



NTNU – Trondheim
Norwegian University of
Science and Technology

Cross-Cultural Knowledge Transfer within Multinational Companies

A Case Study

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Industrial Economics and Technology Management

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- uttak av masteroppgave

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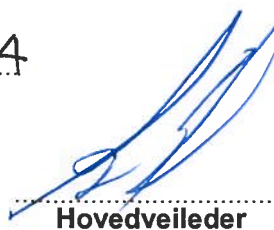
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Sted og dato

Kamilla Nerland
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Student: Kamilla Nerland
født: 22.12.1990

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Bedrift/ekstern virksomhet: Powel AS

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ett år

to år

tre år

(sett kryss bak antall år hvis dette punktet er aktuelt)

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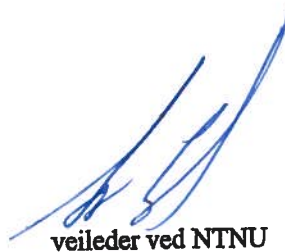
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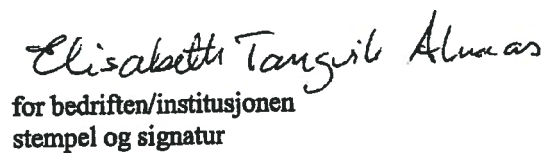
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Sammendrag

Teamarbeid, kunnskap og globalisering er ord som har blitt brukt mer og mer de siste tiårene, i sammenheng med hvordan bedrifter og organisasjoner styres verden over. I tillegg til å se hvordan hver av disse elementene påvirker den daglige driften av selskaper hver for seg, er det også interessant å undersøke hvordan de samhandler. Denne masteroppgaven ser på tverrkulturell kunnskapsoverføring mellom team i det norske selskapet Powel, og utforsker hvordan denne kunnskapsoverføringen blir påvirket av teamkultur og teammodenhet. Dette er videre satt i konteksten av nasjonal kultur. Oppgaven ser også på hvordan teamkultur, teammodenhet og nasjonal kultur har påvirket, og fortsatt påvirker, den tverrkulturelle kunnskapsoverføringen mellom team i det norske selskapet Confirmit. Erfaringene gjort i Confirmit vil danne grunnlaget for generelle anbefalinger rundt tverrkulturell kunnskapsoverføring, og spesifikke anbefalinger for videre kunnskapsoverføring og samarbeid mellom teamene i Powel. Formålet med denne studien er å vise at ved å være mer bevisst på teamkultur og teammodenhet kan multinasjonal selskaper legge bedre til rette for overføring av kunnskap på tvers av landegrensener og kulturer, og dermed prestere på et høyere nivå.

Denne masteroppgaven er basert på prosjektoppgaven jeg gjennomførte ved NTNU høsten 2013, som hadde tittelen: "Hvordan jobber, lærer og samarbeider team i et multinasjonalt selskap? En gjennomgang av kunnskapsoverføringskonseptet". Forskningen utført i denne artikkelen er både kvalitativ og kvantitativ, og forsøker å besvare problemstillingen til denne oppgaven: "Hvordan påvirker teamkultur og teammodenhet den tverrkulturelle kunnskapsoverføring mellom teamene i multinasjonale selskaper, sett i konteksten av nasjonal kultur?".

Avhandlingen gitt her adresserer problemstillingen sin ved først å gi en grundig gjennomgang av relevant teori. Videre har jeg gjennomført en case analyse, hvor to norske bedrifters bruk av tverrkulturell kunnskapsoverføring er studert. Eksempelbedriftene er Powel AS og Confirmit AS, og to team i hvert av selskapene er gjenstand for analyse. Analysen er gjort ved å utføre SPGR-undersøkelser og å gjennomføre intervjuer med nøkkelpersoner i begge selskapene. Analysen indikerer at teamene opererer på et noe lavere modenhetsnivå og at deres teamkulturer ikke er optimale for kunnskapsoverføringsprosessen mellom teamene.

Abstract

Teamwork, knowledge and globalisation are all words that have been used more and more in recent decades, in relation to how companies and organisations are managed all over the world. It is interesting to examine not only how each of these affect the daily operations of companies separately, but also how they interact. This master's thesis will look at the cross-cultural transfer of knowledge between teams in the Norwegian company Powel, and seek to explore how team culture and team maturity affect this transfer. This research objective is put in the context of national culture. Further, the thesis will explore how team culture, team maturity and national culture have affected, and still affects, the cross-cultural knowledge transfer between teams within the Norwegian company Confermit. The experience of the employees in Confermit will create the foundation for general recommendations regarding cross-cultural knowledge transfer, and specific recommendations for further knowledge transfer and collaboration between the teams in Powel. The purpose of this study is to show that by being more conscious about team culture and team maturity, multinational companies might better facilitate knowledge transfer across borders and cultures, and thus perform at a higher level.

This thesis is based on the project thesis I conducted at NTNU during the fall of 2013, which was titled: *"How do teams work, learn and collaborate in a multinational corporation? A review of the knowledge transfer concept"*. The research conducted in this paper is both qualitative and quantitative, and seeks to answer the research question of this thesis: *"How does team culture and team maturity affect the cross-cultural knowledge transfer between teams within multinational companies, seen in the context of national culture?"*

This thesis addresses its research question by first giving a thoroughly review of the relevant theory. Further, I have conducted a case analysis, where two Norwegian companies' use of cross-cultural knowledge transfer is studied. The case companies are Powel AS and Confermit AS, and two teams within each of the companies are the objects of analysis. The analysis is done by performing SPGR-surveys and conducting interviews with key employees within both companies. The analysis indicates that the teams operate on a lower maturity level and that their team cultures are not optimal for the knowledge transfer process between the teams.

Preface

This paper is the result of the master's thesis at the Department of Industrial Economics and Technology Management at NTNU, The Norwegian University of Science and Technology, in Trondheim. The thesis is created within the major Strategy and International business development. It was conducted during the spring of 2014, and the title is: "Cross-cultural knowledge transfer within multinational companies: A case study". This thesis is a contribution to a larger research project on operational management at NTNU, a project that is reported to the Norwegian Social Science Data Services.

Several people have provided me with help and suggestions during the work on my project, and I want to take the opportunity to thank these people. In particular, I want to thank my supervisors, Kenneth Stålsett and Endre Sjøvold. Their guidance and feedback throughout the semester has been very valuable for me. I also want to thank Powel, which has contributed valuable information in my work. Especially I want to thank Elisabeth Tangvik Almaas, who has been my contact person in Powel. Further, I send my thanks to Trond Johansen, who has been my contact person in Confirmit. Further, the good cooperation with the teams and employees in Powel and Confirmit has been essential for the completion of this assignment, I am therefore very grateful that they took time to participate in my surveys and interviews.

Trondheim, 10. June 2014

Author,
Kamilla Nerland

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1 INTRODUCTION

The topic of this paper is how teams in multinational corporations work, learn and collaborate. The reason why I chose this topic is that I find it interesting and exciting. Furthermore, it is relevant within a variety of fields and industries, as the use of teams in organisations is increasing whichever discipline is addressed. Moreover, this topic was chosen because knowledge is increasingly becoming an important asset for companies.

Knowledge is widely recognised as a competitive asset to multinational corporations, and crucial for the competitive position of the individual company (e.g. Lundvall & Johnson, 1994; Nonaka, 1994). Drucker (1969) pointed out that there had been a shift in the economy in the U.S., from what was once an economy of goods to a “knowledge economy”, and emphasised that the basic economic resource in the new economy is knowledge, not capital. His publication can be credited for being the origin of the widespread attention towards knowledge management (K. A. Stewart et al., 2000). Several of the CEOs of companies on the Fortune 50-list of 1989 (top rated by gross revenue) agreed that knowledge was a fundamental factor behind the enterprises’ activities and the organisation’s most important asset (Wiig, 1994). Minbaeva, Pedersen, Björkman, Fey, and Park (2003) support this by arguing that the ability to create and transfer knowledge internally is one of the main competitive advantages of multinational corporations. Further, the development of strategic opportunities is said to be increased by internal communication between business units, clearly establishing the relevance of knowledge transfer within multiunit organisations (Volberda, Foss, & Lyles, 2010). Based on this, one can see why it is interesting to study knowledge management and knowledge transfer.

As national boundaries are increasingly becoming more blurred and trade barriers are eliminated, the opportunity for knowledge transfer across borders between subsidiaries of multinational corporations has increased, and hence, it has become increasingly important to conduct such transfers for organisations to survive. As I am completing this thesis within the major “Strategy and International Business Development”, I am particularly interested in

international and *cross-cultural* knowledge transfer. This is shown to be a critical aspect for multinational corporations, as competition among multinational and global organisations intensifies. This statement is supported by Bhagat, Kedia, Harveston, and Triandis (2002), who stated that effective cross-border transfer of knowledge within an organisation will become increasingly critical.

1.1 Research question

According to Ringdal (2009), all research starts with an idea. He points out that both the interest of the researchers and the needs of the customers may contribute to the emergence of an idea. The research question must be formed based on this idea (Ringdal, 2009). The research question for this thesis is motivated by my pre-project thesis conducted during the fall of 2013. In the pre-project thesis, I studied literature regarding cross-cultural knowledge transfer between teams in a multinational corporation. While writing the pre-project thesis, I presented a model for further research, which suggested that team culture, team maturity, incentives to share knowledge and national culture affect the teams' willingness to transfer knowledge. This model creates the foundation for the research conducted in this thesis, and the research question, which is formulated as follows: "*How do team culture and team maturity affect the cross-cultural knowledge transfer between teams within multinational companies, seen in the context of national culture?*" I point out that I have chosen to not study the third variable in the pre-project thesis model, incentives to share knowledge, in this study. This is because the foundation for studying this variable is not present in the case companies of this study. An illustration of the research question is given in figure 1 below.

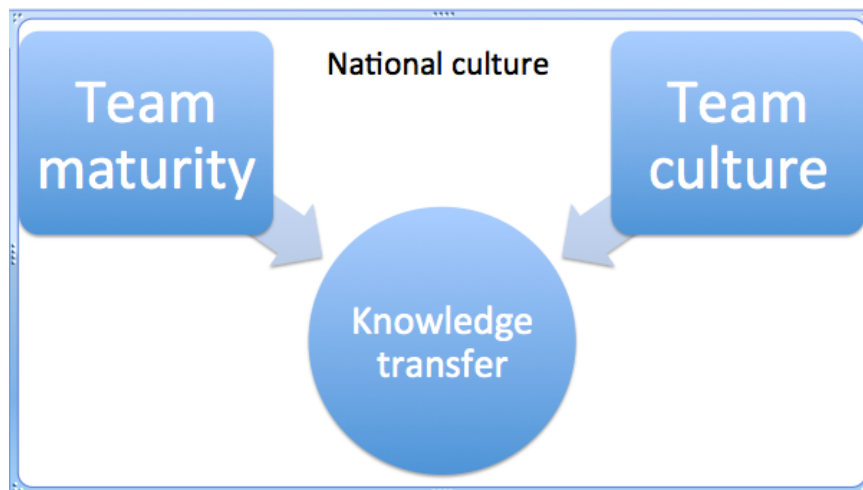


Figure 1: Illustration of the research question.

