main Globe project, Sweden scores the highest of all on Institutional collectivism. *Institutional collectivism is defined as social arrangements at the societal level that promote conformity and interdependence among (groups of) individuals, and a concern for collective rather than individual interest (p.41).*

The authors distinguish between institutional and In-group collectivism, the latter being closer in definition and measure to Hofstede's collectivism index. In fact, despite Sweden being ranked 1st on Institutional collectivism by the GLOBE project, it is ranked 60th out of 61 on In-group collectivism! This means that in line with Hofstede's findings, personal ideas and opinions are respected, and autonomous leadership is important.

Furthermore, Sweden has the lowest ranking on assertiveness (61/61) suggesting that "Swedes are typically non-assertive, that is, timid, non-dominant and non-aggressive in social relationships" (.47). The authors say that Swedes reveal their emotions less often and less overtly than people from most other countries, and that they are "internationally famed for their desire to avoid conflict" (p.47).

Netherlands

Compared to other countries, "Dutch people are seen as relatively dominant and tough" (p.229). Compared to other countries, they score quite high on assertiveness. However, the "Should Be" scores show that people would wish to emphasis the humane orientation more, along with feminine values and sensitivity to people, and possibly reduce the amount of toughness.

Furthermore, there is a focus on self-reliance, autonomy and individual achievement, a focus that is gaining prominence according to the authors. But "classical values such as collective economic interest, loyalty, [...] and gender egalitarianism are still endorsed" (p.230).

Russia

In Russia, relationships are important, and "many Russian managers work successfully in networks, relying not only on formal agreements but on friendships and social interactions as well" (p.817). This

might be why Russia scores relatively low on assertiveness and being confrontational, with a rank of 54 out of 61.

On the other hand, "strong leaders have been valued in the history of the state" (p. 818), and the tradition of respect for authority is still strong in the contemporary Russian society. Nevertheless, the researchers notice a difference among young people, and say they are unlikely to blindly obey a leader, and that despite the remaining power distance, they are ready to express their own ideas and defend their principles. In fact, Russia is a changing society according to the authors, and that was certainly the case when the main part of the data was gathered, in the late 1990s. With changing laws, economy and political context, the authors noticed a decline in traditional collectivistic values. They say that the evolutionary process in Russia is influenced among other things by "emulation of the Western managerial principles, policies and practices" (p.830).

Research method

Research design

In order to answer the research question, a multimethod design has been chosen, consisting of both a quantitative part and a qualitative part. The quantitative study provides breath, by analysing the opinions of a large number of respondents, while the qualitative study provides depth.

Data collection

Questionnaire

A structured online survey method was used to assess how respondents would communicate in different situations. The first section asked for background data such as age, gender, nationality and position at the company. In the second section, respondents were asked to rate their agreement with 22 statements, using a 6 point Likert scale that ranged from strongly disagree to strongly agree. Three questions were of a similar logic, but where the scale represented the options between "in a very high degree" and "not at all". The instructions for the respondents were to try not to think specifically about their current job when rating the statements, but rather work life in general. The survey can be found in appendix 1.

The questionnaire was created in SelectSurvey, a software for online surveys. It was sent through a link in an email, distributed via the team leaders, and answers were gathered automatically.

Interviews

15 interviews were conducted, with 4 people from Norway, 4 from Russia, 5 from Latvia, 1 from Sweden and 1 from the Netherlands. When possible, I conducted the interviews face-to-face, by travelling to Oslo and also to Riga. The other interviews were done via skype, with video when possible, in order to observe the respondents' facial expressions and body language.

The interviews were recorded, so that detailed notes could be taken later. The length of the interviews ranged from 17 to 59 minutes, with an average of 37 min.

Demographics

The online survey was sent to 110 people in Visma and 58 people in Confirmit. A total of 93 surveys were completed, giving a total rate of 55.4 %.

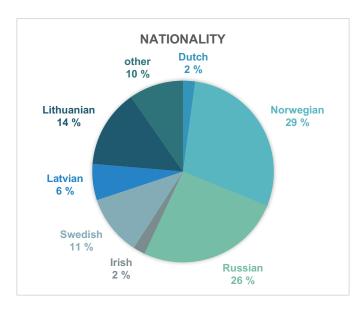


Figure 3.5: Nationality of survey respondents

26% of the respondents were women and 74% were men, a distribution that is quite balanced given the gender distribution in the IT sector in general. For the interviews, there was also a balance between the nationalities of respondents, gender, position, and time spent at the company.

Analysis

Ouestionnaire

The analyses were conducted in Excel, using student t-tests, and calculating averages and standard deviation. While these are not complex operations, they were repeated numerous times to analyse the answers with regards to each one of the background factors.

Interviews

For the qualitative study, detailed notes were taken based on the interview recordings. These notes were then grouped thematically, with colour coding to delimit/mark the notes of the separate interviewees.

Concluding

Finally, the quantitative and qualitative findings were related to each other, and then they were compared to the literature. I also looked up new literature in order to explain some of the findings.

Validity and reliability

Internal validity in cross-sectional design is quite low, but can be improved through case study elements in the research design (Bryman, 2015). For example, the newly established Visma office in Riga can explain some of the findings from Latvian respondents, rather than assuming the findings are associated with national culture. I have also analysed demographic and organisational factors, in order to determine whether it is actually national culture or something else influencing the answers.

External validity is increased by looking at two case companies instead of just one (Yin, 2013), providing a better base for theory building. Nevertheless, apart from Norway the two companies did not have any offshoring countries in common that were part of the study, limiting the generalisability of the findings concerning each nationality.

Finally, reliability should be fairly high, as I mostly reported quantitative findings that were significant or qualitative findings that were mentioned by several interviewees.

Presentation of the data

The survey questions concerning communication are presented in table 3.1, along with the averages for each nationality. Significance levels between Norway and the other countries are represented by asterisks.

In the text, themes are addressed thematically, combining qualitative and quantitative findings. Thereafter, the analysis of demographic and organisational factors is addressed, with a presentation of the most interesting findings.

Results

Table 3.1 presents the averages for each survey questions, on a scale from 1 to 6, where 1 is "completely disagree" and 6 is "completely agree".

Table 3.1: Questionnaire results for communication based on nationality

		Norway	Swedish	Latvia	Lithuania	Russia
1	When I don't agree with my colleagues, I openly express my disagreement	4.6	4.4	3.6	4.3	4.5
2	I know I can challenge my colleagues' opinions without them getting offended	4.9	4.0*	4.4	4.3	4.3*
3	When I don't agree with a person in authority, I openly express my disagreement.	4.4	4.0	4.4	4.3	3.9
4	On average, my colleagues are more direct than me	2.7	2.5	3.4	3.0	3.0
5	When uncertain about something I make it clear that I haven't understood	4.9	4.0*	4.6	4.9	4.5
6	I would keep task-related opinions to myself to avoid hurting someone's feelings	2.2	2.7	3.8**	3.1*	3.0*
7	When quick decisions are needed, I would easily give up my standpoint to avoid long discussions	3.9	3.5	5.0	4.1	3.3
8	I would mind if a colleague got credit for work that I have done	4.3	4.0	4.0	3.8	3.9
9	I would try to catch up on any delays before revealing them to my co-workers	3.4	3.8	4.2	4.3*	4.2*
10	I would feel easier about reporting bad news/ delays if they were not my fault	3.8	3.8	3.3	4.6	3.8
11	I often give positive feedback to my colleagues	4.4	4.1	4.7	3.8	3.9
12	I often give constructive criticism to my colleagues	3.8	3.5	3.3	3.6	4.0

^{*}p < 0.05. **p < 0.01. ***p < 0.001 (two-tailed).

Directness

As mentioned earlier, some cultures that are known for more indirect communication. Such countries would be expected to have a low average on statement 1 and 3 - When I don't agree with my colleagues / a person of authority, I openly express my disagreement. However, among the nationalities studied here, there are no significant differences. Norway, Sweden, Lithuania and Russia all score between 4.3 and 4.6, thereby agreeing with the statement. Latvia has a lower average of 3.6, but the difference is not statistically significant.

When it comes to asking for clarifications, on question 5, Sweden has the lowest average, with a score of 4.0. The t-test shows that this is significantly lower than Norway's average of 4.9.

For the statement 4 - On average, my colleagues are more direct than me, everyone seems to disagree, in smaller or larger extent. A possible reason could be that the respondents compare themselves with colleagues of the same national culture. In fact, from the interviews, it is apparent that people often do notice a difference in directness related to national culture. For example, all the Russians find Norwegians to be quite indirect, whereas things such as heated discussions are no rare thing in Russia:

In Russia, at least in our team, if you disagree you say you disagree [...] It's more difficult to understand if a Norwegian agrees". "People in Oslo like giving general answers and not diving into details. That's difficult sometimes.

Some Latvians also feel that Scandinavians are even more polite than Latvians:

In general, it's hard to imagine any reason for a conflict situation if you work with Sweden, but here [in Latvia] you can easily create conflict situations: with Russians, Latvians, Irish people,... With Swedish people everything is calm.

Furthermore, from the qualitative study, a clear perceived difference was found between the Scandinavian countries and the Netherlands. All the Scandinavian interviewees in Visma mentioned that they find the Dutch to be much more direct, that "they rarely insinuate or beat around the bush". This difference is supported by a Dutch interviewee, who also indicated that most Norwegians are less direct than the Dutch. (This came up on a general question about organisational climate at the office and whether you could speak your mind; I had not yet started asking about cultural differences):

Yes, people can say what's on their mind. If they do that's a different thing. Of course some people have difficulties telling what they really think or feel. I think in Norwegian it's a little bit more like that than in Dutch; Dutch are more "straight" in that area, they find it easier to say "ok, this is how I think it should be".

While the quantitative part of the study did not have enough Dutch respondents to run reliable statistical analyses, the simple average does seem to be in line with the qualitative findings. On question 1 and 3, on whether you openly express disagreement with colleagues and leaders respectively, the Dutch have an average of 5.5 on both questions, which is much higher than the other averages in table 3.1 (ranging from 3.6 to 4.6). Furthermore, the Dutch respondents also seem to be giving more constructive criticism than the others (Q12), with a score of 5.0 (vs. 3.5 and 3.8 in Norway and Sweden).

Apart from that, feedback giving seems to be fairly similar across the other countries studied here (Q11 and 12). However, one can observe that Latvians claim to give positive feedback to colleagues more often than the other nationalities, and constructive criticism less often than the other nationalities. In fact, from the interviews it is apparent that Latvians are more hesitant to critique, especially to people in authority: "I say if I disagree, but I'm not so sure about critique. [...] I do have critique, but maybe I need to collect more arguments before I say something."

Position of the recipient

According to the survey findings, most respondents would express their opinions whether they disagree with a colleague or a supervisor, and there is little difference in scores between the two statements. While respondents were asked to answer how they would be in work life in general, they are probably affected by the organisational culture of their current office.

In Confirmit, the quantitative findings coincide strongly with the qualitative findings. The interviewees describe a flat structure, where both Russians and Norwegians feel they can speak to peers and leaders the same way. Even though some of the Russians say they would be hesitant to argue <u>too</u> openly with a supervisor even in Confirmit, they say that there is usually more of a hierarchy in other Russian companies.

In Visma, a larger company, there is slightly more hierarchy, and several interviewees would adapt what they say to which level of the hierarchy they are, also in Scandinavia. Moreover, a Swedish leader notices a large difference between his Scandinavian and Latvian subordinates: "Those who visit us from Latvia and Lithuania think it is really strange how people one can talk to their boss".

He also mentions how he has to adapt his communication; if he emails a Swedish person with "Could you look at this?" she will answer "ok, I'll look at it later". However he feels he cannot send that type of email to Riga unless it is urgent; "If I send that email to someone in Riga, then they will drop everything because I am the boss." He must therefore be careful with how he formulates the request.

The level of directness or "politeness" also depends on the organisational culture and the skill level of the colleagues. One Latvian manager says he behaved quite differently, and was "stricter" as a manager in a previous company, where people had lower qualifications than in Visma.

Openness

Trust

From the interviews, I have the impression that all interviewees are happy with the organisational climate at their current company, and they describe it as open and friendly. The Latvians and Russians often mention how there is much more communication is Visma and Confirmit that in other companies they've worked in. Employees at the Latvian office say they experience a high level of trust.

Nevertheless, on the statement - *I know I can challenge my colleagues' opinions without them getting offended* - Norway scores the highest with 4.9, significantly higher than Russia (4.3) and Sweden (4.0). The Norwegians therefore seem to experience a higher level of trust.

Norwegians being comfortable that their colleagues won't be offended, it is maybe not surprising that they have the lowest average on statement 6 - *I would keep task-related opinions to myself to avoid hurting someone's feelings*. The Norwegian score of 2.2 is significantly lower than Latvia (3.8), Lithuania (3.1) and Russia (3.0). This finding is supported by the Latvian interviews, where several of the interviewees indicate that they do not usually criticise, and try to never say negative things.

The Dutch seem to have a different approach to this topic, saying "Yes of course people can get offended. Yes, I think that's part of how we solve it [...] It's never in a way that people are hurt, but feelings could be offended sometimes."

Reporting delays or asking for help

One thing that is affected by both organisational climate and national culture is how easy it is to ask for help or report bad news.