The selected topic for this assignment demands a mixture of various disciplines, and by relating existing theory and research within these disciplines to each other and to the findings in my own research, I expect to arrive at useful and valuable information and knowledge that can be used to enlighten the chosen topic. Van de Ven (1992) points out that researchers at the intersection of disciplines often combine elements of different theories to explain observed processes of change and development in their studies. By proceeding with such a method, there is a risk that the applied theories become surprising and illogical. This is something that I, as a researcher, need to have particular focus on, as I am applying theory from various disciplines in this thesis.

1.2 About the research

In this thesis I will look at the cross-cultural knowledge transfer between teams within Powel, and how it is affected by a team's culture and level of maturity. This is all set in the context of national culture. Further, the findings discovered in Powel will be compared to the situation in Conifermat from 2007, when they bought a British company with divisions in Russia, up to present time. When giving my recommendations for further knowledge transfer and cooperation between the offices in Powel, I will draw my conclusions both on the findings in the data from Powel and on the experience gained within Conifermat.

The goal of this assignment is to discover how team culture and team maturity affect cross-cultural knowledge transfer between the teams in Trondheim and Gdansk in Powel, given the national context. This is done by identifying how the teams in Trondheim and Gdansk operate and cooperate today, and how they perceive each other's national culture. This assignment aims to provide Powel recommendations for the further collaboration between the offices in Trondheim and Gdansk, and an indication of which strategic moves to repeat and which to avoid if they decide to open yet another office in a new country. Moreover, by reading this thesis, both Powel and Confermit should get valuable insights to what is important to be aware of when handling with foreign departments.

1.3 About Powel AS

My focal organisation for this assignment is Powel AS. Powel has reviewed my research question, and has agreed to let me conduct research on their employees, teams and organisation during the spring of 2014.

Powel is a Norwegian software company headquartered in Trondheim (Powel AS, 2013a). The company was established in 1996 as a spin-off from the Norwegian Electric Power Research Institute (EFI), which was a part of the SINTEF Group. Since 1996, Powel has gone from being part of the academic community at SINTEF and NTNU to being a world-leading software supplier to the energy sector, and at the same time grown from 37 to 280 employees (Powel AS, 2014a). Powel develops and delivers business critical software and consultancy services to the energy sector, municipalities, advisory consultants and contractors in Norway and internationally (Powel AS, 2013a). Powel's goal is to develop solutions that give strategic flexibility and quick result-improvements in cost management, operational efficiency and customer care (Powel AS, 2014c), and their mission statement is "Helping utilities work smarter" (Powel AS, 2014b).

Powel has five operational segments in addition to the finance & HR department: Strategy & Technology, Smart Generation, Smart Infrastructure, Business development and Operations. The organizational chart is presented below.

Powel AS

Organisation from 01.02.2014

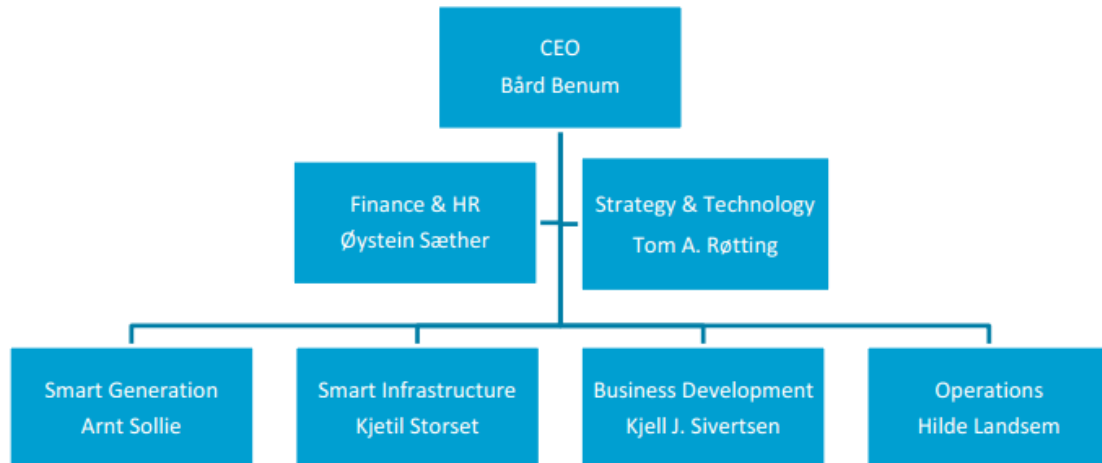


Figure 2: Organizational chart Powel AS. Provided by Elisabeth Tangvik Almaas.

The primary focus of the Strategy & Technology department is to conduct strategic processes and ensure that the solutions Powel delivers is developed according to the strategic technological choices. The division is also responsible for setting up the development environment in Poland (Almaas, 2014 [Personal communication]). The Smart Generation segment includes software and consultancy services for decision support to production scheduling of hydropower and energy trading. This includes, among other things, software for inflow forecasting, simulation and operation of hydropower optimization. Additionally, this segment develops software for review and settlement of energy contracts, and balance calculations and messaging (Powel AS, 2013b). The Smart Infrastructure segment consists of two parts: the net-part and the technical infrastructure-part. The net-part includes software and consultancy services for effective and safe operation of power grids, including planning, investment analysis, maintenance support and decision support on both the strategic and operational level. The technical infrastructure division includes software and consultancy services for municipal-technical infrastructure (Powel AS, 2013b). The department of Business development focuses on creating new and bigger business opportunities within selected priority areas. Currently, the focus is on two specific segments: contractor and metering. The contractor area delivers solutions supporting the contractor's

need for accurate and simple production monitoring and documentation of performed tasks at a facility. With the use of the solutions, the contractors may also meet their needs for mass calculations and settlement of tunnel. In regards to metering, Powel delivers solutions within the metering chain, from the collection of measurements. These solutions also includes, among other features, functionality for monitoring and exception handling (Almaas, 2014 [Personal communication]). Lastly, the Operations department in Powel focuses on supporting the various business areas. This includes tasks as internal IT support, customer-oriented support for Powel's products, quality improvements and marketing activities (Almaas, 2014 [Personal communication]).

In addition to the headquarters in Trondheim, Powel has offices in Oslo, Bergen, Porsgrunn, Bryne and Grimstad in Norway. Further, they also have offices in Odense in Denmark, and Stockholm and Jönköping in Sweden. Moreover, the company has offices in Basel in Switzerland, Gdansk in Poland and Istanbul in Turkey (Powel AS, 2013a). Among Powel's more than 1000 customers in the public and private sector, one can find leading energy companies like DONG, E.ON, Fortum, Norsk Hydro and Statkraft (Powel AS, 2014c). Currently (10.03.2014), Arendal Fossekompagni ASA owns 95,81% of Powel. In 2012, Powel achieved a turnover of 54,1 million USD, and there is expected an increase in sales in the future (Powel AS, 2013b).

Powel is a multinational company operating in six countries, within a highly knowledge intensive industry. My assignment should be interesting for most multinational corporations within knowledge-intensive industries, including Powel, as it gives an understanding of how team culture, team maturity and national culture affect cross-cultural knowledge transfer, and because it is important for these types of companies to manage knowledge and conduct knowledge transfer in a good manner. Further, Powel is growing with a high speed and creating teams in different locations frequently, and as this paper addresses team theory and how different aspects of teams will affect knowledge transfer between teams it should be interesting and helpful for Powel to read this assignment.

1.3.1 About the teams

In this assignment two teams within Powel will be studied: one team in Gdansk, Poland and one support team in Trondheim, Norway. In the following, the two teams will be presented.

1.3.1.1 The Trondheim-team

The team located in Trondheim consists of four members, whereof one is a business manager, one is a technical architect and two are product managers. The team consist of two women and two men. All team members are Norwegian, even though one of the members has origins from China. This team member was born in China, but moved to Norway when he/she was 1,5 years old and was raised in Norway by his/her Chinese parents. He/she stated that "I am more Norwegian than Chinese in my mind-set and behaviour". The age difference within the team members is relatively high. This team has a shared overall goal to get the office in Poland up and running in the best possible manner, and for it to be a good part of Powel, as any other of the offices. The four members of the team have different educational backgrounds within engineering and science, and different background from the company (position, seniority, previous projects etc.), and all of them have work together on different projects previously. The team members are not placed next to each other in the daily work, but are located in the same office space. The team previously met up regularly in meetings to discuss challenges and issues regarding the Gdansk-office, and how to proceed with the interaction between the offices. However, the frequency of these meetings is decreasing. All the members of this team have visited the office in Gdansk, though they have not all been there at the same time.

1.3.1.2 The Gdansk-team

This team is located in Gdansk, Poland and consists of six members, whereof one is the team leader and Scrum-master. All the team members are polish, and all six members are males. They are fairly close in regards to age difference. All team members are all highly educated and most of them have worked for other international companies previously. The team was established February 1st 2014, and is therefore still fresh. All the team members meet up every day to perform a Stand-up meeting, as is custom in the Scrum-methodology of

working. Further, they have other formal meetings according to the Scrum methodology, such as Sprint-meetings. In addition, the team conducts formal knowledge transfer-meetings once a week. The team spent its first two weeks together in Trondheim on initial training and introduction to the company, and has since been located in Gdansk.

1.4 About Conformat AS

Conformat AS has agreed to be a part of this thesis, and to give me valuable information regarding their experiences in acquiring a company with two offices in Russia in 2007. The offices in Russia were previously owned by a British company. This experience is related to cooperation and collaboration between the teams in Russia and teams at the Norwegian headquarters, and the cross-cultural knowledge transfer that has been conducted since 2007 and until today.

Conformat AS was founded in 1996 (Proff.no, 2014), and is a leading international supplier of software for Market Research (MR) and Enterprise Feedback Management (EFM) (Conformat AS, 2013). The software is used for data collection, data processing, market analysis, media analysis and reporting (Conformat AS, 2013). Further, the software helps companies exploit feedback and data of the attitude of the companies' customers, prospects, employees etc. to improve the financial results and to automatize central business processes (Conformat AS, 2013). Conformat targets big international corporations and Market Research companies (Conformat AS, 2013). The company is headquartered in Oslo, Norway, and they also have offices in Grimstad (Norway), London and Guildford (England), New York, San Francisco and Silicon Valley (USA), Moscow and Yaroslavl (Russia), Vancouver (Canada), Cologne (Germany), and Chengdu (China) (Conformat AS, 2014a). In 2012, Conformat had 342 employees in total (Conformat AS, 2013), whereof 76 employees are located in Norway (Proff.no, 2014). In 2012, Conformat had total revenues of 61,8 million USD (Conformat AS, 2013).

Conformat's solutions help businesses gather feedback from customers and employees, to analyse the results and to take action to improve the business processes (Conformat AS,

2014e). More specifically, Confrimit provides three different software programmes: Confrimit CustomerSat, Confrimit Horizon and Confrimit Integrasco. Confrimit CustomerSat is a web-based Voice of the Customer (VoC) solution used to capture, analyse, and act on feedback from customers, employees, and partners. This software helps companies to get improved business results by improving the customer satisfaction and loyalty (Confrimit AS, 2014b). Further, Confrimit Horizon is a multi-channel software platform for Customer Experience, Employee Engagement and Market Research programs (Confrimit AS, 2014c). Lastly, the solution of Confrimit Integrasco enable blue-chip brands to measure how they are perceived in social media, and to understand how to engage with customers in a best possible manner (Confrimit AS, 2014d). Confrimit creates revenue by selling time-limited use of right to its software (92% in 2012), and by selling consultancy services in relation to installation, support and training for the use of the software (8% in 2012) (Confrimit AS, 2013).

Confrimit has agreed to give me access to SPGR data retrieved approximately 2,5 years ago, containing data from two teams. These two teams both consist of four members each and are located in Oslo in Norway and Yaroslavl in Russia. Further, three employees in Confrimit has agreed to let me conduct interviews with them. Of these three employees, two was members of the Norwegian team that the SPGR analysis was conducted on 2,5 years ago, whilst the third employee is a Norwegian member of the management in Confrimit and has therefore a more distant overview of how the knowledge transfer happened and still happens between the teams in Russia and Norway.

1.5 Limitations of the research question

The focus of this study is on how team culture, team maturity and national culture affect cross-cultural knowledge transfer between teams within multinational companies, at the interpersonal level. I am aware that the degree, quality and frequency of knowledge transfer will depend on how it is transferred and which transmission channels are used (e.g. intranet, virtual meetings, electronic mail), but as I am focusing on the human aspect of the subject it is beyond the scope of this assignment. Further, I am aware that there are several other

factors and characteristics affecting this knowledge transfer besides the ones I am focusing on (e.g. absorptive capacity, organizational culture, network position), and I have addressed some of these factors and characteristics in my pre-diploma thesis conducted during the fall of 2013. However, I will limit the scope of this assignment to only consider team culture, team maturity and national culture when addressing the phenomenon of cross-cultural knowledge transfer.

In the following, it is assumed that the teams being referred to are constant and given, so that I will not address the topic of floating teams, teaming and team scaffolds when seeking to answer the research question. However, it is taken into account that there might occur some replacements of team members. Furthermore, the selection of which employees to be part of the team or not is not an issue addressed here, because there is not a strong link between this issue and the research question.

Further, it is not within the scope of this assignment to evaluate the quality of the knowledge being transferred and any possible bias included in the transferred knowledge. Neither is it in my interest to evaluate the speed of knowledge transfer.

I am aware that the limitations given above would have changed the scope of this study if included, and it is important for the reader to notice that the chosen theory presented in the study is adapted to the limitations of timeframe, scope and other restrictions.

1.6 Structure of the paper

The thesis is divided into six main parts. (1) First, relevant theory is presented. This chapter gives a theoretical introduction to knowledge management, team-theory and national culture. (2) Second, a chapter devoted to the use of method is presented, followed by a chapter about the method of analysis and a chapter evaluating the data. The first of these three chapters explains how I have proceeded to answer the research question of the thesis, and also includes the assignment's research methods and design, whilst the last of these chapters address the reliability and validity of the data. (3) The next chapter addresses the data collected. Here, result from the conducted SPGR-surveys and interviews are rendered. (4) Further, a chapter concerning analysis is presented. The collected data is here analysed and compared to the theory previously offered, and this is where the research questions is sought to be answered. This analysis is followed by a (5) discussion and, finally, a (6) conclusion. The thesis should be read in its entirety, and the chapters in the order they are presented to ensure total comprehension.

2 THEORY

In this part of the thesis the theoretical foundation of the assignment is presented. Yin (2014) argues that the research question should be used to guide the direction and limitations of the research, and I will, hence, use it to select relevant literature for closer examination. First, a theoretical presentation of knowledge management is provided, including theory on knowledge transfer. Second, team-theory is presented, addressing team maturity and team culture. Finally, the focus is aimed at national culture.

2.1 Theory on knowledge

As previously argued, knowledge is widely recognised as a competitive asset to multinational enterprises, and crucial for the competitive position of the individual company. McDermott (2000) identified four challenges related to knowledge management; technical, social, management and personal. The technical challenge is related to the capability to design information systems that make information accessible. The social challenge is to develop knowledge sharing communities where diversity is maintained. The management challenge is about creating an environment valuing knowledge sharing. Finally, there is a personal challenge in being open to other people sharing their ideas and being open to those ideas presented by others. Organisations must acknowledge these challenges and make a continuously effort to overcome them, in order for knowledge transfer to be successful in the organisation. However, as already pointed out, I will not look at the technical challenge of knowledge transfer in this paper. The underlying point here is that knowledge transfer is a part of the knowledge management field, which implies that one has to understand theory about knowledge and knowledge management to comprehend the consequences, effects and conditions of knowledge transfer. As knowledge transfer is the dependent variable of my research question, it is obviously necessary to get a deeper understanding of the concept of knowledge, knowledge management and knowledge transfer.

Throughout the literature, knowledge has been defined several times. In this paper, I will present three definitions of knowledge and one definition of organisational knowledge, ordered by year published. Firstly, Davenport and Pruzak (2000, p. 5) defined knowledge as:

"[...] a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluation and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organizations, it often becomes embedded not only in documents and repositories but also in organizational routines, processes, practices, and norms."

Furthermore, De Long and Fahey (2000, p. 114) defined knowledge as:

"[...] A product of human reflection and experience. Dependent on context, knowledge is a resource that is always located in an individual or a collective, or embedded in routine or process. Embodied in languages, stories, concepts, rules and tools, knowledge results in an increasing capacity for decision making and action to achieve some purpose".

Lastly, Tsoukas and Vladimirou (2001, p. 973) defined knowledge as:

"[...] the individual capability to draw distinctions, within a domain of action, based on an appreciation of context or theory, or both."

Tsoukas and Vladimirou (2001) also defined organisational knowledge. Their definition sounded:

"Organizational knowledge is the capability members of an organization have developed to draw distinctions in the process of carrying out their work, in particular concrete contexts, by enacting sets of generalizations whose application depends on historically evolved collective understandings." (p. 973)

The definitions listed above have some clear differences, for example is the latter definition more practical than the first two. However, what connects the three definitions of knowledge is the notion that knowledge is dependent on contextual factors, and that it is bound to people and/or organisations. Even though Davenport and Pruzak believe knowledge is founded by values and expertise, and David and Fahey argue it is a product of human reflection and experience, their definitions share the idea that knowledge is derived

from experience. What is interesting to note is that none of the presented definitions of knowledge mentions capabilities. Teece, Pisano, and Shuen (1997, p. 516) define dynamic capabilities as: “[...] *the firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments*”, whilst Oxford Dictionaries (2013) define capability as “*the power or ability to do something*”. I believe knowledge can be shown through someone’s capabilities, and hence add the aspect to my definition of knowledge. From this discussion derives the definition of knowledge that I will stick to throughout this paper:

Knowledge is a result of experience, is dependent on contextual factors and can be located to an individual or a collective. Knowledge can be rooted in values, capabilities and norms as well as in routines, rules and processes.

Knowledge is not the same as data and information, even though they are related concepts and all three expressions often are used interchangeably when talking about intellectual capital in an organisation. Davenport and Pruzak (2000) emphasise the importance of differentiating between the concepts, and explain “data” as a single digit or a letter often kept in databases or other types of information systems. It is the simplest of the three concepts (Davenport & Pruzak, 2000). Data does not mean anything to a reader unless it is put in a context, in which case it is named “information”. Information must inform and it must have meaning. In the same way that information derives from data, knowledge derives from information. The pyramid-shaped figure below shows the relation between the three aforementioned elements, and illustrate that data is the foundation that information is derived from, and that information forms the basis of knowledge.

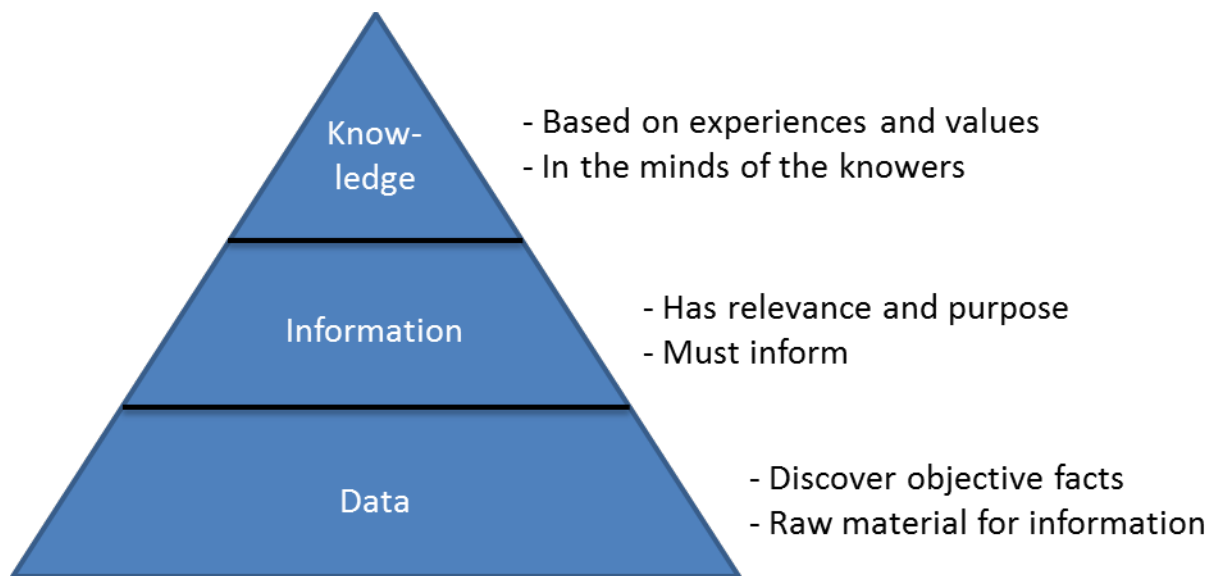


Figure 3: The DIK pyramid. Inspired by “The wisdom hierarchy: representations of the DIKW hierarchy” by Jennifer Rowley, 2007, *Journal of Information Science*, 33(2), p. 164.

Knowledge is a rather abstract concept, and it therefore has been nuanced into various sub-concepts in the literature. Examples of such sub-concepts are tacit versus explicit knowledge, simple versus complex knowledge, systemic versus independent knowledge, group versus independent knowledge and human versus social versus structured knowledge (Berman, Down, & Hill, 2002; Bonache & Zárraga-Oberty, 2008; De Long & Fahey, 2000; Garud & Nayyar, 1994; Harlow, 2008; Leonard & Insch, 2005; Polanyi, 1967). I will not go deeper into the various sub-concepts here, as it is outside the scope of this thesis.

2.1.1 Knowledge transfer

Minbaeva et al. (2003) point out that research on knowledge management reveals that one of the multinational corporations’ main competitive advantages is the capability to create and transfer knowledge within the organisation. As an example; Inkpen and Tsang (2005) argue that organisations with a well-developed ability to transfer knowledge are more productive than organisations that don’t possess this skill. Going through the literature, one finds a lot of papers regarding the knowledge transfer process (e.g. Bresman, Birkinshaw, & Nobel, 1999; Davenport & Pruzak, 2000; Szulanski, 1996).

In the literature, knowledge transfer has been defined by several researchers, and I will

present two definitions here. Firstly, I will present Lucas (2006)'s combination of the definitions of Kostova (1996) and Szulanski (1996), which is that knowledge transfer is the identical or partial replication of knowledge from one place to another involving both a provider and a receiver. Secondly, Argote and Ingram (2000, p. 151) define knowledge transfer in organisations as: “[...] *the process through which one unit (e.g., group, department, or division) is affected by the experience of another.*” Argote and Ingram (2000) continue by arguing that organisational knowledge transfer is revealed through changes in the receiving unit's knowledge or performance, and that knowledge transfer can be measured by measuring the changes in these factors. However, they acknowledge the difficulties in performing this measuring, for instance the difficulty of remove the effect other factors have on the degree of knowledge and performance of the receiving unit during the timeframe of the study.