The importance of organisational climate

First of all, many interviewees indicate how this is affected by the organisational culture;

It is definitely an organisational-culture-thing. In many cultures, the fear of making mistakes makes you not report things and sweep them under the carpet. [...] Management has a large influence on the culture at the company, more than national culture.

I worked in a company where they were not promoting teamwork, they were playing the blame game, so no-one wanted to help anyone else, because then you could not work on your own tasks. The managers were really frustrated with it, but they did not know how to improve it.

Concerning the current situation, interviewees in all countries describe a climate where it is easy to ask for help.

Netherlands: "There is no blame culture. If you don't say anything, <u>then</u> you can be addressed on it, but if you raise awareness of what the situation is or address it, then there is nobody to blame because that makes it possible for us to find a solution."

Latvia: "No one will blame you if you are delayed or have made a mistake. If you fix it then tell or tell then fix it's the same, in the end it just has to be done. No-one would blame you"

Several people also highlight the effect of Scrum methodologies. In particular, they express how everyone is responsible for delivery, not the individuals, which promotes team work and reduces competitiveness and blaming. Furthermore, it was found to increase the frequency of communication. A Russian interviewee says:

There is a big difference in communication compared to companies where they don't use Scrum. [In my previous company] you didn't have a vision of what was happening around in the company. There were few meetings, and common meetings were rare. In Confirmit it's the opposite. There is communication every day by means of emails, slack, skype, chatting and talking, also with the Oslo and the Yaroslavl office. [...] By inviting people to discuss gradually you avoid heated debates where people try to defend their point of view.

The effect of national culture

On question 10, Latvians, Lithuanians and Russians state that they would try to catch up on delays before revealing them to their co-workers (with averages of 4.2, 4.3 and 4.2). The difference with Norway (3.4) is significant. This is supported by interviews, especially with the Russians. While the younger respondents say they would not hesitate to report bad news personally, both younger and older Russian interviewees agree it is actually an issue at their offices that people do not ask for help when they should.

Russia: We respect each other's time so we don't want to interrupt. We usually try to find answers by ourselves. [...] It is a problem in our team; people try to fix things by themselves without asking for help, so we are not able to keep tasks in a perfect timebox.

Norway: When you discover that they (the Russians) have done things in a different way you sometimes think "Why didn't you just ask?".

Despite Latvia scoring higher than Norway on question 10, the Latvian interviewees do not find honest status reporting to be a problem among themselves. However, a Scandinavian manager says it is very difficult to obtain accurate status reports from Latvia.

When I go to Riga and have conversations one-on-one with everyone I have to push them into telling me how things are, because the answer is always: "it's good, it's fine, it's perfect". [...] In Latvia you don't want to say if things are going bad because you don't want to be branded as bad yourself. [...] It's not that they insinuate, they say nothing, they say all is good, even though the statistics shows that they are far from being ready.

It is difficult when you manage from a distance, and need status reports and don't know if you get the truth. I am very dependent on having a local manager there who can pick up on these signals. They open up more to that person.

Other factors affecting openness

Blame shifting: The presence of a blame shifting opportunity can increase reporting in some cultures. According to table 3.1, Lithuanians are more comfortable reporting bad news if they are not their fault, while interestingly, Russia and Latvia score similarly to the Scandinavians.

Individual differences: As several people point out, "It really depends on the person". One person says she would only report a delay when she can give a definite new delivery time, but she knows others are not like that.

Time pressure: While people would like to help each other, time pressure makes it difficult sometimes:

Norway: "There is no problem in asking for help within the team, but of course they are always busy, and then I have to try and squeeze myself into a full calendar".

Russia: "Some people probably just have too much work, and they don't pay so much attention to your questions. A question often goes by email to a specific person, or sometimes to a team. Sometimes you get an answer and sometimes not."

Willingness to share credit: One thing which is affected by organisational climate, and which in turn affects openness, is whether colleagues are willing to share credit. As can be observed on Q9, there are no differences related to national culture, with all nationalities having an average of 4.0 or 3.9 on statement 8. The variety in ratings are therefore probably due to individual differences or team climate.

Quantitative findings related to age, position, and organisational culture

As pointed out by several researchers, there are other factors than national culture which must also be taken into account when observing communication style. For example, the age of respondents, their time at the company or their position may influence their communication style. In the following section, the questionnaire answers are analysed with regards to these factors.

Age

In Visma, the age groups can be divided as following: below 34, 35-44, and over 44 (because of few respondents in the <25 and >55 categories). When comparing the oldest and the youngest age group, there are several differences;

The younger score slightly lower on expressing their disagreement, and on knowing colleagues won't get offended. The difference becomes significant when it comes to disagreeing with people in authority (3.8 for <34, 4.7 for 35-44, and 4.9 for people >44). The younger also score slightly lower on clarifying misunderstandings.

In Confirmit, the most significant difference is found for statement 6 - *I would keep task-related opinions to myself to avoid hurting someone's feelings*. The age groups between 25 and 54 all have an average between 2.2 and 2.7, disagreeing with the statement, but people over 55 agree with the statement, with an average of 4.4. The important thing to note here is that all employees above 55 are Russian and live in Moscow. This finding related to age can therefore not be generalised to all countries, but is specific to Russia. The generation difference in Russia is also confirmed by the qualitative study. While it would be difficult for another person to judge whether someone holds something back to spare people's feelings, the interviewees indicate that the older people in Russia are also likely to avoid reporting bad news, and to catch up on delays before revealing them to co-workers:

There are people here who would work on the problem until they die. The Moscow guys are even more conservative than Yaroslavl, and I would say that's due to age differences. (from a younger Yaroslavl employee)

Time at the company

Time worked at the company (or seniority) is not strictly related to age, especially not in Visma, and it can therefore be seen as another factor affecting communication style. One can assume that people who have spent a long time at the company will be more influenced by the organisational culture.

In Visma, there is a very visible difference for people who have worked there for less than one year. That group have lower averages on statements 1, 2 and 3 in table 3.2. They are therefore less likely to express disagreement with colleagues as well as leaders, and have less confidence that colleagues won't be offended. Interestingly, the 1-year limit seems to be a barrier above which everyone answers more similarly, as illustrated in table 3.2.

Table 3.2: differences related to seniority in Visma

Time worked at company (years)	<1	1-2	2.5	5-10	>10
When I don't agree with my colleagues, I openly express my disagreement	3,4**	5,0	4,2	5,0	5,3
I know I can challenge my colleagues' opinions without them getting offended	3,5**	5,0	4,5	4,3	5,0
When I don't agree with a person in authority, I openly express my disagreement	3,8	4,3	4,1	4,7	4,9

^{**}p < 0.01 for t-test significance between the first group and the others combined

In Confirmit, there is only one respondent having worked for less than a year, so it is unfortunately impossible to compare this finding across the two companies.

However, this tendency does seem quite intuitive. One developer said that he uttered few opinions on the beginning, but as gradually felt the support of his colleagues and that his opinions were respected, he shared more opinions (from a pre-interview with an employee in Telenor Digital). An interesting finding is that there is less of a difference when it comes to addressing supervisors. Possible explanations will be discussed.

Between offices in the same country

When it comes to open communication, there was one significant difference between the Yaroslavl and the Moscow office. Yaroslavl employees strongly disagree that they would keep task-related opinions to themselves from a concern for people's feelings (2.0) whereas Moscow is neutral to the statement (3.6). As mentioned earlier, this is probably related to age difference of employees between the Moscow and Yaroslavl office, with mostly younger employees working in Yaroslavl.

Position

Based on the survey, there are very few differences between leaders and other employees. The only significant difference in the area of communication is that in Confirmit, leaders report to give more positive feedback (with an average on statement 5.0 for leaders and 4.0 for others on Q11), which seems quite logical. Yet no significant difference is reported between the two groups in Visma.

Another interesting finding is that both in Visma and Confirmit, leaders are more likely to give up their standpoint to avoid long discussions (with a significance of 0.09 in both companies, coincidentally enough). The average is 4.5 vs 3.7 for leaders vs "others" in Visma, and 4.3 vs 3.5 in Confirmit.

Discussion

Directness

Russia

From the qualitative study, it is apparent that the respondents notice a difference in directness between national cultures. First of all, the Russian interviewees feel that Norwegians have a more indirect way of speaking, while they themselves can have heated discussions. This differentiates Russia from a stereotypical collectivist, high power distance country. In fact, most researchers in the meta-analytical review by Merkin et al. (2014) found that individualism is positively related to direct communication, while collectivist countries such as Japan, Taiwan and China are known for their indirect communication (Yin & Kuo, 2013). Yet Russia who has a much lower score on individualism that Norway according to Hofstede seems to have a more direct communication style. This highlights the findings of Kapoor et al. (2003), that there are complex subtleties in each culture which defies a strict classification of collectivism/individualism or of high vs low context behaviour.

Netherlands

When it comes to the Netherlands, both Scandinavian and Dutch interviewees indicate that the Dutch have a much more direct communication style. This is consistent with the description by Chhokar et al. (2013, p. 229), that "Dutch people are seen as relatively dominant and tough", and that they score high on assertiveness compared to other countries. Directness can be experienced as abrupt or even rude by people who are not used to it (Herbsleb & Moitra, 2001), and several of my respondents indicated that the difference in directness between the Netherlands and Scandinavia does create some tension at times. However, the attitude adopted by the managers I interviewed is that the employees will just have to adapt to that, and learn not to get offended. While I agree that is a necessary attitude in multicultural teams, I know from personal experience that if a person's behaviour appears rude to you, knowing it is caused by cultural norms does not make the person much more likeable in your eyes.

Latvia

Directness in the Latvian case might at first seem like a paradox. The Latvians indicate that Norwegians and Swedes are more indirect than themselves, but at the same time, the Latvians are very hesitant to give critique, something which is indicated by both Latvian and Scandinavian interviewees. This is in line with Hofstede's description of the Baltic countries, where people in Latvia and Lithuania are said to be hesitant to open up and speak one's mind, and that they keep a low profile and communicate with a soft and diplomatic voice in order not to offend anyone (geert-hofstede.com, 2017). A possible explanation to the paradox is in the sometimes subtle distinction between open and direct communication. While Norwegians and Scandinavians can be indirect in the way they ask for help or give instructions, they do also give constructive criticism, even if it is in a diplomatic way. On the other hand, the Latvian team may not give any critique at all. This would be more related to openness, which will be further discussed below. However, I would like to point out that there is a difference between "critique" and expressing tasks-based opinions. As one of the interviewees says, their hesitancy is not about holding opinions back, it is just "not branding any ideas as bad".

Scandinavia

When it comes to directness, the Norwegians and Swedish are characterised by interviewees as the most indirect among the nationalities I have studied. This is consistent with the GLOBE study ranking Sweden as the lowest country on assertiveness among 61 countries. While the GLOBE project did not do an in-depth study of Norway, Norway and Sweden are usually described are quite similar. Swedes are described as "typically non-assertive, timid, non-dominant and non-aggressive in social relationships" (Chhokar et al., 2013, p. 47). This is consistent with one of the Latvians saying "it is hard to imagine any reason for a conflict situation if you work with Swedes". In fact, according to Chhokar et al. (2013, p. 47) "Swedes are internationally famed for their desire to avoid conflict".

On the other hand, Hofstede describes Norway and Sweden as having direct communication (geerthofstede.com, 2017). This shows the relativity of the concept of directness; while Scandinavia might have an indirect communication style compared to several other European countries such as Russia and the Netherlands, Scandinavia is much more direct than East-Asian countries such as South-Korea (Hall & Hall, 1990). Moreover, some interviewees also indicated that British people are less direct than Norwegians, highlighting the distinguishable nuances even within Europe.

The position of the recipient

Of course, describing a culture's communication as direct or indirect is a simplification. Firstly, the term is relative, as explained above. And secondly, I would assume it depends a great deal on the situation, and on the relation between speaker and recipient. For example, in Norway we address school teachers by their first name, and in the workplace we address colleagues and supervisors in a similar manner. In many other countries that is not the case.

While the quantitative findings reveal similar scores on expressing disagreement with colleagues or with supervisors for all of the case countries, the interviews reveal a slightly different picture. Both the Latvians and the Russians are hesitant to agree too strongly or too openly with people in authority. The Russians also say the tendency is much more prominent in other Russian companies.

While one possible explanation is that subordinates are often muffled in the presence of authority in high power distance countries (Casey, 2009; Muriithi & Crawford, 2003), another explanation can be found in the historical socio-economic context (especially in the case of Latvia, where power distance is lower). In Norway and Sweden, trust and good cooperation between labour unions, employers and the government during the past century has contributed to the development of the welfare state (Chhokar et al., 2013). This has helped secure worker's positions and reduce uncertainty. In the meantime, employees in the ex-Soviet states have not had the same advantage, and would therefore often be more careful to please their employers in order to keep their jobs. Nonetheless, one Swedish interviewee thinks that with an increasing welfare state in Latvia and Lithuania, the business culture will change accordingly, and that "in 10-20 years, the Latvians will complain as much as the Swedes do".