The definition presented by Lucas (2006) identifies that knowledge transfer involves both a provider and a receiver, whilst Argote and Ingram (2000) does not directly recognise that the subunits has to actively act as a provider or a receiver to be a part of a knowledge transfer. To illustrate this, the source of the knowledge in Argote and Ingram's definition may simply be the key object of the recipient unit's search for knowledge. In such a case, the knowledge source may still affect the transfer indirectly. Also, there is a difference in the two definitions in that the first refers to knowledge whilst the latter refers to experience. However, I have already argued that knowledge is a result of experience. In the rest of this paper, I will combine the two definitions in the following way:

Knowledge transfer is the identical or partial replication of knowledge from one unit to another, involving both a provider and a receiver, such that the receiving unit is affected by the source.

Kang, Kim, and Bock (2010) divide the transfer of knowledge into two types, closed knowledge transfer and open knowledge transfer. Open knowledge transfer happens between a single sender and multiple, unspecified number of receivers, and often takes a public form of communication such that once it is published anyone can access it (Kang et

al., 2010). An example of open knowledge transfer is when an employee posts a document on the company's intranet for anyone to read. On the other hand, closed knowledge transfer happens when there is a single sender and a single receiver of knowledge. In this type of knowledge transfer the target of the knowledge can easily be identified, and the sender can hence build a relationship with the recipient (Kang et al., 2010). In contrast, it is not as easy to identify the destination of the shared knowledge in an open knowledge transfer, and the source of the knowledge cannot control the number or type of recipients. As a result, it is more difficult for the source of open knowledge transfer to build a relationship with the recipients than for the source of closed knowledge transfer. As a result of the nature of open knowledge transfer, it is also a possibility for the receivers to potentially abuse the provided knowledge. In addition, the senders of knowledge in an open transfer cannot expect, in the same degree as senders in closed knowledge transfer, that their contribution will be returned as they will not be able to identify the receivers (Kang et al., 2010). Hence, the factors affecting peoples' choice to share knowledge is different for the two types of knowledge transfer. Based on this, it is important for managers and middle managers of multinational corporations to facilitate for knowledge transfer to happen both in closed and open form to get a level of knowledge transfer as high as possible.

Several studies have been conducted with the mission of identifying factors affecting knowledge transfer (e.g. Bhagat et al., 2002; Minbaeva et al., 2003). Some of the results are that a clear understanding and sharing of the mission statement facilitates knowledge transfer by making employees aware which knowledge is important (Lyles & Salk, 1996) and that the type of knowledge (explicit or tacit) to be transferred affect the effectiveness of knowledge transfer directly (Bhagat et al., 2002). In addition, Argote and Ingram (2000) argue that the task characteristics are found to affect knowledge transfer, especially the similarity across tasks in different contexts, and Attewell (1992) discovered that the higher the costs incurred by transfer, the slower it will occur. Moreover, Szulanski (1996) referred to something he called the "stickiness" of knowledge, and said that a knowledge transfer is 'sticky' if it is not executed in a seamless manner. The examples given above illustrate the variety of factors affecting knowledge transfer. Nevertheless, there are still factors

remaining undetected, supposedly affecting the transfer of knowledge. Further, this presentation highlights the complexity of knowledge transfer, and the point is that both a researcher of knowledge transfer and managers and middle managers working on raising the level and quality of knowledge transfer within their organisation need to be aware of this complexity and be open to the possibility that there might be other, additional undiscovered factors and characteristics affecting the transfer.

As a result of the many studies conducted on knowledge transfer, several frameworks for knowledge transfer has been presented in the literature. For instance, Szulanski (1996) presented a four-stage model consisting of the following steps: initiation, implementation, ramp-up and integration. Yet another example is Minbaeva (2007), who produced a model where the basic elements of knowledge transfer were presented as source, message, recipient and context. Minbaeva's work was based on Szulanski's work from 1996, and it is interesting to observe that the authors agree that the knowledge transfer process consists of elements post the physical transmission. Kostova (1999) also argues for this in her paper, where she considers the knowledge transfer process to continue until the recipient develops a similar set of values for the knowledge as the transmitting entity. In addition, Cohen and Levinthal (1990)'s definition of absorptive capacity as the "ability to recognise the value of the new external information, assimilate it, and apply it to commercial ends" (p.128) falls in line with the views presented above.

However, different researchers have different points of view. Hocking, Brown, and Harzing (2007), for instance, do not agree with the latter view of knowledge transfer. They argue that activities after the physical transfer of knowledge is conducted are dependent on the recipient, and that their decision whether or not to absorb and place value on the knowledge is not part of the transfer process. In this case, it is noticeable that the authors do include search and identifying of knowledge as part of the process, rather than excluding it as a preceding function as well.

I will use the model presented by Minbaeva (2007) to define the knowledge transfer process

in this paper, because it combines two previously utilised and well referenced articles. In this model, three elements of the knowledge transfer process is identified and fits well with communication theory; a sender, the message, and a receiver. In addition, the author emphasises the importance of the characteristics of the context of the knowledge transfer. The model is presented graphically in figure 4 below.



In Bold – elements of knowledge transfer

In Italics – barriers/determinants associated with the four elements of knowledge transfer

Figure 4: Knowledge Transfer: A Schematic Diagram. Adapted from “Knowledge transfer in multinational corporations” by Dana Minbaeva, 2007, *Management International Review*, 47(4), p. 569. Copyright 2007 by Gabler Verlag. Reprinted for scholarly usage.

The model presented by Minbaeva (2007) challenge the view that the characteristics of the transferred knowledge is the only feature affecting the success of knowledge transfer. Minbaeva argues that it is important to include characteristics of the individuals involved in the process of knowledge transfer and the context surrounding the knowledge transfer, to understand the process completely. Below, I will discuss the various elements of Minbaeva’s model for the knowledge transfer processes.

Regarding the first element, *Sender*, Minbaeva (2007) argues that the decision to share knowledge is mainly individual, and that it is driven by the ability and willingness of the knowledge senders. In her study, the behaviour of the knowledge sender is named

“disseminative capacity”. Minbaeva (2007) argues there will be a higher degree of knowledge transfer if the employees of the subsidiary (the knowledge senders) have higher ability and motivation to share knowledge. In the study of the second element, *Knowledge characteristics*, Minbaeva separate between tacit and explicit knowledge, simple and complex knowledge, the specificity of the knowledge, and the availability of the knowledge. Furthermore, the third element, *Receiver*, affect the outcome of the transfer of knowledge, through its absorptive capacity (Cohen & Levinthal, 1990). Minbaeva (2007) argues that there will be a higher degree of knowledge transfer to subsidiaries with employees who are highly motivated and possess high ability to absorb knowledge, than to other subsidiaries. Regarding the fourth element, *Organisational context*, Minbaeva (2007) argues that the more involvement of the focal subsidiary in network relations with other units in the multinational corporation, the higher the degree of knowledge transfer to the subsidiary. This is closely related to the theoretical concepts on the positive benefits as a result from the development of relationships, in social capital theory. In addition, the concept of noise that exists in communication theory may affect the transfer process, as it can be related to the varying levels of disseminative and absorptive capacities, as well as the knowledge characteristics.

To summarise, knowledge transfer is a complex subject that is affected by several factors. Knowledge transfer is a concept that can be found within various disciplines, and it might therefore be difficult to get a complete overview of it. However, I have here presented the most important and relevant theory of knowledge transfer within the scope of the research question of this paper, and believe that it is an adequate presentation. As knowledge theory now has been explained, it is time to embark on team theory.

2.2 Teams

The terms “groups” and “teams” will be used as synonyms in this paper. There are several advantages of using teams within companies, such as creativity stimulation, but there are also some disadvantages to using teams, such as costs, increased likelihood of conflict and lack of individual responsibility (King Iii, 2002). Teams are often used within organisations for

instance when it is confronted by difficult tasks in which the complexity exceeds the capacity of individuals and when the task environment is poorly defined, ambiguous and stressful (Salas, Cooke, & Rosen, 2008). However, it is well documented that groups exploit their potential to very various degrees. Some individuals perform better (social facilitation) and some individuals perform worse (social loafing) when in a group with others (Sjøvold, 2006b). Either way, Salas et al. (2008) argue that organisations increasingly depend on teams as the complexity of the workplace continues to grow, and Devine, Clayton, Philips, Dunford, and Melner (1999) note that the use of teams has become customary among leading corporations today.

Sjøvold (2006b) defines a team as three or more persons who share a goal and interact to reach this goal. He argues that the complexity in the communication increases drastically when the number of people increases from two to three, so that one gets a completely different constellation. Sjøvold (2006b) does not recognise two persons as a team; he claims that there is only a personal interaction between the two individuals. Sjøvold (2006b)'s definition incorporates the idea of setting goals, which several researchers have argued to be one of the strongest psychological guidelines in the business world (e.g. Cyert & March, 1963; Frey & Jegen, 2001; Hackman & Oldham, 1976; Locke, 1968; Mohrman, Cohen, & Morhman Jr, 1995). Another definition of teams is presented by Katzenbach and Smith (1993, p. 112), who argues that it is important to distinguish between teams and other forms of working groups. Their definition is: *"A team is a small number of people with complementary skills who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable"*.

As can be seen, both Sjøvold (2006b) and Katzenbach and Smith (1993) address the number of members constituting a team. Sjøvold (2006b) reasons for a lower limit of three people, but does not set an upper limit of the number of members within a team. In fact, this is supported by the Norwegian Government as the Norwegian Law states *"An organized criminal group is here defined as an organized group of three or more persons whose main purpose is to [...]"* (emphasis added) (Straffeloven § 60 a annet ledd, 1902). Katzenbach and

Smith (1993), on the other hand, argue for an upper limit that is not numbered, in addition to assuming the team to be consisting of two or more members. Katzenbach and Smith (1993) state that a group consisting of a large number of members will be of greater complexity, will face logistical issues and communication problems, and will find it hard to create a common purpose. In such a case the members are likely to create sub-teams within the larger group (Katzenbach & Smith, 1993). Furthermore, King lli (2002) mapped the different definitions of teams in the literature, and identified several characteristics the various definitions have in common. He used this as a basis for defining teams. The characteristics are: (1) *“A team is a diverse group of people with different backgrounds, abilities and knowledge levels to accomplish a specific task”*, (2) *“Members of a team work to achieve agreed upon goals”*, and (3) *“Team members create a self-identity or self-image that becomes a cohesive and motivating force for its members.”* (p. 238)

In this assignment, I will use all the definitions described above, by applying Sjøvold (2006b)'s contribution that a team has to consist of three members or more and Katzenbach and Smith (1993)'s contribution of an upper limit, to King lli (2002)'s definition. Hence, I arrive at the following definition:

A team is three or more persons, together forming a small number of people, with different backgrounds and knowledge levels, and complementary capabilities sharing an agreed upon goal and interacting to reach this goal.

The discipline of team theory is a wide and complex field, but the understanding of it is important for this assignment. This is because the research question specifically addresses teams, and because teams are used as engines for learning in organisations (Mohrman et al., 1995) and, hence, is an important factor for understanding how knowledge transfer in organisations work.

There are many aspects of teams I could address when studying the effect teams have on knowledge transfer (e.g. trust, absorptive capacity). However, as my research question is only interested in culture and maturity when addressing teams, I will limit this section to

team maturity, team culture and other theory necessary to build the foundation for team maturity and team culture.

2.2.1 Roles

When looking at team theory one has to address the subject of roles, even though the subject itself is outside the scope of this paper. The reason why it needs to be addressed is because it forms the foundation of certain topics within team theory. According to Sjøvold (2006b) the topic of roles can be divided into formal roles and informal roles. Sjøvold (2006b) states that formal roles are expectations related to the formal position an individual holds. To illustrate this, the expectations towards a senior manager will be different from those targeting an assistant. Informal roles, on the other hand, are related to the social function and individual augments in the specific group. Examples of expectations associated with the informal roles of the team members are related to task solving, and maintaining group identity and the members' well-being (Sjøvold, 2006b). Furthermore, Sjøvold (2006b) recognises that the informal roles may be completely independent from the formal role an individual holds. Incorporated in the formal roles are the functional roles of the team members, which describes the daily work tasks the employees are hired to conduct, hence, I will refer to both formal and functional roles only as formal roles for the rest of this paper.

2.2.1.1 Formal roles

The importance of formal roles within a team depends on the maturity of the specific team. I will address team maturity in chapter 2.2.2. It is found that formal roles are more important in teams with low levels of maturity than at higher maturity levels (Sjøvold, 2006b). As the formal roles are strongly attached to the daily position held in the organisation, they will vary across organisations. In addition, the formal roles will vary according to which employees are selected to be a part of the team. As formal roles are related to the job description, they are relatively fixed roles, and are independent of the informal role(s) the employee occupies within the team. The formal roles cannot be ignored, as they specify the areas of responsibility an employee have within the organisation and therefore affect the choices taken and line of thoughts occurring. However, Sjøvold (2009) emphasises that it is a

myth that fixed roles are important for a team. Further in this paper, I will not focus on formal roles, as it is not within the scope of my research question.

2.2.1.2 Informal roles

The SPGR (Systematizing the Person-Group Relation) model is a useful tool when studying the different informal roles of a team. This model identifies four basic group functions required for a group to function over time, and looks at the interaction between the functions. The functions are named: control, nurture, dependence and opposition (Sjøvold, 2006b). The control function is occupied by individuals that can be experienced as task oriented, analytical, factual and controlling, and is concerned about following clear and precise rules and routines and maintaining status quo. Individuals holding the nurture function, however, are experienced as friendly, empathic, creative and caring, and are interested in other members' opinions. This group function seems protective and unifying for the team. The dependence function is mainly characterised by obedience, conforming, satisfaction and subservience, and team members taking on this role are normally trusting and accept the tasks given. Lastly, Sjøvold (2006b) claims that individuals occupying the opposition function are provocative, self-willed, competitive, opinionated, assertive, critical to the team's decisions and are constantly challenging status quo.

According to the SPGR model is the informal roles defined by which of the four group functions an individual member of the group holds. The model emphasise that all four of the group functions will affect the team in varying degrees over time, and that each function has characteristics the team cannot do without. However, it is important to notice that there are instances where the individual members can hold more than one function. In the situation where the team members hold several informal roles, and constantly switches between them, one can say that the team is "in balance". The more roles the members of the team holds and the faster they switch between them, the more solid and flexible is the team towards changes in the environment surrounding it (Sjøvold, 2006b). How many of the informal roles each of the team members hold define how mature a team is, which is a subject I will address below.

2.2.2 Team maturity

Sjøvold (2006b) defines a group with a high maturity-level (mature group) as a team where all of the basic group functions are equally present, and every member of the team masters all of the functions. Hence, mature groups are well balanced, and are usually more flexible, more solid, capable of adjusting quickly and the members of such a group will experience mutual dependency to a higher degree. Further, all the members in teams of high maturity will have a relatively equal influence on the team and take up approximately the same amount of space in the group (Sjøvold, 2006b). Sjøvold (2006b) claims that mature groups are capable of solving complex tasks with relatively high quality. In contrast, a low maturity-level group (immature group) is defined as a group where some of the functions dominate over others, and the members will tend to step into roles that fit their zone of comfort and hold only this role. Hence, immature groups are balanced poorly and execute simple tasks or divide the work into individual tasks. Such a group is more vulnerable to the influence of the environment in which it exists (Sjøvold, 2006b). Further, there is not an equal distribution in how much each team member influence the group, and some of the team members tend to take up much more space in the group than others (Sjøvold, 2006b). To illustrate the difference in high and low maturity teams, one can observe groups of low maturity and identify which member hold which group function, whilst this is impossible in high maturity groups where every member hold every function and constantly switches between them.

The SPGR framework explains that group behaviour is measured on a maturity scale from *immature* to *mature*, and suggests four levels of maturity; “Reservation”, “Team Spirit”, “Production” and “Innovation”. In the same way as maturity do not necessarily relate to the age of an individual, these maturity levels of groups must *not* be mixed with the age of the group (Sjøvold, 2006b). In fact, Sjøvold (2014) argues that the performance and maturity level of a team over time is dependent on whether or not suitable team training is conducted. He states that a team trained to reach a certain level of performance and maturity will, if no further training is conducted, experience a reduction of this level over time. This is illustrated in figure 5 below.

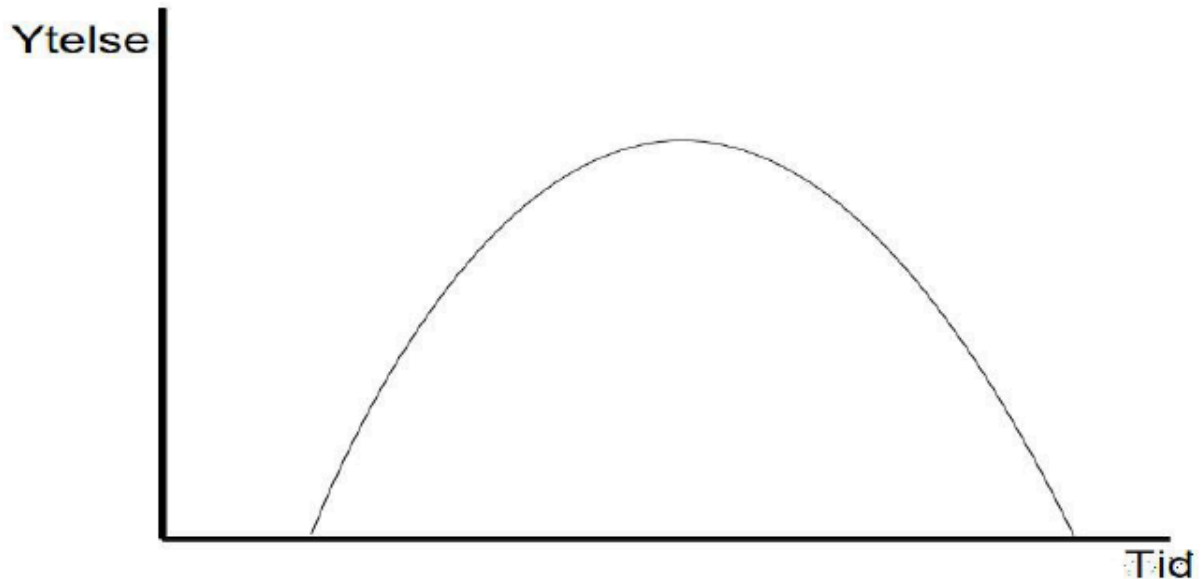
Fig 3.3

Figure 5: Team performance over time. Adapted from “Resultater gjennom team” by Endre Sjøvold, 2014, p. 79. Copyright 2014 by Universitetsforlaget. Reprinted for scholarly usage.

Hence, Sjøvold (2014) argues that the team has to conduct team training continuously to maintain a high level of performance and maturity. In the following sections, I will briefly explain the characteristics of the different levels of maturity.

At the *reservation level*, members of the team share behaviour skills that support nurture. This is a typical situation for newly established groups where few of the members know each other from previous situations, and it is usually low accept for criticism. In this type of group, the members participate to satisfy their own needs and to get more in return than they put into the group. At this level, the group is most effective when the task is clearly defined, and when there is a central and strong leader. However, the group is closed to external influences, there is much potential for polarisation and conflict, and the group cannot exist at this level of reservation for a long period of time; it will either move on to one of the other levels or dissolve (Sjøvold, 2006a, 2006b). Examples of typical teams operating at this maturity level are groups doing voluntary work in the neighbourhood association, a class of

students, people who come together during a crisis, mobs and baseball teams (Sjøvold, 2014).

At the *team spirit level*, dependence is added to the behaviour skills shared by the members, and norms are formed. There is a strong “we”- feeling in team spirit groups, and the members put aside their own needs and wants for the benefit of what is best for the group to reach its goals. At this level, a strong leader is required, and the group is most effective in relatively stable conditions and when the goal is clearly defined, serves everyone’s needs and is not too complicated. It is also helpful for the effectiveness if the team can achieve visible results in a short period of time. There is a low degree of polarisation in groups at the team spirit level, the willingness to share knowledge and skills is high, and it is OK to contribute more to the group than what is given in immediate return. However, the group’s willingness to change is low, and it is closed to external influences (Sjøvold, 2006a, 2006b). Examples of groups operating at the team spirit level are therapy-groups, political parties, cults, teams performing routine tasks and groups in team sports that require coordinated interaction, such as handball and football teams. What is common for all these groups is that they are supposed to provide maximum performance in specific situations (Sjøvold, 2014).

Thirdly, control is added to the behavioural skills *at the production level*. Here, the group is capable of finding the right direction and finding effective ways of solving problems without having a strong leader. Groups at this level appear to be flexible and dynamic, but are only so within given limits. Hence, they are vulnerable towards significant changes in the contexts. The group is willing to change in small, incremental steps, and the group members take it for granted to teach each other individual skills, but it will not accept revolutionary changes very well (Sjøvold, 2006a, 2006b). Examples of groups operating at the production level are ship crews, teaching staff, the boards of companies, groups of athletes in individual sports (team work to promote one person’s success), bike teams and some surgical teams in hospitals (Sjøvold, 2014).

At the *innovation level*, opposition is added as a behavioural skill shared by the team's members. At this level, the members have a basic trust towards each other, and dare to challenge one another. The purpose of the group, at this level, is to create something new, turn into "something more", or simply to grow. The group wants big and revolutionary changes, it is not enough to simply improve gradually with small adjustments. Groups working at the innovation level perform best in complex situations where change happens quickly. At this level, groups actively experiment in pushing boundaries, and the group members pass in and out of the group without losing the identity they have within the team. The communication between the members is of high quality, which means that few good ideas and opportunities are lost (Sjøvold, 2006a, 2006b). Examples of groups operating at the innovation level are special forces in the military, some entrepreneurial groups, successful groups in advertising, art and architecture, successful research teams and some management teams with responsibility for strategy development (Sjøvold, 2014).

The innovation level is the highest level of maturity a group may reach, as all the members of the group master all of the group functions and uses and switches between them continually. In the production level every member of the group masters a rich set of roles, but everyone does not master all the roles. Further, at the team spirit level, there is a certain degree of permanent roles, whilst there are completely fixed roles at the reservation level, which is the lowest level of maturity for a group. Sjøvold (2006b) emphasises that groups do not necessarily develop systematically through each of the maturity levels, most groups do not even reach the fourth level at all. Even though most groups actually start at the reservation level, they might jump straight to the level required of the complexity of the task at hand (Sjøvold, 2006b).