To conclude on the topic of directness, there is no right or wrong way to communicate. Direct communication is often more clear, leads to higher attention by the listener and reduces the chances of misunderstandings (Yin & Kuo, 2013). At the same time, indirect communication may be useful in reducing interpersonal tension, as it can mitigate the effect of interruptions, criticisms and disagreements (Morand, 2000). It is therefore necessary to find the right balance.

Openness

Trust

In order to achieve an open communication between employees, it important to create a climate of psychological safety, in which people feel that they can speak up and disagree without negative consequences (Edmondson, 2012). From the interviews, it seems like both Visma and Confirmit have managed to create such a climate, with most respondents indicating that they are encouraged to speak their mind and give feedback, and that they experience a high level of trust. This is especially interesting at the Latvia office, where teams are multinational, often containing team members from both Russia and Ukraine, two countries in an ongoing political conflict. A Latvian manager was the one to bring up this topic when I asked about trust, but only to highlight that they experienced no issues in the team, because "we are more professionally oriented, and have common goals to reach". He adds "We are also more intelligent, so we can understand better what's going on and respond appropriately," in a comparison with people of lower education or who do not have as good an access to information. I would say that this is a sign of cognitive trust (Zhu et al., 2013), since they base their cooperation on information and intelligence. A further example of cognitive trust is mentioned by a Confirmit employee; in a previous company the colleagues were also friends on their spare time, while in Confirmit the relationships stay at a friendly but professional level. Of course, that does not exclude the possibility of affect-based trust, especially between people who have worked together for a long time.

Most researchers agree that interpersonal trust in general is something that builds up over time. Therefore, it is maybe not a surprising finding that employees who have worked in Visma for less than a year are less likely to express disagreement with colleagues as well as leaders, and have less confidence that colleagues won't be offended. One developer said that he uttered few opinions on the beginning, but as he felt the support of his colleagues, he gradually shared his ideas and opinions more frequently. Interestingly, the 1-year limit seems to be a barrier above which everyone answers quite similarly on those questions, whether they have worked at the company for 2 or 10 years. Another interesting observation is that the difference is more pronounced for disagreeing with colleagues than with supervisors. This could be because in the beginning, everyone has more experience and authority than you, whereas after a year, you feel at the same level as your colleagues, while your leaders will always be one level above.

Challenging opinions

A sign of trust between colleagues is that they feel free to discuss differences of opinion (Pinto, 2013) and are willing to continuously challenge the status quo (Endre Sjøvold, 2014). On the statement - *I know I can challenge my colleagues' opinions without them getting offended* - Norwegians have the highest average with 4.9, significantly higher than Russia (4.3) and Sweden (4.0). The Norwegians therefore seem to experience a higher level of trust. This is despite several Russians saying during interviews that they often use rude words when addressing each other without people getting offended. I can only assume that the explanation lies in the difference between content and matter of speech. Using a certain language or even swear words is something people can get used to and not take personally if it is the common way for a person to speak. On the other hand, if someone challenges your opinion it can feel more personal. Nevertheless, from the interviews no-one said they would take it personally when people had better ideas.

Based on the qualitative study I get the feeling that Russians are much more comfortable challenging colleague's opinions than what you would expect from a country with a score of 93 on Hofstede's power distance index. In other high power distance countries, employees are often described as rarely expressing an opinion, not asking many questions, and giving little feedback on their progress (Casey,

2009; Muriithi & Crawford, 2003). Of course it should be taken into account that Confirmit is a Norwegian owned company with headquarters in Oslo. The Russian interviewees indicate that Confirmit distinguishes itself from other Russian companies by the amount of communication (emails, meetings, chatting...).

Sensitivity

One aspect for which the Norwegians significantly distinguish themselves form their Eastern colleagues in the questionnaire is on statement 6 - *I would keep task-related opinions to myself to avoid hurting someone's feelings*. Norway has an average of 2.2, thereby definitely disagreeing with the statement, while Latvia (3.8), Lithuania (3.1) and Russia (3.0) are more neutral.

There can be several explanations for this result. One is that Norwegians feel the most confident that they can challenge colleagues' opinions without offending them, as mentioned above. Another explanation could be the fact that power distance often relates positively to sensitivity and face-saving concerns (Merkin et al., 2014). Furthermore, according to Kim (1994), it is perceived to be more important to avoid hurting the hearer's feelings in collectivistic cultures. This seems to be consistent with the fact that several authors indicate that cognitive trust is more important for cooperation in individualistic cultures, whereas affect-based trust is more important in collectivistic cultures (Gelfand et al., 2007; Harrison et al., 2000; Yuki, 2003).

Russia

The quantitative findings concerning Russia are consistent with the observations of Hofstede and the GLOBE study. Hofstede describes Russia as a slightly collectivistic country, where "family, friends and, not seldom, the neighbourhood are extremely important to get along with everyday life's challenges. Relationships are crucial in obtaining information, getting introduced or having successful negotiations. They need to be personal, authentic and trustful before one can focus on tasks" (geerthofstede.com, 2017). Chhokar et al. (2013, p. 817) support this by saying that "many Russian managers work successfully in networks, relying not only on formal agreements but on friendships and social interactions as well". This description of the Russian culture can maybe help understand why the Russian respondents would be more careful not to hurt someone's feelings.

However, the Russian values are changing, and there is a decline in traditional collectivistic values (Chhokar et al., 2013). The Russian respondents between the age of 25 and 54 have an average of 2.4 on the above statement, while the respondents above 54 have an average of 4.2. This is a highly significant difference (below 0.001) and clearly shows a gap between generations. Furthermore, office culture can also affect the response. Yaroslavl employees strongly disagree that they would keep task-related opinions to themselves for a concern for people's feelings (2.0) whereas Moscow is neutral to the statement (3.6). This might also be related to the age factor though, as there is a discernible age difference between employees at the Moscow office and at the Yaroslavl office.

Latvia

Interestingly, the nationality to have the highest average on statement 6 (*I would keep task-related opinions to myself to avoid hurting someone's feelings*) is Latvia. This finding is supported by the Latvian interviews, where several of the interviewees indicate that they usually do not criticise, and try to never say negative things.

On the one hand, it can be related to Hofstede's description of the Baltic states where conflicts are seen as threatening, which is a characteristic of a feminine culture (geert-hofstede.com, 2017). The Latvians can therefore seem prone to prefer avoidance, or a harmony model, as described by Gelfand et al. (2007). On the other hand, the authors say that people in individualistic countries tend to prefer a direct

confrontational model where they rely on their own expertise and training to solve problems, whereas people from a collectivistic society usually prefer styles of avoidance. As Latvia is an individualistic according to Hofstede, my findings must be explained by other factors.

At the Visma office in Latvia, a contributing factor mentioned by one of the managers is that it is difficult to get qualified enough qualified IT-people in Latvia, due to several other companies also offshoring to the Baltic states, just like Visma. The manager in question is therefore hesitant to give critique, in case people decide to find another place to work instead.

Another factor, which affects all the employees and not just managers, is that the Latvia office is quite new, and has grown from 3 to 70 employees in 2 years, with a plan to hire another 70 in the coming year! With constantly growing teams, the employees may therefore not have had time to build up a high level of trust yet, which could make them hold back task-related opinions in fear of hurting someone's feelings.

Netherlands

For some, being indirect or not criticising at all is a way of avoiding conflict, whereas in other cultures, being clear and direct is way to reduce ambiguity with a potential for conflict (Merkin et al., 2014). Kim (1994) states that in individualistic cultures, clarity is more important. This can be illustrated by a Dutch's manager's response: "Yes of course people can get offended. Yes, I think that's part of how we solve it". The Dutch therefore have a different approach to sensitivity, and prefer a clearer and more direct communication style.

Honest reporting

One of the reasons open communication is important is status reporting. Because complex software code is especially difficult to assess for an outsider, honest status reporting is especially important in software development (Keil et al., 2007; Tan et al., 2003; Zhang et al., 2012).

Nevertheless, Keil et al. (2007) state that there is a human tendency to withhold bad news, or delays in a project. Pinto (2013) points out that there is often an incentive for employees to report strong results in order to look good. Pinto thereby implicitly highlights the influence of organisational culture. My interviewees also agree that the organisational culture is essential, and that in companies where people "play the blame game", you are hesitant to report anything that could reflect badly on yourself. Yet in Visma and Confirmit, they say the climate encourages them to be open, and several people indicate that you would be reproached more by not saying anything, if it later turned out you needed help.

The respondents also underline the positive effect of Scrum methodologies, where daily Stand-ups lead to frequent and better status reporting. At the daily Stand-up you are supposed to include one challenge that you are facing when describing your current task. The threshold for bringing up challenges and difficulties is therefore significantly lowered. This is consistent with the findings of most researchers in the field, who indicate that Agile methods improve team communication and collaboration (Hummel et al., 2015; Sutharshan & Maj, 2011).

Nevertheless, despite the positive effects of Agile methods and organisational climate, some cultures seem to have more of a tendency to withhold bad news than others.

On question 10, Latvians, Lithuanians and Russians state that they would try to catch up on delays before revealing them to their co-workers. The difference with Norway is significant. A Russian employee says that "There are people here who would work on the problem until they die" rather than ask for help. He adds that there is a difference between generations by saying that "the Moscow guys are even more conservative than Yaroslavl, and I would say that's due to age differences". A possible

explanation is the historically lower job security compared to the Scandinavian countries. The respondent in question felt that the culture at Confirmit has changed his approach, and he would easily ask for help now, but the organisational culture has not been enough to change the attitude for everyone.

In Latvia, reporting delays or asking for help is not seen as an issue by the Latvian interviewees, but a Scandinavian manager finds it very difficult to get accurate status report from Latvia. Perhaps the employees are more hesitant to report delays to a supervisor than to colleagues, especially a supervisor who works in a different country.

Finally, the presence of a blame shifting opportunity can increase reporting in some cultures (Keil et al., 2007). According to table 3.1, Lithuanians are more comfortable reporting bad news if they are not their fault, while interestingly, Russia and Latvia score similarly to the Scandinavians. Maybe this is related to the climate at the Lithuanian office in some way, but this finding would need further research, as I did not get the opportunity to interview anyone from Lithuania.

Closing the discussion

Concerning communication in general, the qualitative study revealed that most interviewees do not see cultural differences as a hindrance to work related communication. In fact, language differences were considered to be much more challenging:

Going to English was a huge difference for me. Before, I discussed things in a low level of detail, and I don't do that anymore, I can't describe.

There is also an issue of divergent technical terms in software development (Ali & Lai, 2015). For example, one respondent said that "client" in the context of software development means different things at different sites.

Moreover, many respondents highlight the fact that communication style varies with the individual. For example, you can find people who don't communicate in every country. Some individuals just want to be left alone during the development process, as they feel that monitoring or constant reporting restrict their autonomy and creativity (De Bony, 2010). Most respondents could think of at least one such person that they had worked with in the past.

Nevertheless, even if respondents considered the cultural differences not to pose a big challenge for their team work, they did describe several interesting differences which are worth reporting:

Summary of findings

Directness: Russian and Dutch people both seem to be more direct in their speech than Scandinavians. This is despite the literature often linking directness to individualism and indirectness to collectivism. My findings therefore provide a nuance to this research, showing that there is not always a correlation between directness and individualism.

Addressing leaders: When it comes to expressing disagreements, the qualitative study revealed that both Latvians and Russians are often more careful in how they address leaders. This cannot only be related to power distance, since Latvia scores relatively low on that dimension. I therefore theorise that it is related to the historically lower job security compared to the Scandinavian countries. This could also explain why Latvians, Lithuanians and Russians prefer to catch up on delays before revealing them to co-workers.

Sensitivity: Norwegians have the highest average on the statement - *I know I can challenge my colleagues' opinions without them getting offended*, while Russians, Lithuanians and Latvians are more likely than the Scandinavians to hold back task-related opinions in order to avoid hurting someone's feelings. For Russia, this is consistent with the historically collectivistic values. However, the significant difference in responses between the younger and older generation illustrates the decline in collectivistic values observed by Chhokar et al. (2013). For Latvia, an individualist culture, the concern for people's feeling can be related to Hofstede's femininity dimension, and it can also be influenced by the fact that the office is newly established with constantly growing teams, influencing the level of trust.

Status reporting: On the topic of status reporting, my findings support previous literature in that both Agile software methods and a good organisational climate positively affects honest reporting. Furthermore, the study reveals that Latvians, Lithuanians and Russians prefer to catch up on delays before revealing them to co-workers and are less likely to ask for help than the Scandinavians. However, a seemingly contradictory finding is that Swedes are the most hesitant to ask for clarification when uncertain about something. As this is not consistent with previous literature, this finding would need further research.

Implications

In line with Merkin et al. (2014), I conclude that there are other factors than national culture which must also be taken into account when observing communication style. For example, the quantitative results showed that people who had worked at a company for less than a year were much less likely to openly express disagreement, and that the age of respondents in Russia influenced their concern for people's feelings. However, during interviews, the subjects could easily think of differences between national cultures, but when asked if they noticed any differences among age groups or for new people, nothing came to mind. This implies that national culture has a stronger influence on communication style than the demographic factors. It also shows the usefulness of a hybrid research design, with the quantitative findings revealing certain differences in communication, and the qualitative study revealing other differences.