A mature team is able to operate on all four maturity levels presented above, whichever fits the situation best. Such a team will adjust their maturity level according to the complexity of the task at hand, and might therefore sometimes operate on the lower levels of maturity. An immature team, however, is not able to operate on all the different levels, usually only the lowest. Immature teams will therefore not be able to adjust optimally to every situation.

Hence, one can draw the conclusion that a team operating at the innovation level is mature. However, one cannot tell whether a team operating at the reservation or team spirit level has low or high maturity (Sjøvold, 2006a, 2006b).

Even though we have seen that a mature group masters a higher number of situations and solves more complex problems than an immature group, Sjøvold (2006b) emphasise that groups on low maturity-levels might be at least as effective as high maturity groups. This is because the effectiveness is dependent on the complexity of the task at hand and the context the group is in. However, mature teams are able to adjust themselves to do tasks that need less maturity, whilst immature teams cannot adjust to solve more complex tasks without training. Still, it might be a waste to develop a group to become more mature, if it is not required by the task in hand. In fact, Sjøvold (2006b) argues that team building might make the group less effective.

I argue that the maturity level of a team will affect the teams ability and willingness to share and receive knowledge to and from other teams within an organisation. Based on the presented theory above, I believe that the higher the maturity of a team, the better they are equipped to conduct such knowledge transfers.

2.2.3 Shared mental models

Shared mental models (SMM) have been defined as *“the expectations and beliefs held in common by a team about their situation and environment”* (Schlecker, Zacacaro and Burke, 1998 as cited by Priest, Burke, Munim, & Salas, 2002, p. 563). SMMs means that team members have a common understanding of the environment and expectations of performance, and hence allow them to work cooperatively by anticipating and predicting each other’s needs (Salas, Sims, & Burke, 2005). Priest et al. (2002) also underline that SMMs allow the team members to predict each other’s behaviour and actions and the outcomes following these actions. As SMMs construct a framework promoting common understanding and actions, they are important for team effectiveness (Zaccaro et al., 2001 as cited by Salas et al., 2005, p. 566). Further, the impact of SMMs on team effectiveness is tied to the complexity of the work tasks: the higher the complexity and interdependence of the tasks

the stronger the effect of SMMs on the effectiveness, and vice versa. In addition to the effectiveness of the team, Jonker, Van Riemsdijk, and Vermeulen (2011) argue that the team performance improves if the members of the team share the same understanding of the team's tasks. However, it is not desired for the members to have identical mental models as it might reduce the alternative solutions and strategies within the team, and hence the flexibility will be reduced. The mental models of the team members should be compatible, so that they lead to shared expectations (Jonker et al., 2011).

It can be argued that SMMs is a desired outcome of high levels of maturity, and it is further assumed that teams with low levels of maturity do not have the same degree of SMMs. In such low maturity teams, the team members do not challenge each other's mental models, and take for granted that their interpretation and understanding is correct (Sjøvold, 2014). One result of the development of SMMs is efficient communication strategies: *"Shared mental models (SMM) can provide an explanation of how effective teams are able to utilize efficient communication strategies whereas ineffective teams are not"* (Stout, Cannon-Bowers, Salas, & Milanovich, 1999, p. 62). Hence, the development of shared mental models is important in teams.

To which degree the team members try to understand each other's mental models, and the level of focus the members pay to the values of the other members, is referred to as cross-understanding. Naturally, one can expect high levels of cross-understanding within mature teams (Huber & Lewis, 2010). In high levels of cross-understanding, members of a team have to understand and respect the other members within the same team, but they do not, however, have to agree. K. Lewis (2004) contributes to this view by introducing the term "transactive memory system", which is the name for a group-tool for learning where the individuals gain more in collaboration within the group than they do as individuals. A result of the transactive memory system is that the team will be capable of exploiting all of the diverse knowledge contributed from the individuals to perform better. This is obviously very relevant for multinational corporations holding a wide range of diversified knowledge within and between its teams and individual employees.

2.2.4 Team culture

Most teams are characterised by the fact that they have their own culture or an environment that is unique for the specific team. King lli (2002) emphasises that the prevailing culture in the organisation will guide and constrain which team culture is created within a team of the organisation. Schein (2006, p. 17) defines group culture as:

“A pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaption and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems.”

Sjøvold (2006b, p. 143), on the other hand, define group culture as:

“A group's culture is the shared beliefs about what is important and right (values and basic assumptions) and which rules (norms) that govern the interaction between members.

The culture is expressed through the group's role structure and members' behaviour and regulates both specific actions and members' feelings (emotions) surrounding external and internal events”.

As can be read from both definitions, culture will affect the team members on a basic level: it will, for instance, affect what meaning a member attribute to events and symbols within and outside the group. Sjøvold (2006b) states that this power within the culture of groups results in individuals from different cultures to perceive the same things differently. In this paper, I will apply the definition given by Schein (2006) and relate it to the theories of team culture presented by Sjøvold (2006b). These theories are presented below.

As groups can have different cultures, Sjøvold (2006b) defines six types of cultures based on which group function is prominent; synergy culture, nurture culture, control culture, opposition culture, dependence culture and withdrawal culture. I will present the different cultures in the following sections.

In *Synergy cultures*, equality is an important characteristic, and the influence is related to mutual respect more than formal status and roles. The members of such a culture has both

great loyalty and courage to oppose and be critical. This culture is characterised by openness and safety for the members, and there is no transparent division of roles between the members as most members are capable of mastering all group functions. Groups in this culture are mature, and have great potential for growth, both for the group itself and for the individual members (Sjøvold, 2006b).

In *nurture cultures*, members of groups are good listeners, friendly and inclusive. The most important purpose of groups within such a culture is to increase the degree of satisfaction of the members. However, values promoting performance and achievement are absent (Sjøvold, 2006b).

In *control cultures* the role structure is simple and consists exclusively of roles supporting control functions. Members of groups within control cultures are characterised by analytical behaviour, technical expertise, logical thinking, searching for the best solution and orientation towards rational problem solving. However, the creativity within such a group is low and it is not capable of adapting to changes in the environment, hence, crises often occur. The goal the group is working towards is crystal clear and consensual, and is never up for discussion. This inhibits the ability to discover new ideas and to view new procedures as valuable. In fact, these types of groups consider new ideas and new people as threats, and ethnocentrism and a “we are the best”-attitude are prevailing (Sjøvold, 2006b).

In *opposition cultures*, there is cohesion in the feeling of standing united in a rebellion against a perceived threat. Here, there is a predominance of opposition roles, and from being a necessity in well-balanced groups, streamlining of it will be devastating for the trust and interaction within the group. The members of groups within opposition cultures are characterised by tough and aggressive behaviour, whilst the willingness and ability to work towards a shared goal is absent. Here, it frequently arises alliances among the members, mutual suspicion, widespread motivation to take as much as possible of what is perceived as limited resources, and full acceptance of an individual’s right to hold power (Sjøvold, 2006b).

In *dependence cultures* members of groups are loyal, obedient and disciplined towards a fully accepted system or ideology. Prevailing characteristics of such cultures are passivity and submission. Here, the dependence role dominates, but the group is dependent on having a few individuals mastering the nurture and control functions as well (Sjøvold, 2006b).

In *withdrawal cultures* there is no cohesion, and the role structure is loose. It is the opposite of the synergy culture, and might actually be referred to as a non-culture. The members of groups in this situation are independent, but the widespread anxiety, fear of failing, and feeling of being of no use inhibits the members from getting anything done within the community of the group. Any attempt to lead the group towards performance and achievement will be perceived as a hostile act and lead to further withdrawal (Sjøvold, 2006b).

Even though Sjøvold (2006b) distinguished between the six types of cultures, it is emphasised that a group culture normally consists of a more or less balanced mix of these types, with one of the types usually more prominent than the others. Which group culture is considered optimal and most suitable is dependent on the group's tasks and context. However, Sjøvold (2006b) argues that the group needs to be able to cope with several of the cultures simultaneously, as it is negative for one function to dominate over time if the group wants and needs to solve a wide range of tasks and operate in different contexts. For a team to perform as optimal as possible, there must be created a team culture in which every member is encouraged to contribute with their experience, expertise and skills (James & Wooten, 2009). This is important in relation to knowledge transfer, as the organisation is dependent on every member to contribute. Also, the more knowledge there exist within a team (not separately within a single team member) the more knowledge is likely to be transferred from the team.

As can be seen from the theory presented above, the team culture has major influence on how an individual perceive being a member of a team, and the team culture will always be there as a background no matter which tasks and challenges the team will meet. Hence,

team culture will have a significant affect on the knowledge sharing that might or might not happen to and from a specific team. According to Levi and Slem (1995), it is easier to influence and shape the culture in an early phase of the development of a team than to change an already existing and developed team culture. Hence, one should facilitate the development of team culture in the early phases of a team's development. This way, one can influence the team to develop a culture that has positive effect on cross-cultural knowledge transfer within a multinational company.

Even though trust, group cohesiveness and groupthink is not added to this case study as separate variables affecting the knowledge transfer, they both influence the culture within a team. Therefore, it will be given a short introduction to the topics below.

2.2.4.1 Team trust

Trust is a critical element in any team or operation (Ross, 2006), and successful teamwork is built on a foundation of trust. Sjøvold (2009) emphasises trust as a prerequisite for good teamwork, and states that it is created through openness and direct communication. Sjøvold (2006b) has also argued that a person needs to hold all four basic group functions, control, nurture, opposition and dependence (2.2.1.2), to be trusted heavily by others.

As working together often involves interdependence, mutual trust is needed for the team members to work together in an effective manner, and therefore to accomplish the team's and organisation's goals (Mayer, Davis, & Schoorman, 1995). For team trust to apply for a team, the whole team and the team members need to have a shared perception that team trust exists within the team (Edmondson, 1999). Further, clear goals and expectations are two central factors to building and maintaining trust (Ross, 2006).

According to Jarvenpaa and Leidner (1999) informal interaction play a key role at the beginning of a team's life, in creating trust. This is important because the increase of trust decreases the transaction costs within a relationship, since individuals have to involve less in self-protective actions to protect themselves against the opportunistic behaviour of others (Aubert & Kelsey, 2003; Jarvenpaa & Leidner, 1999; Kramer & Tyler, 1996). Trust is especially

important regarding multicultural and multinational organisations, where the workforce is diverse and the members of the workforce is less able to rely on interpersonal similarity, common background and experience to contribute to enhance the willingness to work together (Berscheid & Hatfield, 1978; Jackson & Alvarez, 1992).

According to Lencioni (2005), trust within a team is so important that the lack of it will lead to a number of dysfunctionalities like fear for conflicts, lack of involvement and lack of attention to results. This implies that a team with team trust and a team without team trust have very different team cultures. Further, Baron and Kerr (2003) highlights trust as an element separating a cooperating from a non-cooperating team member.

2.2.4.2 Group cohesiveness

As the members of a team get to know each other and learn about each other's personalities and strengths and weaknesses, group cohesiveness is created and developed. Group cohesiveness is a characteristic commonly seen in high-performance teams. The members of highly cohesive teams are more cooperative and effective in achieving the goals they set for themselves (Oxford Brookes University, 2011). If there is a lack of group cohesiveness, it might occur unnecessary stress and tension among the team members, which will affect the team performance (Alvarez, Butterfield, & Ridgeway, 2014). However, too much group cohesiveness might lead to groupthink (Callaway & Esser, 1984).