The findings of this paper further nuances previous research on the link between direct communication and Hofstede's collectivism/individualism dimension. An individualistic country such as Norway can be less direct than a collectivistic country such as Russia. This implies that it is therefore necessary to take into account other dimensions, such as femininity and power distance, when trying to explain communication style.

Nevertheless, countries that score similarly on several of Hofstede's dimensions can still not be assumed to have the same communication style. The findings show that despite Scandinavia, the Baltic countries and the Netherlands all having low power distance, high individualism and low masculinity (Hofstede, 1984), they are significantly different when it comes to open and direct communication.

Recommendations to the case companies

National culture was not seen as a barrier to teamwork by most of the respondents, and my impression was that these are well functioning multicultural teams. It would therefore not be necessary for management in the two case companies to take any drastic measures with regards to communication.

However, one recommendation could be to emphasise the need for honest reporting in certain cultures, where some people have more of a tendency to struggle with tasks on their own rather than ask for help.

Another recommendation is for team members to regularly discuss their expectations with regards to communication, and also differences that they encounter. For example, discussing differences in

directness could be useful, since it appeared to cause some tension at times. I know from experience that if someone's behaviour appears rude to you, knowing it is caused by cultural norms does not necessarily make the person much more likeable in your eyes. It could therefore help to openly share how a certain type of behaviour makes you feel, and what is considered polite in your culture. When I asked, no interviewee could recall having such a discussion at work. I would therefore recommend adding this dimension to the Sprint retrospective, a setting which should provide a low threshold for bringing up such topics. The aim should be not to criticise anyone, or to treat the differences as a problem; the conversation should rather be seen as a group observation exercise, where the goal is to raise awareness and have an open dialogue.

Limitations

One limitation of the study is the possibility of self-report bias. A respondent can consciously or subconsciously bias their results. This phenomenon seems to be especially prevalent when respondents are to rate their own performance, or for questions that are of high sensitivity (Donaldson & Grant-Vallone, 2002). My survey does not rate performance, but some things could be harder to admit, such as - I would mind if a colleague got credit for work that I have done - or - I would feel easier about reporting bad news/ delays if they were not my fault. However, I tried to limit the effect of self-report bias by having an anonymous survey, neutral phrasing of questions, and mostly non-sensitive questions. Furthermore, I also employed qualitative methods, in order to capture aspects that would not be captured in questionnaire.

Another limitation of this study is of course the limited data material from each country. For example, the questionnaire only had two respondents from Ireland and Holland, making statistical analyses impossible. Additionally, the interviews did not reach "theoretical saturation" (Guest, Bunce, & Johnson, 2006), since each new interview revealed new and interesting information. The reason is that employees at the case company were busy with work, naturally enough, and not everyone had time for interviews.

Future research

To test the validity of the questionnaire, I would apply it in a more diverse range of case countries, and see if that reveals even more significant results in the area of communication. For example, the quantitative results showed little differences in directness between Norway and Russia, but I imagine that the differences between Norway and East-Asian countries would be significant. The construct validity could also be increased by adding definitions or examples of openness and directness to the questionnaire, as it appeared during interviews that there is some divergence in how people view those concepts.

Furthermore, as self-reporting might not be the best method to evaluate differences in communication styles, future research could include observation in the research design. People in different cultures can both think of themselves as direct, which would yield similar results on a questionnaire, but observation could discover differences in enactment.

There are also a few interesting findings that are difficult to explain, and which would be interesting to research further. For example, the fact that Latvians think Scandinavians are more polite, despite the Scandinavians feeling that the Latvians are much more hesitant to criticise. Observation in both countries and a larger data sample would be useful in solving this mystery.

Conclusion

In this paper, I have looked at the effect of national culture on open and direct communication in the software industry. Through two case companies, I have gathered data from branches in Russia, Latvia, Lithuania, Norway, Sweden and the Netherlands.

I found that differences in directness are not directly related to Hofstede's individualism/collectivism dimension. Indeed, Russians and Dutch people are both more direct than Scandinavians, despite the Netherlands scoring higher than Norway and Sweden on individualism, and Russia scoring much lower. On the other hand, Scandinavia and the Baltic countries have a less noticeable difference when it comes to directness.

Concerning openness however, there is a difference between the Eastern countries and the Scandinavian countries. In general, Russia, Latvia and Lithuania are more careful with disagreeing with leaders, and they would be more likely to catch up on delays before revealing them to co-workers. This can be partially explained by the historical difference in social, economic and political context (Chhokar et al., 2013).

This study has also compared the effect of national culture to the effect of other influencing factors such as age, gender and even position in the work hierarchy, and concluded that the strongest influence is that of national culture. However, there is a decline in typical collectivistic values in Russia (Chhokar et al., 2013), which could be observed by a significant quantitative difference between the younger and older generation, especially when it comes to holding back opinions to avoid hurting someone's feelings. In fact, communication styles can change, often through the influence of other cultures (Nishimura et al., 2008), and interviewees from both Latvia and Russia felt that their countries were becoming more "Western", also in the area of communication.

References

Ali, & Lai, R. (2015). A method of software requirements specification and validation for global software development. *Requirements Engineering*, 1-24. doi:10.1007/s00766-015-0240-4

Ali, Tretiakov, A., & Crump, B. (2009). *Models of national culture in information systems research*. Paper presented at the Australasian Conference on Information Systems (ACIS).

Bredillet, C., Yatim, F., & Ruiz, P. (2010). Project management deployment: The role of cultural factors. *International Journal of Project Management*, 28(2), 183-193.

Bryman, A. (2015). Social research methods (4th ed.): Oxford university press.

Casey, V. (2009). *Leveraging or exploiting cultural difference?* Paper presented at the 2009 Fourth IEEE International Conference on Global Software Engineering.

Casey, V. (2011). Imparting the importance of culture to global software development. *ACM Inroads*, I(3), 51-57. doi:10.1145/1835428.1835443

Chhokar, J. S., Brodbeck, F. C., & House, R. J. (2013). *Culture and leadership across the world: The GLOBE book of in-depth studies of 25 societies*: Routledge.

Cocroft, B.-A. K., & Ting-Toomey, S. (1994). Facework in Japan and the United States. *International Journal of Intercultural Relations*, 18(4), 469-506.

De Bony, J. (2010). Project management and national culture: A Dutch–French case study. *International Journal of Project Management*, 28(2), 173-182.

Ding, D. D. (2006). An indirect style in business communication. *Journal of Business and Technical Communication*, 20(1), 87-100.

Donaldson, S. I., & Grant-Vallone, E. J. (2002). Understanding self-report bias in organizational behavior research. *Journal of business and Psychology*, 17(2), 245-260.

Edmondson, A. C. (2012). Teamwork on the fly. Harvard Business Review, 90(4), 72-80.

Edström, A., & Jönsson, S. (1998). Svenskt ledarskap. *Organisationsteori på svenska Ed. by Czarniawska. B.*

Fulkerson, R. E., Thompson, R. L., & Thompson, E. H. (2015). Team Member Perceptions of Software Team Leader Communication Influencing Motivation for Achievement of Project Goals. *Journal of Psychological Issues in Organizational Culture*, 6(3), 24-39.

geert-hofstede.com. (2017). Retrieved from https://geert-hofstede.com/

Gelfand, M. J., Erez, M., & Aycan, Z. (2007). Cross-Cultural Organizational Behavior. *Annual Review of Psychology*, 58(1), 479-514. doi:doi:10.1146/annurev.psych.58.110405.085559

Gibson, C. B., & Zellmer-Bruhn, M. E. (2001). Metaphors and meaning: An intercultural analysis of the concept of teamwork. *Administrative Science Quarterly*, 46(2), 274-303.

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field methods, 18*(1), 59-82.

Hall, E. T., & Hall, M. R. (1990). *Understanding cultural differences: Germans*. Garden City, N.Y.: Anchor press/ Doubleday.

Harrison, G. L., McKinnon, J. L., Wu, A., & Chow, C. W. (2000). Cultural influences on adaptation to fluid workgroups and teams. *Journal of international business studies*, 31(3), 489-505.

- Herbsleb, J. D., & Moitra, D. (2001). Global software development. IEEE Software, 18(2), 16-20.
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (Vol. 5): sage.
- House, Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*: Sage publications.
- Hummel, M., Rosenkranz, C., & Holten, R. (2015). The role of social agile practices for direct and indirect communication in information systems development teams. *Communications of the Association for Information Systems*, 36(1), 15.
- Hwang, S. J., Quast, L. N., Center, B. A., Chung, C.-T. N., Hahn, H.-J., & Wohkittel, J. (2015). The impact of leadership behaviours on leaders' perceived job performance across cultures: comparing the role of charismatic, directive, participative, and supportive leadership behaviours in the US and four Confucian Asian countries. *Human Resource Development International*, 18(3), 259-277.
- Jarvenpaa, S. L., & Leidner, D. E. (1998). Communication and trust in global virtual teams. *Journal of Computer-Mediated Communication*, 3(4), 0-0.
- Jurison, J. (1999). Software project management: the manager's view. *Communications of the AIS*, 2(3es), 2.
- Kapoor, S., Hughes, P. C., Baldwin, J. R., & Blue, J. (2003). The relationship of individualism—collectivism and self-construals to communication styles in India and the United States. *International Journal of Intercultural Relations*, *27*(6), 683-700. doi:http://dx.doi.org/10.1016/j.ijintrel.2003.08.002
- Keil, M., Im, G. P., & Mähring, M. (2007). Reporting bad news on software projects: the effects of culturally constituted views of face-saving. *Information Systems Journal*, *17*(1), 59-87. doi:10.1111/j.1365-2575.2006.00235.x
- Kim, M. S. (1994). Cross-cultural comparisons of the perceived importance of conversational constraints. *Human communication research*, 21(1), 128-151.
- Merkin, R., Taras, V., & Steel, P. (2014). State of the art themes in cross-cultural communication research: a systematic and meta-analytic review. *International Journal of Intercultural Relations*, 38, 1-23.
- Meyerson, D., Weick, K. E., & Kramer, R. M. (1996). Swift trust and temporary groups. *Trust in organizations: Frontiers of theory and research*, 166, 195.
- Mir, F. A., & Pinnington, A. H. (2014). Exploring the value of project management: linking project management performance and project success. *International Journal of Project Management*, 32(2), 202-217.
- Morand, D. A. (2000). Language and power: An empirical analysis of linguistic strategies used in superior-subordinate communication. *Journal of organizational behavior*, 235-248.
- Mumbi, C., & McGill, T. (2008). An investigation of the role of trust in virtual project management success. *International Journal of Networking and Virtual Organisations*, *5*(1), 64-82.
- Muriithi, N., & Crawford, L. (2003). Approaches to project management in Africa: implications for international development projects. *International Journal of Project Management*, 21(5), 309-319.
- Ng, S. I., Lee, J. A., & Soutar, G. N. (2007). Are Hofstede's and Schwartz's value frameworks congruent? *International marketing review*, 24(2), 164-180.

Nishimura, S., Nevgi, A., & Tella, S. (2008). Communication style and cultural features in high/low context communication cultures: A case study of Finland, Japan and India. *Teoksessa A. Kallioniemi* (toim.), Uudistuva ja kehittyvä ainedidaktiikka. Ainedidaktinen symposiumi, 8(2008), 783-796.

Pinto, J. K. (2013). *Project management: achieving competitive advantage*: Pearson/Prentice Hall Upper Saddle River, NJ, USA.

PwC. (2015). 18th Annual Global CEO Survey: A marketplace without boundaries? Responding to disruption. Retrieved from https://www.pwc.com/gx/en/ceo-survey/2015/assets/pwc-18th-annual-global-ceo-survey-jan-2015.pdf

Sagie, A., & Aycan, Z. (2003). A cross-cultural analysis of participative decision-making in organizations. *Human Relations*, 56(4), 453-473.

Sjøvold, E. (2014). Resultater gjennom team. Oslo: Universitetsforl.

Standish Group. (2001). *Chaos, Extreme*. Retrieved from https://www.projectsmart.co.uk/white-papers/chaos-report.pdf

Sutharshan, A., & Maj, P. S. (2011). Enhancing Agile methods for multi-cultural software project teams. *Modern Applied Science*, *5*(1), 12.

Tan, B. C., Smith, H. J., Keil, M., & Montealegre, R. (2003). Reporting bad news about software projects: Impact of organizational climate and information asymmetry in an individualistic and a collectivistic culture. *IEEE Transactions on Engineering Management*, 50(1), 64-77.

Taylor, J. (2003). Managing information technology projects: applying project management strategies to software, hardware, and integration initiatives: Amacom.

Tessem, B. (2014). Individual empowerment of agile and non-agile software developers in small teams. *Information and software technology*, *56*(8), 873-889.

Yin. (2013). Case study research: Design and methods: Sage publications.

Yin, & Kuo. (2013). A study of how information system professionals comprehend indirect and direct speech acts in project communication. *IEEE Transactions on Professional Communication*, 56(3), 226-241.

Yuki, M. (2003). Intergroup comparison versus intragroup relationships: A cross-cultural examination of social identity theory in North American and East Asian cultural contexts. *Social Psychology Quarterly*, 166-183.

Yum, J. O. (1988). The impact of Confucianism on interpersonal relationships and communication patterns in East Asia. *Communications Monographs*, *55*(4), 374-388.

Zhang, S., Tremaine, M., Milewski, A. E., Fjermestad, J., & O'Sullivan, P. (2012). Leader delegation in global software teams: occurrence and effects. *Electronic Markets*, *22*(1), 37-48. doi:10.1007/s12525-011-0082-y

Zhu, W., Newman, A., Miao, Q., & Hooke, A. (2013). Revisiting the mediating role of trust in transformational leadership effects: Do different types of trust make a difference? *The Leadership Quarterly*, 24(1), 94-105.

Discussion

In the following section, I will not repeat the findings of the articles, but rather discuss participative leadership, communication and cultural differences in a wider context.

Cultural differences

There are many definitions of culture, but most of them similar in meaning. Trompenaars (1996) views culture as composed of shared assumptions, beliefs, values, norms, and language patterns that distinguish one group from another. This probably corresponds to what most people think of when they think of culture. Yet despite being aware of cultural differences, a lot of people experience "culture shock" when going to a different country. It is here important to note the word shock, which stand in contrast with the fact that you expect cultural differences. Indeed, even though you may have heard and read that norms and behaviours are different abroad, you may not know how this will manifest and in which situations. For example, on a class trip to South Korea, my friends and I were puzzled by the fact that waiters often left the table after only one person had ordered, and we had to call them back to take the rest of the orders. We had of course been taught that South Korea was a collectivistic country, but we did not make that connection between that "cultural knowledge" and these strange incidents, until a South Korean explained to us that they usually order as a group, with only one person making the order, and they share the food they get.

The point here is that expecting cultural differences is one thing, but you never know exactly what to expect or how to react. You often think the individual is just acting strange until someone explains how their behaviour is based on national culture. Indeed, in the restaurant case, we thought that the waiters were just distracted or busy, forgetting to take all the orders. This can be related to Herbsleb and Moitra's (2001) observation that when people get messages they find odd or unusual, they often ignore the request and think badly about the sender's intentions or character. In our case it was not a request but an unexpected behaviour, yet our reflex was to blame it on the individual. This is one of the reasons why it important to get to know the culture and practices of your work colleagues.

When I asked interviewees if the culture of their foreign colleagues was similar to their own, the answer was often "definitely not". Yet at the same time, they had difficulties coming up with examples or pointing to something specific. Additionally, in the context of work culture, respondents felt that there are more similarities. In fact, the business culture probably adapts faster than other local costumes, from the influence of frequent interactions with other nationalities

Hierarchy and organisational climate

Organisational climate and psychological safety is something which affects both PL and communication. A climate which encourages openness and the expressions of ideas as well as constructive criticism is more likely to be suited for high levels of participative leadership. The relationship between leaders and colleagues will also affect both factors. In a company with a flat structure, employees may have an easier time expressing their opinions, and it is easier to conduct brainstorming and fruitful discussions where both leaders and subordinates are present. On the other hand, if there is a focus on hierarchy, employees may be more hesitant to make decisions, and leaders on the other hand can in some cases be more hesitant to ask for advice. Indeed, in some cultures, asking for advice or being unsure can be seen as a sign of weakness, which may be why Hwang et al. (2015) found that participative leadership does not always increase the perceived job performance of the leader.

Determining good leadership

In fact, to determine good leadership, you must consider carefully which criteria you judge leadership by. Table 4.1 presents a list I have made of possible criteria, grouped based on who's perspective is presented. The point of the table is to illustrate how diverging these criteria can be.

Table 4.1: A list of possible criteria one can use to evaluate a project manager

Team based criteria	Project based criteria	Company based criteria	Individual criteria		
Motivated team members	Project success	Creating a large business network	Get promoted		
Effective team building	Subordinate productivity	Represent the company in a positive way	Get a high salary		
Subordinates' learning and advancement	Quality of the software delivered	Satisfied employees	Building personal relationships		
Positive ratings by the subordinates	Customer satisfaction				

It would be very hard to get a full score on all of these criteria. Imagine an authoritarian leader, who manages to lead a project to success, on time and on budget, yet the project team is overworked, and unhappy with their job. This could be considered a project management success, fulfilling the criteria of time, cost, quality and customer satisfaction as defined by (Pinto, 2013), yet the project team would not describe their managers as a good leader. This approach to leadership would in most Western cultures not work in the long run, as the team members would request a different manager or find a new job. In fact, I was recently surprised

to hear that a student in my class who often takes on leadership roles and who I thought was liked by everyone is in fact liked only by the people who have never worked closely with him. Someone who appears as a good leader from the outside can therefore look very different from the inside of a project.

On the other hand, imagine a very likeable leader who listens carefully to all employees, makes them feel appreciated, and let workers leave early if they have a bad day. While subordinates may describe him as a great leader, his lack of rigour could lead to delays, and ultimately to project failure.

Determining how a manager should behave is therefore not only dependent on context, project complexity and team size, but also by what criteria you measure successful leadership. Group and individual benefits are not always correlated (Pfeffer, 2015), causing self-promotion to be beneficial for a manager who wants to advance, but not necessarily for the project team. Which criteria matter the most will depend on individual motivation, organisational prioritisations, and of course, national culture. As seen in article 1, some nationalities have a stronger focus on results when assessing the capabilities of a leader, while for other nationalities, a good leader needs to be easy to talk to and involve employees in decision-making.

The role of communication in decision-making

In the questionnaire, all nationalities agree with statement 7 - *I expect my leaders to encourage employees to express their opinions, even contrary ones*. This encourages open communication, and is, I believe, a prerequisite for consultative and participative leadership. When it comes to directness, there is no standard for what is the best practice with regards to decision-making. While directness can lead to increased attention and improved understanding for the listener (Yin & Kuo, 2013), vagueness of instructions can create a freedom to act and to take initiative by oneself. Because of that, vagueness even has a positive connotation in the Swedish language according to Chhokar et al. (2013).

Consequently, it seems to me that there are therefore two different ways to perceive directness. Firstly, Norwegians can be perceived by the Russians as more indirect because they use for example insinuations, innuendos or hints, (Yum, 1988), meaning something beyond the words that are said (Yin & Kuo, 2013). Secondly, they can also be perceived as indirect because they are less directive, giving more "open" or vague instructions. However, the latter phenomenon is actually more related to the delegation of responsibility. In fact, it is important to distinguish between direct communication and directive communication/leadership.

Directive leadership can be defined as the extent to which a manager attains desired objectives by telling subordinates or others what to do and how to do it (Oshagbemi, 2008, p. 1908). One of the Russian interviewees describes Norwegians as giving very generic answer and not going

into too much detail on tasks. He would therefore prefer a higher level of directive leadership. For others however, "it would be a sign of a lack of confidence to tell another person how they should perform a certain task" (Chhokar et al., 2013, p. 64). Chhokar et al. mention this in the context of Swedish culture, but the link between responsibility and trust was also mentioned by one of the younger Russian interviewees.

The difference between directness and directive leadership can be illustrated by this quote from one of the Dutch managers:

Personally I can be direct, but I also have the feeling that we need consensus, because we need to do it together, stand behind what we decide. So I am not too directive, but others are more so; and then I know some people could be very offended, if the leader tells them what to do without consulting them.

So this manager is direct, but he is not directive. Indeed, as mentioned by Yin and Kuo (2013), directives have the potential to threaten the hearer's "face".

On the other hand, Hwang et al. (2015, p. 268) define directive leadership as "clarifying performance expectations and assigning tasks", and they found directive leadership to be positively related to perceived job performance of leaders in all countries studied. Newman and Nollen (1996) also support this result, asserting that clarity of policies and direction seems to be a good management practice regardless of national culture.

The reason Hwang et al. (2015) and Newman and Nollen (1996) found a purely positive link to performance may be the difference in definition compared to Oshagbemi (2008). The former focus more on clarifying policies and expectations, which is an important aspect of management's communication to employees, while the latter defines directive leadership as something which would reduce the employee's freedom.

The challenge for leaders will be to find a line between freedom and clarity of policies. This line is even more difficult to find in a multicultural setting, as some formulations may be considered directives in some countries but not in others. For example, someone pointed out that if a manager says "Could you look at this when you have time?", it is an instruction in Norway, but would maybe not be considered as such in Spain. For Norwegians it is not really considered indirectness however, but rather politeness. And in a Norwegian context, where everyone interprets these things similarly, you do not really consider the vagueness of that instruction. It is often in a multicultural setting that such differences in communication style become noticeable.

Combining the research findings

As shown in article 1, the Eastern countries have slightly lower expectations when it comes to participating in decision-making. This can be seen in the line with the finding from article 2 that people in Latvia and Russia would be more careful with how they address leaders than in

Scandinavia. Yet all nationalities seem to prefer high levels of participative leadership. Similarly, respondents in Latvia and Russia often gave examples of previous companies where there was little communication, but they all seemed to prefer the current model, with frequent and open communication.

Of course, there are some exceptions; several people point out that too many meetings inhibit productivity, and Russian interviewee even felt that the amount of communication was reducing his autonomy. Having to discuss everything rather than developing software in isolation meant to him that he had less autonomy that in the previous company, even if he did get instructed on how to develop it. The link between instructions and autonomy is therefore difficult to define. Furthermore, the preferences for autonomy were difficult to categorise. In Norway it is important for employee motivation, but in Latvia and Russia it seemed to be quite individual, and depend on the amount of responsibility a person is comfortable with.

Implications for Agile methods

The findings have implication for the use of Agile software development. As pointed out by Sutharshan and Maj (2011), Agile methods might be less suited in some countries.

In general, interviewees indicate that there is usually a flatter structure in the IT-sector than in other industries, especially in Russia and the Baltic countries. Additionally, Scrum methodology further encourages a flat structure with an open communication. The framework increases the level of PL, especially through Sprint planning and Sprint retrospective, a point mentioned by several of the Latvian respondents.

In general, I would say that Agile development is suitable in all the case countries studied, because the majority of respondents have a wish for high participative leadership, a flat organisational hierarchy, and open communication with both colleagues and leaders. However, the oldest generation of Russians seem to find Scrum methodology more challenging, as they do not expect to choose their own tasks, and prefer more instructions than the others. While they have adapted to their current situation, after many years in Confirmit, the different attitudes of this group can be an indication that in other countries, where hierarchy and instructions are an even stronger part of the culture, agile methods could be less suitable. Alternatively, it could be that younger workers can adapt more easily, while older employees who have worked in a certain way for many years have more difficulty in adapting. Both of these hypotheses would be very interesting questions for future research.

Furthermore, Scrum methods call for a quite large amount of meetings. Even though people like to have an open communication, there can sometimes be too many meetings, as pointed out by several respondents:

The methodology says that everyone should participate in meetings and "groomings", to increase team motivation. But from what I observe, most of those meetings are just time-wasting, because it doesn't contribute to much commitment. So for a topic, it would be better to have the meeting with the people who know about the topic, and not waste time for other people.

Trying to involve employees in all topics can sometimes lead to frustration. So even if it means having a high level of participative leadership, there can actually be too much communication, which will be discussed in more detail below.

Challenges of virtual communication and effects on team work

Virtual communication per se was not part of the quantitative study, but several aspects were mentioned by the interviewees during the qualitative part of the study. As it was not a part of the research question, I did not include these findings in article 2, but they can be useful for a more holistic view of the context of the respondents, and could also provide an interesting base for future research.

Openness

One aspect affected by virtual communication is openness. Employees may find it easier to talk with people face-to-face:

There are definitely some people that would say more if they were in the same room. It is very challenging with distributed teams to get a god interactivity, to include everyone, when you talk on Skype or Hangout rather than at the same table.

We have tried many communication tools to see which can reduce the threshold of contacting someone in a different country: Skype, Flowdock, email, etc. For example, Flowdock (a chat room software) entails more questions that 1-on-1 communication using Skype or email.

While it's ideal to have a low threshold for contacting people virtually, one developer indicates that Slack (or chat programs in general) can actually reduce the amount of good face-to-face communication; even in co-located offices you often post things on Slack rather than talk with people directly. The reason is that on Slack, colleagues can answer when they have time, and therefore you disturb them less than if you go over to their desk. However, many things would have been solved easier face-to-face. Additionally, the respondent says "it is difficult not knowing who you are talking with on Slack. People often have no profile picture and a funny username, making them impossible to identify".

This highlight the comment by Herbsleb and Moitra (2001) that distances do not need to be global to be important. Finding the right balance between virtual communication tools and face-to-face communication is challenging.

Inefficiency

When asking whether respondents encounter many misunderstandings, they generally indicate that there is little miscommunication per se, but that the communication just takes longer when you are geographically separated.

"Of course it is more efficient if you are in one location, that's for sure!" Because Sometimes I have small questions which I need to solve, but not knowing what people are doing I don't know whether to call, to arrange a meeting, or whether to send a message. I don't want to call in case they are busy, but typing is quite long. And then when I type something I am not sure whether the person has read it, but I am waiting for that answer. My work depends on the questions I ask, and sometimes I can wait for several hours, just to find out I need to contact someone else. It makes the development process harder, and less productive.

One person indicates that the physical barrier is especially challenging for new developers who need more information and have many questions to be answered: "When you are a newcomer to a company the on-boarding period is longer when you have such a distributed team".