Groupthink is described as excessive belief in the group being right, and constant efforts to achieve consensus in the group (Janis, 1972). Groupthink is a threat to team effectiveness and might occur when there is a low level of trust within a team (Janis, 1982 as cited by Edmondson, 1999), in addition to high levels of group cohesiveness. According to Levin and Rolfsen (2004) groupthink occurs when the team members becomes more concerned about agreeing and creating harmony within the group, than to come up with new ideas. Instead of finding new and possibly better answers and solutions one seeks to find a solution the team can agree upon. Edmondson (1999) argues that groupthink implies a lack of interpersonal risk taking and says that it can be recognized as a lack of interpersonal trust. This can reduce

the team members' willingness to disagree with each other and challenge each other's views.

It is now obvious that even though there are a lot of upsides to having a supporting and including team culture, a too supportive team culture might be problematic for the team as well, as it might lead to groupthink.

2.3 National culture

The term "culture" might be used in many contexts, and is mostly used for referring to societies or ethnic or regional groups. However, culture may be applied equally to other contexts, for instance an organisation (Hofstede, 1980). Hofstede (1980, p. 25) defined culture as: *"The collective programming of the mind which distinguishes the members of one human group from another"*.

The definition presented above is short and precise, however, Hofstede (1980) acknowledge that it is not a complete definition. For further clarification, he explains that collective programming of the mind may incorporate shared opinions, attitudes, values and goals. Furthermore, Hofstede (1980) argues that in the sense of his definition, culture incorporate systems of values; and values are among the building blocks of culture. According to Ghemawat (2001), cultural distances created between nations may be the result of differences in ethnicity, religion, language and norms.

Geert Hofstede has published several papers and books about culture, and conducted an extensive research in a number of countries for identifying culturally based differences and similarities. Based on this, he has presented six cultural dimensions that can be used for analysing and comparing different cultures: Power distance, Uncertainty avoidance, Individualism vs. Collectivism, Masculinity vs. Femininity, Long- vs. Short-term orientation, and Indulgence vs. Restraint (Hofstede, 2013). These six dimensions will be presented in the following sections.

The focus of the *Power Distance* dimension is to which degree a culture accepts human inequality, in for instance power, prestige, wealth and authority, between people in the society and inside organisations (Hofstede, 1980). Hofstede (1980, p. 99) defines power distance as the following: “*The power distance between a boss B and a subordinate S in a hierarchy is the difference between the extent to which B can determine the behavior of S and the extent to which S can determine the behavior of B*”. In societies with high degree of power distance, there is a general accept for people having their specific place and ranking in the society, and one does not need to justify their place. In cultures with a low degree of power distance, however, individuals strive for a uniform distribution of power, and require a justification for differences. Further, Hofstede (1980) argues that unequal power distribution is the essence of organisations, and says that the distribution is formalised in a hierarchy in most utilitarian organisations.

A culture’s tolerance for uncertainty and ambiguity is the base for the culture’s *Uncertainty Avoidance*, and this might be reflected in the focus regarding rules, safety and stability in the work situation and stress (Hofstede, 2013). Differences in uncertainty avoidance implies the differences in how people perceive opportunities and threats in their environment and how they act upon them (Schneider & De Meyer, 1991). According to Hofstede (1980) uncertainty avoidance also includes the uncertain aspect of the future, and whether one wish to control it or face it with an open mind. Characteristics of high uncertainty avoidance are clear and rigid norms for how to behave, and people with high uncertainty avoidance are in general intolerant for abnormal people and ideas. Low uncertainty avoidance, on the other hand, is often characterised by a more relaxed atmosphere where execution and result is higher valued than norms and principles (Hofstede, 1980). Cultures with high uncertainty avoidance emphasise stable careers and minimal ambiguity, whilst cultures with low uncertainty avoidance tend to tolerate behaviour and opinions different from their own (Cavusgil, Knight, & Riesenberger, 2012).

The aspect of *Individualism vs. Collectivism* refers to whether a person is functioning primarily as an individual or are integrated in groups (Hofstede, 1980). In addition to

Hofstede (1980)'s work, several papers have argued that this dimension is the major distinguishing characteristic in the way people analyse social behaviour (e.g. Earley & Gibson, 1998; Erez & Earley, 1993; Triandis, 1989). In collectivist cultures, people are integrated into strong cohesive ingroups that protect them throughout the lifetime, in return for unconditional loyalty. Put more generally; people in such cultures usually prefer strong, emotional bonds between individuals (Hofstede, 2013). People in collectivism cultures are motivated by obligations, duties and norms imposed by the collectives, and are inclined to give priority to the goals of these collectives over their own personal goals (Bhagat et al., 2002). In individualistic cultures however, Hofstede (2013) argues that there are weaker social bonds between individuals, and one is expected to take care of themselves. According to Bhagat et al. (2002), people in such cultures view themselves as independent of collectives, act according to his or her own self-interest, and are motivated by their own needs, rights, preferences and contracts. As we can see then, the degree of interdependence between individuals is therefore the fundamental distinction between individualism and collectivism. In collectivist cultures it is called for greater emotional dependence of members on the organisations in which they work; in a culture in balance, the organisations should assume a broad responsibility for their members (Hofstede, 1980).

The dimension of *Masculinity vs. femininity* refers to a society's orientation based on traditional male and female values. Masculine cultures value competitiveness, assertiveness, ambition, accomplishments, courage, confidence, dominance and the accumulation of wealth, whilst in feminine cultures people value relations, modesty, nurturance, helpfulness, and quality of life (Hofstede, 1980). However, it is worth noting that Hofstede (2013) has found that there are bigger differences in men's culture across nations than women's, therefore he characterises masculine cultures as cultures where men are highly competitive and confident, and there is a bigger division of the gender roles in the society. Hofstede (2013) refer to feminine cultures where men are more modest and caring, with a smaller division of the genders roles. In masculine cultures, organisations are more task-oriented and materialistic (Hofstede, 1980), and people are in general focused on their career, earning money and may care little for others. Here, the gender wage gap is higher, there are

fewer women in management and employees prefer higher pay to leisure time. In feminine cultures, the gender wage gap is smaller, there are more women in management, and employees prefer fewer working hours to higher pay (Tidwell, 2013).

The fifth dimension, *pragmatic vs. normative*, describes “how people in the past as well as today relate to the fact that so much that happens around us cannot be explained” (The Hofstede Centre, 2014a). This dimension was previously named *long-term vs. short-term orientation*, but was changed: “[...] the 5th dimension of national culture has changed from *Long-Term Orientation (LTO)* to *Pragmatism*. The altered name is a way of avoiding the misunderstanding that this dimension is merely about time orientation, which the previously name seemed to indicate [...]” (The Hofstede Centre, 2014b). This dimension was originally added to the framework in 1991 to describe whether a culture tends to set aside short-term satisfaction in order to achieve long-term success (Hofstede, 2013). In pragmatic societies, most people believe that it is not possible to fully understand the complexity of life and they therefore do not have the need to explain everything. People within such cultures believe that the truth depends on the situation, context and time. Hence, they have the ability to accept contradictions, adapt to the circumstances, show a strong inclination to save and invest, and is persistent in achieving results (The Hofstede Centre, 2014a). In normative oriented societies, on the other hand, most people show a strong desire to explain as much as possible. They want to establish the absolute truth, exhibit great respect for social conventions and traditions, show a relatively small inclination to save and invest for the future, and have a focus based on achieving quick results (The Hofstede Centre, 2014a).

Indulgence vs. restraint is a dimension that also was added to the framework in 1991 (Hofstede, 2013), and expresses the extent to which members in a society try to control their desires and impulses. Cultures allowing relatively free pleasure of basic and natural human drives relating to enjoying life and having fun are indulgences. In contrast, restrained cultures suppresses such pleasure, have a belief that such gratification needs to be curbed, and controls it by means of strict social norms (Hofstede, 2013).

Through the discussion presented above, it is evident that national culture will have an effect on knowledge transfer. Lucas (2006) argues that the subsidiaries' position along each of Hofstede's cultural dimensions will significantly affect the possibility of knowledge transfer between subsidiaries of a multinational corporation. When I refer to national culture in the rest of this assignment, I will apply Hofstede's dimensions as a basis. This is because it is an acknowledged framework and I believe it can be used to address the cultural challenges in knowledge transfer in a good manner. The framework is especially well suited to target differences between nations, and thus knowledge transfer *across* national borders.

The values individuals hold as a result of their national culture governs their attitude related to change and how they will react to the introduction of something new (Schein, 1985). Hence, the national culture will affect the willingness for individuals to share their knowledge, and to absorb knowledge provided from others. This statement is supported by several researchers (e.g. Bhagat et al., 2002; Javidan, Stahl, Brodbeck, & Wilderom, 2005; Kedia & Bhagat, 1988). One of the authors on this subject, Lucas (2006), claim that efforts of knowledge transfer are most likely to be successful when both sides of the transfer are culturally aligned with each other.

2.3.1 Country scores

As have already been stated, I will be using Geert Hofstede's national dimensions when I refer to national culture in the rest of this assignment. Hence, I find it appropriate to present the ratings of Norway, Poland and Russia among the six dimensions. Further, a short comparison of the countries, in regards to Hofstede's dimensions, will be given.

2.3.1.1 Norway

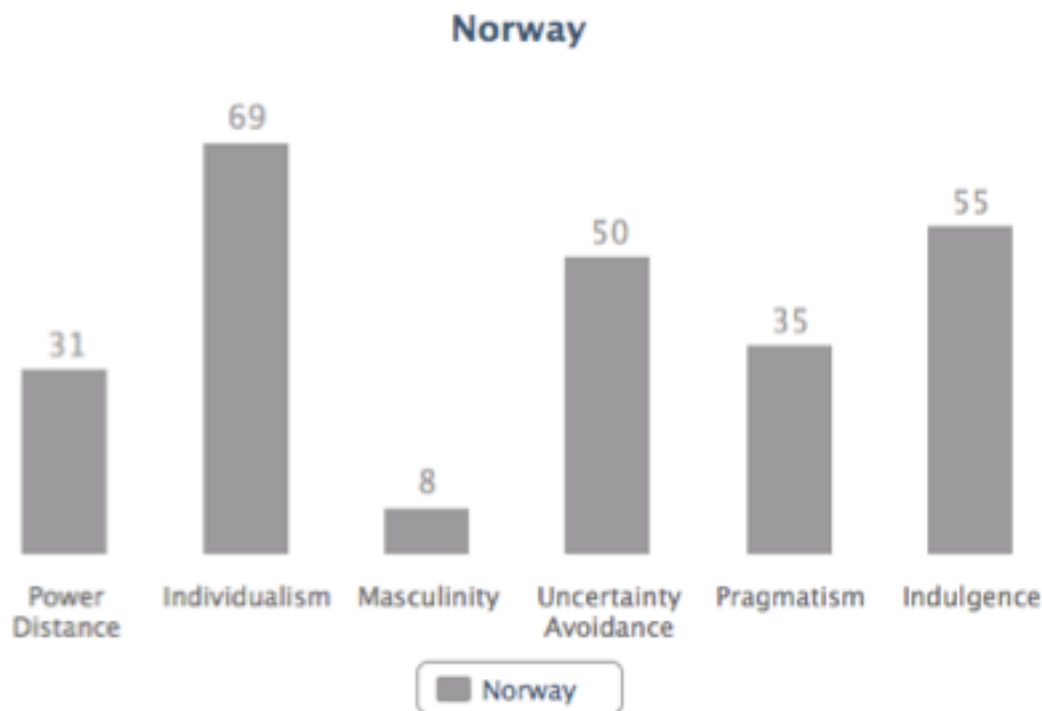


Figure 6: Norway along Hofstede's six dimensions of national culture. Adapted from "Norway – Geert Hofstede" by The Hofstede Centre, 2014. Reprinted for scholarly usage.