Need for communication rules

The multiple technologies in use at the Visma and Confirmit offices (Skype call, Skype chat, Google hangout, Slack, Jira, Confluence, email, telephone, etc.) leads to the need for communication etiquette, as indicated by one of the managers. Otherwise there can be too much communication, and you do not get any time to work productively.

It creates problems that there is no agreed upon process for communication. I can for example try Skype, not get through, send an email, go to Flowdock, and finally resort to calling on the phone. There is no opportunity to tune out and concentrate on development. [...] Programmers have a start-up time and a cool-down time. It can take 15 minutes to enter a "flow". If you then get interrupted every 30 minutes, you only have 10 minutes of efficient development time.

Consequently, virtual communication can entail ineffectiveness in two ways. One the one hand it takes long to reach someone when you need questions answered, and on the other hand ineffectiveness is also caused by interruptions from the many tools that have been created to facilitate communication, ironically enough. It is therefore necessary to agree when and how to communicate with each other.

Recommendations

As implications and limitations of the study have been discussed in the two articles, I will not repeat everything here, but rather add some recommendations based on the above discussion.

The fact that most people on average have the same preferences for participative leadership and open communication is a good foundation for cross-cultural teamwork. Answering whether virtual communication negatively affects team spirit, one manager answers "not necessarily, if you have a team that is committed to being a team". He says you can build a culture internally within the team, and that in an international team, the leader should clarify expectations, be explicit and discuss with the employees.

In fact, in order to build a good team culture, it is important for a team to clarify early on how to communicate with each other (Endre Sjøvold, 2014), and to discuss any differences or challenges that arise due to miscommunication or diverging perspectives (Björndal et al., 2010; Krishna et al., 2004). Yet none of the interviewees could remember having had such discussions. One of the respondent mentioned team building through open air activities, but he felt it would be more useful to do work-related team building. I would therefore recommend another form of team building, where the employees are to discuss areas of divergence, such as expectations towards openness, directness, participation in decision-making, autonomy, and also other things that have not been studied in this paper, such as preferences for individual or collective rewards and feedback. Furthermore, these issues should not just be discussed at the beginning of a project, but regularly throughout the project, in order to encourage openness, uncover any feelings of frustration, or celebrate to good teamwork.

Limitations and further research

A limitation to this study is that I did not reach theoretical saturation for the interviews, so for future research I would have liked to interview more people, especially from the Netherlands, Sweden and Lithuania. Nevertheless, I chose to focus on the countries that stood out in the quantitative study, and could therefore get more in-depth explanations or nuances. Of course, it is difficult to generalise to a nationality based on just one company, so to test the validity of the findings, one could study other companies in the same country. Since the respondents are part of an international company, the results may be different than what one would find in eg. a domestic Latvian company. The strength of my study is that being in the same company reduces the variety of organisational cultures, but future research could try to compare my findings to domestic companies.

However, if one wishes instead to broaden the scope of this paper, it would be very interesting to research the suitability of Agile development methods in countries which have very different cultures to the ones studied here, especially cultures with a long tradition for hierarchy and low participative leadership. In those cases, it could also be interesting to see whether younger people adapt faster to the new work style than older people, and whether the diverging preferences with regards to age groups are consistent in other cultures.

Conclusion

Culture is a complex concept, and there can be many variations in attitudes and values both within a country and between countries in the same region. The findings of this paper show that among the countries studied, there are significant differences concerning employees' expectations towards participative leadership. For example, Russians expect in a lower degree to participate in the planning of tasks, and employees in the Baltic states expect more detailed instructions than in Scandinavia. The Eastern nationalities also have a higher acceptance for controlling leaders. Yet despite that, all nationalities studied seem to prefer participative leadership.

The findings further reveal that direct communication varies with national culture, but is not necessarily correlated with Hofstede's individualism index. Openness of communication is also found to depend on national culture, but might be even more related to organisational climate, psychological safety and job security.

This study contributes not only with new findings concerning the effect of national culture in the case countries, but also with findings concerning the gender of respondents, their age, and position at the company. Gender was found to have no generalizable influence in either article. Conversely, the age of respondents affects both their preference for participative leadership and their communication style. This is especially noticeable in Russia, where there seems to be a generation gap between younger generations and employees who have worked under the Soviet Union.

The findings support previous literature in that Agile software development methods are found to increase both openness of communication and the level of participative leadership in teams. Yet the oldest generation of employees in Russia found Agile methodology more challenging than other respondents. Future research could therefore study the suitability of Agile development methods in other cultures, in particular those which have a tradition for hierarchy and low participative leadership.

In general, the divergent communication styles or divergent expectations for PL were not seen as obstacles to teamwork, but could cause frustration at times. I would therefore recommend that team members regularly discuss their expectations, and also cultural differences that they encounter. I could also recommend a short introductory course during the on-boarding of new employees from a different national culture, with a focus on the culture, communication and work style at their new company.

References

- Ali, & Lai, R. (2015). A method of software requirements specification and validation for global software development. *Requirements Engineering*, 1-24. doi:10.1007/s00766-015-0240-4
- Ali, Tretiakov, A., & Crump, B. (2009). *Models of national culture in information systems research*. Paper presented at the Australasian Conference on Information Systems (ACIS).
- Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic Need Satisfaction: A Motivational Basis of Performance and Weil-Being in Two Work Settings1. *Journal of applied social psychology*, *34*(10), 2045-2068.
- Björndal, P., Smiley, K., & Mohapatra, P. (2010). *Global software project management: A case study*. Paper presented at the International Conference on Software Engineering Approaches for Offshore and Outsourced Development.
- Bredillet, C., Yatim, F., & Ruiz, P. (2010). Project management deployment: The role of cultural factors. *International Journal of Project Management*, 28(2), 183-193.
- Bryman, A. (2015). Social research methods (4th ed.): Oxford university press.
- Casey, V. (2009). *Leveraging or exploiting cultural difference?* Paper presented at the 2009 Fourth IEEE International Conference on Global Software Engineering.
- Casey, V. (2011). Imparting the importance of culture to global software development. *ACM Inroads*, 1(3), 51-57. doi:10.1145/1835428.1835443
- Chhokar, J. S., Brodbeck, F. C., & House, R. J. (2013). *Culture and leadership across the world: The GLOBE book of in-depth studies of 25 societies*: Routledge.
- Cocroft, B.-A. K., & Ting-Toomey, S. (1994). Facework in Japan and the United States. *International Journal of Intercultural Relations*, 18(4), 469-506.
- codeproject.com. (2015). Retrieved from https://www.codeproject.com/Articles/704720/Scrum-explained
- Comrey, A. L., & Lee, H. B. (2013). A first course in factor analysis: Psychology Press.
- De Bony, J. (2010). Project management and national culture: A Dutch–French case study. *International Journal of Project Management*, 28(2), 173-182.
- Deci, E. L., Ryan, R. M., Gagné, M., Leone, D. R., Usunov, J., & Kornazheva, B. P. (2001). Need satisfaction, motivation, and well-being in the work organizations of a former eastern bloc country: A cross-cultural study of self-determination. *Personality and social psychology bulletin*, 27(8), 930-942.
- Den Hartog, D. N., & Verburg, R. M. (1998). Charisma and rhetoric: Communicative techniques of international business leaders. *The Leadership Quarterly*, 8(4), 355-391.
- Dickson, M. W., Aditya, R. N., & Chhokar, J. S. (2000). Definition and interpretation in cross-cultural organizational culture research: Some pointers from the GLOBE research program. *Handbook of organizational culture and climate*, 447-464.
- Dickson, M. W., Den Hartog, D. N., & Mitchelson, J. K. (2003). Research on leadership in a cross-cultural context: Making progress, and raising new questions. *The Leadership Quarterly*, 14(6), 729-768.
- Diener, E., & Crandall, R. (1978). Ethics in social and behavioral research: U Chicago Press.

- Ding, D. D. (2006). An indirect style in business communication. *Journal of Business and Technical Communication*, 20(1), 87-100.
- Donaldson, S. I., & Grant-Vallone, E. J. (2002). Understanding self-report bias in organizational behavior research. *Journal of business and Psychology*, 17(2), 245-260.
- Dorfman, P. W., Howell, J. P., Hibino, S., Lee, J. K., Tate, U., & Bautista, A. (1997). Leadership in Western and Asian countries: Commonalities and differences in effective leadership processes across cultures. *The Leadership Quarterly*, 8(3), 233-274.
- Edmondson, A. C. (2012). Teamwork on the fly. *Harvard Business Review*, 90(4), 72-80.
- Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field research. *Academy of management review*, 32(4), 1246-1264.
- Edström, A., & Jönsson, S. (1998). Svenskt ledarskap. *Organisationsteori på svenska Ed. by Czarniawska. B.*
- Fulkerson, R. E., Thompson, R. L., & Thompson, E. H. (2015). Team Member Perceptions of Software Team Leader Communication Influencing Motivation for Achievement of Project Goals. *Journal of Psychological Issues in Organizational Culture*, 6(3), 24-39.
- geert-hofstede.com. (2017). Retrieved from https://geert-hofstede.com/
- Gelfand, M. J., Erez, M., & Aycan, Z. (2007). Cross-Cultural Organizational Behavior. *Annual Review of Psychology*, 58(1), 479-514. doi:doi:10.1146/annurev.psych.58.110405.085559
- Gibson, C. B., & Zellmer-Bruhn, M. E. (2001). Metaphors and meaning: An intercultural analysis of the concept of teamwork. *Administrative Science Quarterly*, 46(2), 274-303.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field methods*, 18(1), 59-82.
- Hall, E. T., & Hall, M. R. (1990). *Understanding cultural differences: Germans*. Garden City, N.Y.: Anchor press/ Doubleday.
- Harrison, G. L., McKinnon, J. L., Wu, A., & Chow, C. W. (2000). Cultural influences on adaptation to fluid workgroups and teams. *Journal of international business studies*, 31(3), 489-505.
- Hart, C. (1998). *Doing a literature review: Releasing the social science research imagination:* Sage.
- Herbsleb, J. D., & Moitra, D. (2001). Global software development. *IEEE Software*, 18(2), 16-20
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (Vol. 5): sage.
- Hofstede, G. (1994). The business of international business is culture. *International business review*, *3*(1), 1-14.
- House, Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*: Sage publications.

- House, R., Javidan, M., Hanges, P., & Dorfman, P. (2002). Understanding cultures and implicit leadership theories across the globe: an introduction to project GLOBE. *Journal of world business*, *37*(1), 3-10.
- Hummel, M., Rosenkranz, C., & Holten, R. (2015). The role of social agile practices for direct and indirect communication in information systems development teams. *Communications of the Association for Information Systems*, 36(1), 15.
- Hwang, S. J., Quast, L. N., Center, B. A., Chung, C.-T. N., Hahn, H.-J., & Wohkittel, J. (2015). The impact of leadership behaviours on leaders' perceived job performance across cultures: comparing the role of charismatic, directive, participative, and supportive leadership behaviours in the US and four Confucian Asian countries. *Human Resource Development International*, 18(3), 259-277.
- Iyengar, S. S., & Lepper, M. R. (1999). Rethinking the value of choice: a cultural perspective on intrinsic motivation. *Journal of personality and social psychology*, 76(3), 349.
- Jago, A. G. (2016). A contrarian view: Culture and participative management. *European Management Journal*. doi:http://dx.doi.org/10.1016/j.emj.2016.10.001
- Jarvenpaa, S. L., & Leidner, D. E. (1998). Communication and trust in global virtual teams. Journal of Computer-Mediated Communication, 3(4), 0-0.
- Jungert, T., Koestner, R. F., Houlfort, N., & Schattke, K. (2013). Distinguishing source of autonomy support in relation to workers' motivation and self-efficacy. *The Journal of social psychology*, 153(6), 651-666.
- Jurison, J. (1999). Software project management: the manager's view. *Communications of the AIS*, 2(3es), 2.
- Kapoor, S., Hughes, P. C., Baldwin, J. R., & Blue, J. (2003). The relationship of individualism—collectivism and self-construals to communication styles in India and the United States. *International Journal of Intercultural Relations*, *27*(6), 683-700. doi:http://dx.doi.org/10.1016/j.ijintrel.2003.08.002
- Keil, M., Im, G. P., & Mähring, M. (2007). Reporting bad news on software projects: the effects of culturally constituted views of face-saving. *Information Systems Journal*, 17(1), 59-87. doi:10.1111/j.1365-2575.2006.00235.x
- Kim. (1994). Cross-cultural comparisons of the perceived importance of conversational constraints. *Human communication research*, 21(1), 128-151.
- Kim, S. (2002). Participative management and job satisfaction: Lessons for management leadership. *Public administration review*, *62*(2), 231-241.
- Ko, A. J., DeLine, R., & Venolia, G. (2007). *Information needs in collocated software development teams*. Paper presented at the Proceedings of the 29th international conference on Software Engineering.
- Krishna, S., Sahay, S., & Walsham, G. (2004). Managing cross-cultural issues in global software outsourcing. *Communications of the ACM*, 47(4), 62-66.
- Merkin, R., Taras, V., & Steel, P. (2014). State of the art themes in cross-cultural communication research: a systematic and meta-analytic review. *International Journal of Intercultural Relations*, 38, 1-23.
- Meyerson, D., Weick, K. E., & Kramer, R. M. (1996). Swift trust and temporary groups. *Trust in organizations: Frontiers of theory and research*, 166, 195.

- Milosevic, D. Z. (1999). Echoes of the silent language of project management. *Project Management Journal*, 30, 27-39.
- Mir, F. A., & Pinnington, A. H. (2014). Exploring the value of project management: linking project management performance and project success. *International Journal of Project Management*, 32(2), 202-217.
- Morand, D. A. (2000). Language and power: An empirical analysis of linguistic strategies used in superior-subordinate communication. *Journal of organizational behavior*, 235-248.
- Müller, R., & Turner, R. (2007). The influence of project managers on project success criteria and project success by type of project. *European Management Journal*, 25(4), 298-309.
- Mumbi, C., & McGill, T. (2008). An investigation of the role of trust in virtual project management success. *International Journal of Networking and Virtual Organisations*, 5(1), 64-82.
- Muriithi, N., & Crawford, L. (2003). Approaches to project management in Africa: implications for international development projects. *International Journal of Project Management*, 21(5), 309-319.
- Myers, M. D., & Tan, F. B. (2003). Beyond models of national culture in information systems research. *Advanced topics in global information management*, *2*, 14-29.
- Nederhof, A. J. (1985). Methods of coping with social desirability bias: A review. *European journal of social psychology, 15*(3), 263-280.
- Newman, K. L., & Nollen, S. D. (1996). Culture and congruence: The fit between management practices and national culture. *Journal of international business studies*, 27(4), 753-779.
- Ng, S. I., Lee, J. A., & Soutar, G. N. (2007). Are Hofstede's and Schwartz's value frameworks congruent? *International marketing review*, 24(2), 164-180.
- Nishimura, S., Nevgi, A., & Tella, S. (2008). Communication style and cultural features in high/low context communication cultures: A case study of Finland, Japan and India. *Teoksessa A. Kallioniemi (toim.), Uudistuva ja kehittyvä ainedidaktiikka. Ainedidaktinen symposiumi, 8*(2008), 783-796.
- Oshagbemi, T. (2008). The impact of personal and organisational variables on the leadership styles of managers. *The International Journal of Human Resource Management*, 19(10), 1896-1910.
- Perry, D. E., Staudenmayer, N. A., & Votta, L. G. (1994). People, organizations, and process improvement. *IEEE Software*, 11(4), 36-45.
- Pfeffer, J. (2015). *Leadership BS: Fixing workplaces and careers one truth at a time*: HarperCollins.
- Pinto, J. K. (2013). *Project management: achieving competitive advantage*: Pearson/Prentice Hall Upper Saddle River, NJ, USA.
- Powell, A., Piccoli, G., & Ives, B. (2004). Virtual teams: a review of current literature and directions for future research. *ACM Sigmis Database*, *35*(1), 6-36.

- PwC. (2015). *18th Annual Global CEO Survey: A marketplace without boundaries? Responding to disruption*. Retrieved from https://www.pwc.com/gx/en/ceo-survey/2015/assets/pwc-18th-annual-global-ceo-survey-jan-2015.pdf
- Sagie, A., & Aycan, Z. (2003). A cross-cultural analysis of participative decision-making in organizations. *Human Relations*, 56(4), 453-473.
- Sangwan, R., Bass, M., Mullick, N., Paulish, D. J., & Kazmeier, J. (2006). *Global software development handbook*: CRC Press.
- Schwaber, K. (2004). Agile project management with Scrum: Microsoft press.
- Sjøvold, E. (2002). The SPGR manual. Nesodden: SPGR publishing.
- Sjøvold, E. (2014). Resultater gjennom team. Oslo: Universitetsforl.
- Sjøvold, E., Jae, J. H. P. E. S., Ho, H. P. E. S. J., & Park, P. E. S. J. H. (2007). The "Systematizing Person-Group Relation (SPGR)" Method and its Application. A Study of Culture-based Differences in Team Dynamics Team Dynamics. *Korean Journal of Social and Personality Psychology*, 21(1), 19-34.
- Stahl, G. K., Maznevski, M. L., Voigt, A., & Jonsen, K. (2010). Unraveling the effects of cultural diversity in teams: A meta-analysis of research on multicultural work groups. *Journal of international business studies*, *41*(4), 690-709.
- Standish Group. (2001). *Chaos, Extreme*. Retrieved from https://www.projectsmart.co.uk/white-papers/chaos-report.pdf
- Sutharshan, A., & Maj, P. S. (2011). Enhancing Agile methods for multi-cultural software project teams. *Modern Applied Science*, *5*(1), 12.
- Tan, B. C., Smith, H. J., Keil, M., & Montealegre, R. (2003). Reporting bad news about software projects: Impact of organizational climate and information asymmetry in an individualistic and a collectivistic culture. *IEEE Transactions on Engineering Management*, 50(1), 64-77.
- Taylor, J. (2003). Managing information technology projects: applying project management strategies to software, hardware, and integration initiatives: Amacom.
- Technopedia.com. (2016). What is Software Development Process? Definition from Techopedia. Retrieved from https://www.techopedia.com/definition/13295/software-development-process
- Tekna-magasinet. (2016). Opptur for databehandling og programmering. Retrieved from http://teknamagasinet.no/ny-serie-de-nye-tekna-jobbene/opptur-for-databehandling-og-programmering/?utm_source=portraitdialogue&utm_medium=email&utm_content=overskrift3&utm_campaign=teknamag-sept16
- Tessem, B. (2014). Individual empowerment of agile and non-agile software developers in small teams. *Information and software technology, 56*(8), 873-889.
- Thangasamy, S. (2012). Lessons learned in transforming from traditional to agile development.
- Trompenaars, F. (1996). Resolving international conflict: Culture and business strategy. *Business strategy review*, 7(3), 51-68.
- Venaik, S., & Brewer, P. (2010). Avoiding uncertainty in Hofstede and GLOBE. *Journal of international business studies*, 41(8), 1294-1315.

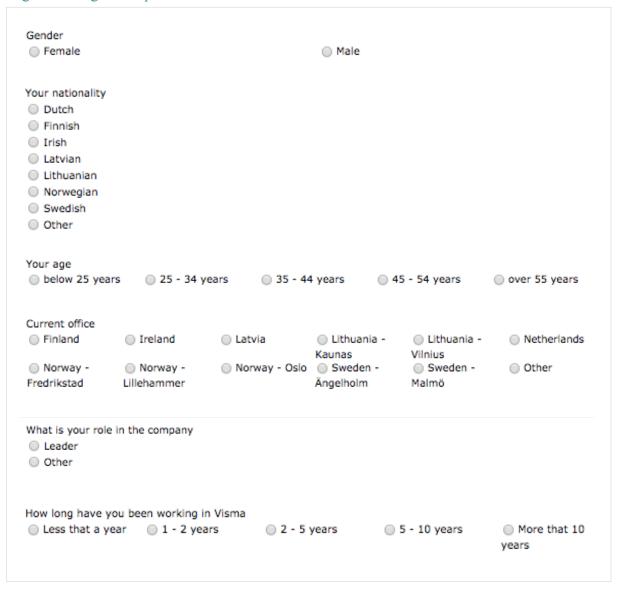
- Watson, D. (1992). Correcting for acquiescent response bias in the absence of a balanced scale: An application to class consciousness. *Sociological Methods & Research*, 21(1), 52-88.
- WhatIs.com. (2016). What is software development? Definition from WhatIs.com. Retrieved from http://whatis.techtarget.com/definition/software-development
- Yin. (2013). Case study research: Design and methods: Sage publications.
- Yin, & Kuo. (2013). A study of how information system professionals comprehend indirect and direct speech acts in project communication. *IEEE Transactions on Professional Communication*, 56(3), 226-241.
- Yousef, D. A. (2000). Organizational commitment: A mediator of the relationships of leadership behavior with job satisfaction and performance in a non-western country. *Journal of Managerial Psychology*, 15(1), 6-24.
- Yuki, M. (2003). Intergroup comparison versus intragroup relationships: A cross-cultural examination of social identity theory in North American and East Asian cultural contexts. *Social Psychology Quarterly*, 166-183.
- Yum, J. O. (1988). The impact of Confucianism on interpersonal relationships and communication patterns in East Asia. *Communications Monographs*, *55*(4), 374-388.
- Zhang, S., Tremaine, M., Milewski, A. E., Fjermestad, J., & O'Sullivan, P. (2012). Leader delegation in global software teams: occurrence and effects. *Electronic Markets*, 22(1), 37-48. doi:10.1007/s12525-011-0082-y
- Zhu, W., Newman, A., Miao, Q., & Hooke, A. (2013). Revisiting the mediating role of trust in transformational leadership effects: Do different types of trust make a difference? *The Leadership Quarterly*, 24(1), 94-105.

Appendix

Appendix 1: Survey

The questionnaire illustrated is the one that was sent to Visma employees. For Confirmit employees, there were different alternatives on the questions of nationality and currents office, and there was one extra question asking which team they belonged to.

Page 1: Background questions



Page 2: questionnaire

	not at all 1	2	3	4	5	in v	ery high degree 6
To what extent do you expect to participate in the planning and scheduling of tasks	\circ	\circ	\circ	\circ	\circ		\circ
To what extent do you expect to be able to choose your own tasks	\circ	\circ	\circ	\circ	\circ		\circ
To what extent do you expect precise instructions on how tasks are to be performed	\circ	\circ	\circ	\circ	\circ		\circ
	strongly disagr	ee 1	2	3	4	5	strongly agree 6
I would consider someone to be a good leader if they obtain good results, even if they are very controlling as a leader	0		0	0	0	0	
I would put more trust in a leader who is always certain of his/her actions than one who asks for advice	0		0	0	0		0
I get demotivated when I am unsure how to perform a task	0		0	0	0	0	0
I expect my leaders to encourage employees to express their opinions – even contrary ones							
If a leader asks for my opinion it shows respect and consideration for my thoughts	0				0	0	
I get more motivated when I can decide how to perform tasks without getting specific instructions	0		0	0	0	0	0
I think a higher degree of autonomy would improve my results (compared to current situation)	0						
I think more instructions would improve my results	0		0	0	0	0	0
When I don't agree with my colleagues, I openly express my disagreement.	0						
I know I can challenge my colleagues' opinions without them getting offended							
When I don't agree with a person in authority, I openly express my disagreement.	0				\circ		
When uncertain about something I make it clear that I haven't understood	0		0	0	0	0	0
I would mind if a colleague got credit for work that I have done	0			0			0
When quick decisions are needed, I would easily give up my standpoint to avoid long discussions	0		0	0	0	0	0
If there is a conflict of opinion, I find it best if the leader makes a quick decision	0		0	0	0		
If there is a conflict of opinion, I find it best for everyone involved/in the team to have an open discussion	0						
I would try to catch up on any delays before revealing them to my co-workers			\circ	0			
I would feel easier about reporting bad news/ delays if they were not my fault					\circ		
On average, my colleagues are more direct than me	0		0				0
I would keep task-related opinions to myself to avoid hurting someone's feelings					0		
I often give positive feedback to my colleagues	0						0
I often give constructive criticism to my colleagues							

Page 3: SPGR

Below you will find 24 items describing different behaviors. Please think about your current job situation and rate which of the 24 behaviors a good leader would show Seldom, Some times or Often.

-- Please rate all 24 items even if you may feel that some of them appear a little strange.

, , , , , , , , , , , , , , , , , , , ,	Seldom	Some times	Often
Committed, determined, makes constructive contribution to cooperative efforts	0	0	0
Principled, detail-oriented, stubborn			
Non-committal, impulsive, demands attention		0	0
Pleasant, sympathetic, adaptable			
Withdrawn, obstinate, apathetic		0	0
Diligent, dutiful, loyal			
Caring, supportive, encouraging		0	0
Effective, self-confident, dares to take the lead			
Closed, self-motivated, a loner		0	0
Anxious, tense, doubts own abilities		0	
Self-sacrificing, self-pitying, complaining		0	0
Informal, considerate, views everyone as equals			
Cooperative, supportive, accommodating		0	0
Direct, controlling, demanding		0	
Self-centered, provokes conflict, uncooperative		0	
Thoughtful, trusting, thinks the best of everyone		0	
Disheartened, discouraged, lethargic		0	0
Cautious, reliable, willingly assumes duties		0	
Extroverted, open, acknowledges others		0	0
Analytical, unbiased, rational		0	
Persistent, tough, competitive		0	
Emotional, unpredictable, untraditional			
Reserved, distant, withdrawn		0	
Faithful, friendly, shows respect to everyone		0	

Appendix 2: Interview guide

Introduction	Present myself and the thesis
	 Mention that it is a conversation, no right answers, feel free to add details
	 Repeat anonymity and that it cannot be connected to the survey results
	Ask for permission to record
	 Any questions before we start?
Background	Time at the organisation
Duckground	Nationality
Communication	at 1
Communication	ChannelsFrequency
	 Collocated / different office
	Team work across sites
Miscommunication	,,
Wiiscommunication	• Example
	• Frequency
Commoning oultures	Cause of delays or frustration?Countries
Comparing cultures	0.07
	Age groups Seminates
	Seniority
	More direct / indirect The Continual in a strength and in a
	The effect of nationality on team dynamics Wing (Configuration and the discussion in the property) The effect of nationality on team dynamics Output Description:
0	Visma/Confirmit compared to other companies in your country
Organisational climate	Mistakes held against you?
	Challenge practices
	• Trust
	Constructive criticism
D 1.1	Hurting people's feelings
Reporting delays	 Things that should have been reported sooner?
	 Try catching up first
	What can affect the willingness to report
Desired leader	 Encourage opposite views
	• What if you disagree
	 Addressing leader vs. colleagues
	Leader asking for advice
Decision making	• In different situations
	• Consensus
	 Handling diverging opinions
	Give up standpoint
	 Less/ more prominent leader situations
Different leadership	 Country
styles	• Age
	 Any good authoritarian leaders?
Compare cultures	Participative leadership here vs other companies
-	Previous companies
	• Any difference between offices?
Autonomy and	General motivation
Autonomy and	A 4
Autonomy and motivation	 Autonomy/ responsibility
	 Change in motivation since you started?
motivation	Change in motivation since you started?Important for agile methods?
motivation	 Change in motivation since you started? Important for agile methods? Openness, directness
motivation Team training	 Change in motivation since you started? Important for agile methods? Openness, directness Feedback giving
motivation Team training (discussing	 Change in motivation since you started? Important for agile methods? Openness, directness Feedback giving

Appendix 3: Excel calculations

Figure A1 and A2 shows the quantitative results for calculations based on nationality. Similar analyses were performed for data sorted by gender, age, current office, role at the company, and team.

Results for nationality

Note: The colour coding for the t-test is (green < 0.05), (yellow < 0.01) and (red < 0.001). Figure A1 shows the results for questions regarding PL, and Figure A2 shows the results for communication.

F	G	Н	I	J	K	L	M	N	0	P	Q	R	S
		do you expect	to be able to choose your	extent do you expect precise	I would consider someone to be a good leader if they obtain good results, even if they are very controlling as a leader	leader who is always certain of his/her actions than one who asks	I get demotivate d when I am unsure how to perform a task		if the leader makes a		I get more motivated when I can decide how to perform tasks without getting specific instructions	I think a higher degree of autonomy would improve my results (compared to current situation)	I think more instructions would improve my results
AVERAGE	Norwegian	5,2	4,4	2,3	2,4	2,1	2,7	5,6	2,8	5,5	5,2	3,6	2,3
	Swedish	5,4	4,5	2,9	2,2	2,8	4,1	5,7	3,4	5,5	4,6	3,8	3,1
	Latvian	4,7	4,2	3,8	3,0	3,8	2,2	5,0	4,0	5,0	4,0	3,6	3,4
	Lithuanian	4,8	4,8	3,8	3,3	2,8	3,2	5,4	3,6	5,6	4,6	3,6	3,2
	Russian	4,2	4,4	3,0	3,7	3,8	3,1	5,0	3,6	4,6	4,4	3,5	2,8
Std. Deviatio	Norwegian	0,7	0,9	1,1	1,1	1,1	1,3	0,6	1,1	0,6	0,8	1,5	1,1
	Swedish	0,7	0,7	0,7	1,0	1,1	1,6	0,5	1,2	0,5	1,0	1,1	
	Latvian	1,2	1,0	1,7	1,0	1,3	0,4	1,2	1,0	0,7	0,7	1,1	
	Lithuanian	0,9	0,8	1,5	1,6	1,2	1,4	0,8	1,0	0,7	0,7	1,2	
	Russian	1,4	1,2	1,4	1,3	1,4	1,5	1,0	1,2	1,2	1,1	1,3	1,2
T-TEST 2-tail	Sweden	0,430	0,866	0,110	0,669	0,094	0,007	0,632	0,170	0,936	0,046	0,634	0,046
	Latvia	0,177	0,518	0,008	0,236	0,005	0,429	0,111	0,034	0,113	0,002	0,949	0,058
	Lithuania	0,212	0,191	0,001	0,035	0,057	0,279	0,465	0,047	0,776	0,016	0,954	0,026
	Russia	0,002	0,815	0,034	0,00032	0,000	0,245	0,013	0,024	0,001	. 0,003	0,971	0,131
T-TEST 1-tail	Sweden	0,215	0,433	0,055	0,335	0,047	0,004	0,316	0,085	0,468	0,023	0,317	0,023
	Latvia	0,088	0,259			0,002				0,056			
	Lithuania	0,106				0,028							
	Russia	0,001			0,000	0,000							

Figure A1: averages, standard deviation, 1-tailed T-test and 2-tailed T-test for calculations based on nationality (for participative leadership)

Т	U	V	W	X	Υ	Z	AA	AB	AC	AD	AE	AF	AG	AH
		When I don't agree with my colleagues, I openly express my disagreement	I know I can challenge my colleagues' opinions without them getting offended	When I don't agree with a person in authority, I openly express my disagreement	When uncertain about something I make it clear that I haven't understood	I would mind if a colleague got credit for work that I have done	When quick decisions are needed, I would easily give up my standpoint to avoid long discussions	If there is a conflict of opinion, I find it best for everyone involved/in the team to have an open discussion	I would try to catch up on any delays before revealing them to my co-workers	I would feel easier about reporting bad news/ delays if they were not my fault	On average, my colleagues are more direct than me	I would keep task- related opinions to myself to avoid hurting someone's feelings	I often give positive feedback to my colleagues	I often give constructive criticism to my colleagues
AVERAGE	Norwegian	4,6	4,9	4,4	4,9	4,3	3,9	4,8	3,4	3,8	2,7	2,2	4,4	3,8
	Swedish	4,4	4,0	4,0	4,0	4,0	3,5	4,3	3,8	3,8	2,5	2,7	4,1	3,5
	Latvian	3,6	4,4	4,4	4,6	4,0	5,0	4,8	4,2	3,3	3,4	3,8	4,7	
	Lithuanian	4,3					4,1			4,6			3,8	
	Russian	4,5	4,3	3,9	4,5	3,9	3,3	4,8	4,2	3,8	3,0	3,0	3,9	4,0
Std. Deviatio	Norwegian	1,0	0,8	1,2	0,9	1,1	1,4	1,1	1,3	1,4	0,8	1,0	1,1	0,8
	Swedish	1,0	1,3	1,6	0,8	1,2	0,8	1,2	1,4	1,3	1,2	1,1	1,4	1,1
	Latvian	2,1	1,3	1,1	1,1	1,2	1,0	1,3	2,2	1,8	2,1	2,1	1,2	0,8
	Lithuanian	1,3	1,4	1,2	0,8	1,3	1,0	0,9	0,6	1,0	1,2	1,0	0,9	1,2
	Russian	1,1	0,9	1,1	1,2	1,2	1,1	0,9	1,1	1,4	1,0	1,2	0,8	1,2
T-TEST 2-tail	Sweden	0,641	0,018	0,443	0,011	0,478	0,371	0,251	0,396	0,966	0,633	0,204	0,440	0,417
	Latvia	0,113	0,269	0,959	0,572	0,591	0,110	0,968	0,256	0,511	0,175	0,007	0,668	0,251
	Lithuania	0,406	0,129	0,773	0,826	0,264	0,725	0,400	0,037	0,085	0,323	0,016	0,065	0,560
	Russia	0,803	0,016	0,131	0,185	0,244	0,077	0,845	0,017	0,944	0,195	0,015	0,065	0,355
T-TEST 1-tail	Sweden	0,321	0,009	0,222	0,005	0,239	0,185	0,125	0,198	0,483	0,316	0,102	0,220	0,208
	Latvia	0,057	0,135		0,286	0,295	0,055	0,484		0,256	0,087	0,004	0,334	0,126
	Lithuania	0,203					0,363	0,200	0,018	0,042	0,161			_
	Russia	0,402	0,008	0,066	0,093		0,039		0,009	0,472	0,097	0,007	0,032	

Figure A2: averages, standard deviation, 1-tailed T-test and 2-tailed T-test for calculations based on nationality (for communication)

Results for age groups in Confirmit

Figure A3 illustrates a calculation for other factors than nationality. In this case, the independent variable is the age of respondents. The T-test shows the difference between the group >55 and all other age groups combined.

		To what extent do you expect to participate in the planning and scheduling of tasks		precise	I would consider someone to be a good leader if they obtain good results, even if they are very controlling		If there is a conflict of opinion, I find it best for everyone involved/in the team to have an open discussion	I would keep task- related opinions to myself to avoid hurting someone's feelings	I think a higher degree of autonomy would improve my results	I think more instructions would improve my results
Average	<34	4,5	4,7	3,3	3,5	2,9	4,9	2,4	3,3	2,1
	35-44	5,0	4,6	2,5	2,9	3,0	5,1	2,2	3,1	2,4
	45-54	4,9	5,0	1,9	2,0	2,9	5,1	2,7	4,3	1,9
	>55	4,0	3,6	2,6	4,4	4,2	4,4	4,2	2,8	3,6
Std. Deviation	<34	1,25	1,28	1,53	1,46	1,10	0,88	0,99	1,29	0,99
	35-44	0,96	0,63	1,56	1,33	1,36	1,27	0,89	1,10	1,02
	45-54	1,35	0,58	0,69	0,82	1,68	0,69	1,38	1,70	0,69
	>55	1,87	1,14	0,89	1,14	1,10	1,34	1,10	0,84	1,52
	T-test >55	0,197	0,016	0,891	0,039	0,045	0,213	0,001	0,305	0,006

Figure A3: averages, standard deviation and t-test for age groups in Confirmit

Appendix 4: SPGR results

Table A1 shows the SPGR-results Russia, Latvia, Lithuania, Sweden, and Norway, for the two countries combined. The T-test is 2-tailed, and has been calculated between Norway and the other countries.

Table A1: SPGR results

	Avera	age				Stand	lard de	viation	ı		T-test			
	Nor	Rus	Lat	Lit	Swe	Nor	Rus	Lat	Lit	Swe	Rus	Lat	Lit	Swe
X	13,0	10,0	11,0	9,1	13,6	2,18	4,03	2,35	5,63	2,80	0,002	0,079	0,005	0,472
Υ	6,0	7,4	6,6	5,3	5,0	2,14	2,16	1,14	2,41	2,16	0,046	0,576	0,377	0,203
Z	2,1	2,4	2,4	2,0	1,5	1,63	1,81	3,29	2,67	2,12	0,648	0,767	0,875	0,358
S2	3,4	3,0	3,2	2,8	3,5	0,75	0,89	0,84	1,23	0,53	0,079	0,625	0,091	0,661
D2	3,4	3,3	3,6	3,2	3,8	0,76	1,12	0,55	0,92	0,63	0,535	0,624	0,461	0,172
N1	3,1	2,7	3,6	2,9	3,2	0,77	0,99	0,89	1,10	0,92	0,079	0,216	0,509	0,780
N2	0,2	0,4	0,6	0,8	0,3	0,43	0,59	0,55	0,79	0,48	0,430	0,102	0,009	0,678
01	0,1	0,1	0,0	0,7	0,1	0,27	0,22	0,00	1,34	0,32	0,721	0,537	0,027	0,829
W1	0,1	0,1	0,0	0,3	0,1	0,43	0,22	0,00	0,48	0,32	0,541	0,560	0,273	0,919
W2	0,0	0,2	0,8	0,7	0,0	0,00	0,52	1,10	0,82	0,00	0,057	0,000	0,000	1,000
02	1,1	1,5	2,0	1,7	0,9	0,65	0,69	1,00	0,82	0,74	0,059	0,016	0,032	0,398
C1	1,0	2,2	1,8	1,6	0,8	0,75	0,99	0,84	1,17	0,92	0,000	0,040	0,076	0,505
C2	3,4	3,5	3,6	3,3	3,2	0,70	0,60	0,55	0,82	0,79	0,740	0,521	0,758	0,497
D1	3,2	3,1	3,0	2,5	3,1	0,92	0,89	1,00	0,85	0,99	0,703	0,739	0,061	0,879
S1	3,8	3,5	3,8	3,6	3,6	0,49	0,76	0,45	0,52	0,52	0,059	0,974	0,270	0,270
S	7,2	6,4	7,0	6,4	7,1	1,13	1,47	0,71	1,58	0,57	0,044	0,719	0,102	0,808
W	0,1	0,3	0,8	1,0	0,1	0,43	0,72	1,10	1,15	0,32	0,433	0,020	0,002	0,919
С	4,4	5,6	5,4	4,9	4,0	1,13	1,19	1,14	0,88	1,41	0,001	0,077	0,205	0,401
N	3,3	3,0	4,2	3,7	3,5	0,98	1,08	0,84	1,16	1,18	0,261	0,079	0,362	0,692
0	1,2	1,6	2,0	2,4	1,0	0,75	0,60	1,00	1,90	0,94	0,089	0,045	0,009	0,525
D	6,6	6,3	6,6	5,7	6,9	1,24	1,66	1,14	1,34	1,20	0,520	0,970	0,071	0,484
E	7,1	6,2	6,2	5,4	7,0	1,23	1,79	1,30	2,59	0,67	0,043	0,159	0,012	0,853