Norway scores low on the Power Distance dimension. According to The Hofstede Centre (2014c), this means that Norwegians are independent, uses hierarchy for convenience only and support equal rights. Norwegian leaders are coaching and the management in companies facilitates and empowers their employees. The power in the companies is decentralized, managers count on the experience of their team members, and the employees expect to be consulted. The attitude towards managers are informal and on first name basis (The Hofstede Centre, 2014c). Further, Norway is considered an individualistic society, as it scores a total of 69 on this dimension. This means that the "self" is important and individual, personal opinions are valued and expressed. The right to privacy is important and respected, and there are clear lines between work and private life in the Norwegian culture. In this individualistic society, managers focus on managing the individuals, workers thinks in terms of individual careers, and work mobility is high (The Hofstede Centre, 2014c). In regards to masculinity, the Norwegian culture is the second most feminine society in the

world, after Sweden. Valued and encouraged behaviour in this culture is levelling with others, consensus, "independent" cooperation, sympathy for the underdog and other softer aspects of culture. Striving to be better than others is neither socially nor materially rewarded, focus is on well-being, and status is not shown. Incentives such as free time and flexibility are favoured, and people "work in order to live". Effective managers are supportive and decision-making is achieved through involvement. Taking care of the environment is important in this feminine culture (The Hofstede Centre, 2014c). Further, Norway has an inconclusive score in the uncertainty avoidance dimension, which means the country does not indicate a preference on this dimension (The Hofstede Centre, 2014c). The Norwegian culture is more normative than pragmatic, as the country scores the relatively low value of 35 on this scale. This means that Norwegian people have a strong concern with establishing the absolute truth; they are normative in their thinking. In this culture people exhibit great respect for traditions, a relatively small propensity to save for the future, and focus on achieving quick results (The Hofstede Centre, 2014c). Lastly, Norway has an intermediate and therefore inconclusive score of 55 in the dimension of indulgence (The Hofstede Centre, 2014c).

2.3.1.2 Poland

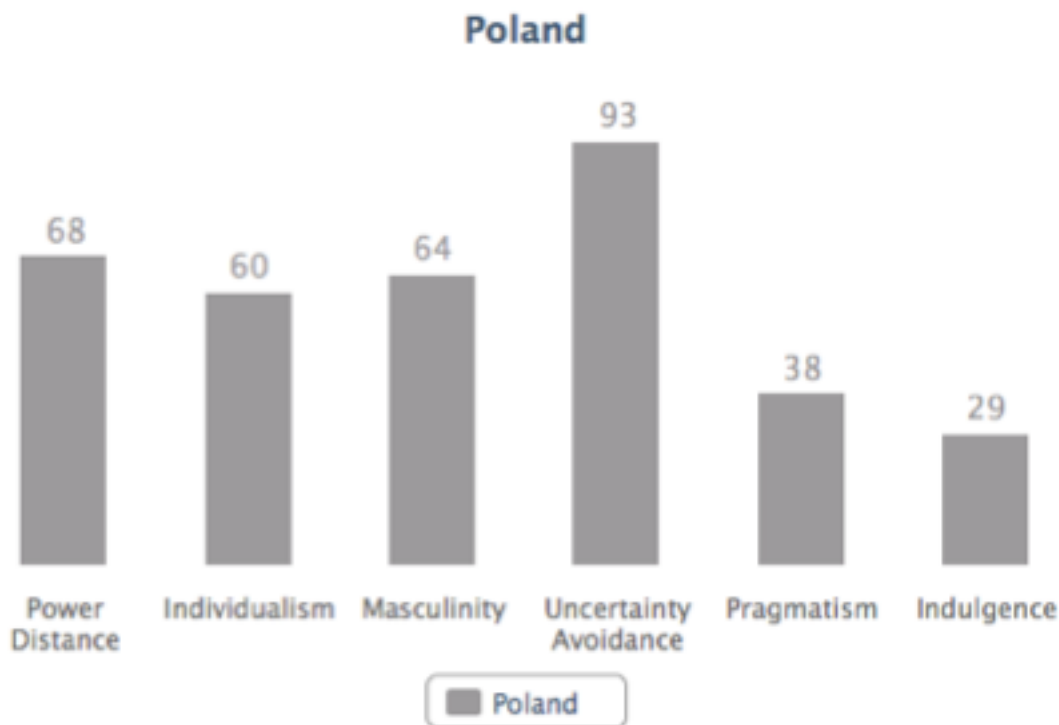


Figure 7: Poland along Hofstede's six dimensions of national culture. Adapted from "Poland – Geert Hofstede" by The Hofstede Centre, 2014. Reprinted for scholarly usage.

In the power distance dimension, Poland is seen as a hierarchical society, as it scores 68. People within the Polish culture accept a hierarchical order in which everybody has a place, and they do not require further justification for this. Centralization of power within organisations is popular, subordinates expect to be told what to do and the ideal boss is a benevolent autocrat (The Hofstede Centre, 2014d). Further, Poland scores a value of 60 on the dimension of individualism, and is also considered an individualistic society. In this society people are expected to take care of themselves and their immediate families only. Similar to in the Norwegian individualistic culture is the relationship between employers and employees in the Polish culture also a contract based on mutual advantage, and decisions about hiring and promotion are supposed to be based exclusively on merit. Also in this culture, management is the management of individuals (The Hofstede Centre, 2014d). The Polish culture is a masculine society, with a score of 64 on the respective dimension. In such cultures people "live in order to work". Here, managers are expected to be decisive and

assertive, and competition and conflicts are resolved by fighting them out (The Hofstede Centre, 2014d). Moreover, Poland scores a very high value on the uncertainty avoidance dimension, 93. This means that the culture in this country has a very high preference for avoiding uncertainty, and is intolerant of unorthodox behaviour and ideas. Countries exhibiting such a high uncertainty avoidance maintain rigid codes of belief and behaviour, and there is an emotional need for rules, regardless of whether the rules seem to work or not. Further, in such cultures time is money, people strive to be busy and work hard, and security is motivational for the individuals. Precision and punctuality is the norm (The Hofstede Centre, 2014d). Poland scores a low value regarding the pragmatism-dimension, which means that the Polish culture is more normative than pragmatic (The Hofstede Centre, 2014d). Lastly, Poland scores 29 in the last dimension, meaning that the Polish culture is a culture of restraint. This implies that the Polish have a tendency to be cynical and pessimistic, have the perception that their actions are restrained by social norms and feel like indulging is wrong. In contrast to indulgent societies, restrained cultures do not emphasis leisure time and control the gratification of their desires (The Hofstede Centre, 2014d).

2.3.1.3 Russia

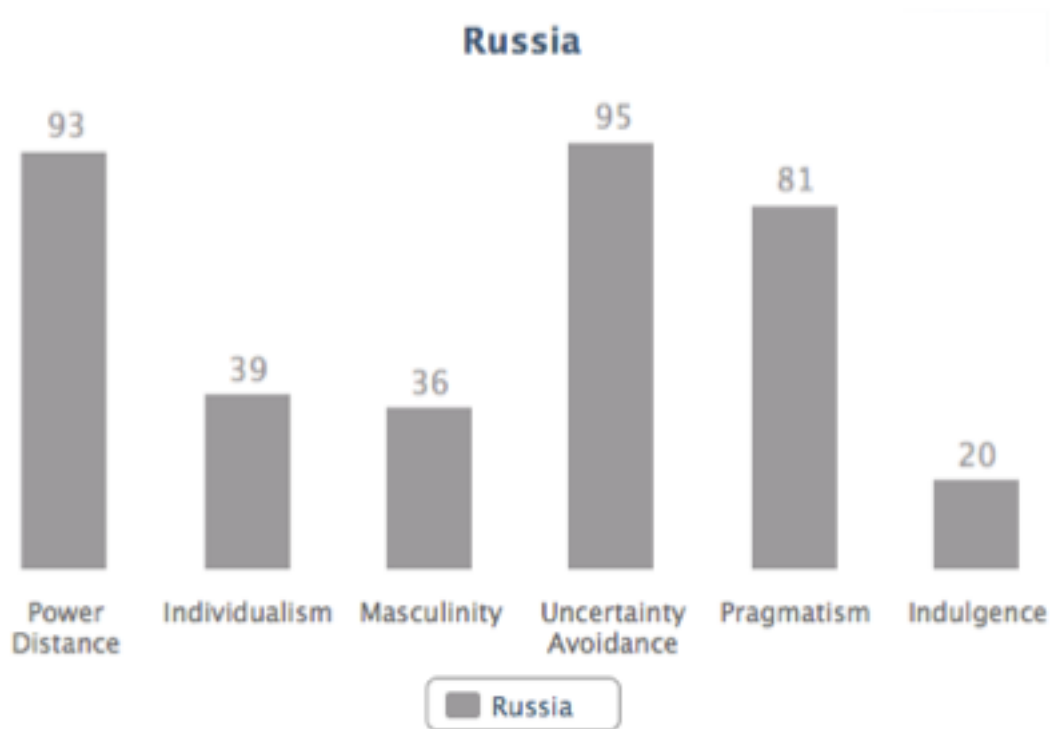


Figure 8: Russia along Hofstede's six dimensions of national culture. Adapted from "Russia – Geert Hofstede" by The Hofstede Centre, 2014. Reprinted for scholarly usage.

Russia scores very high on the power distance dimension, namely 93. This implies that Russia is a society in which power is very distant (The Hofstede Centre, 2014e). Further, Russia scores relatively low on the dimension of individualism, and the score of 39 implies that the Russian culture is more a collectivistic society than an individualistic one (The Hofstede Centre, 2014e). Russia is a feministic society, scoring 36 on the masculinity-dimension. The Russian culture does not reward people who strive to be better than others, and one might notice that Russians at workplaces and when meeting strangers rather understate their personal achievements, contributions and capacities. They talk modestly about themselves. Dominant behaviour might be accepted when it comes from the boss, but is not appreciated among peers (The Hofstede Centre, 2014e). In the uncertainty avoidance dimension, Russia scores the very high value of 95. This indicates that Russians feel very much threatened by ambiguous situations. Detailed planning is very common and Russians prefer to have context and background information. When interacting with strangers, Russians appear very formal

and distant (The Hofstede Centre, 2014e). Russia also scores high on the pragmatism-dimension, and is hence a country with a pragmatic mind-set. In such cultures people believe that the truth depends very much on the situation, context and time. Russians show an ability to adapt traditions easily to changed conditions, and a strong propensity to save and invest (The Hofstede Centre, 2014e). Lastly, as can be shown through the low score of 20 in the indulgence-dimension, Russia's culture is restrained. As already stated, such cultures have a tendency to cynicism and pessimism, and do not put much emphasis on leisure time. People within these types of cultures believe that their actions are restrained by social norms and feel that indulging themselves is wrong (The Hofstede Centre, 2014e).

2.3.1.4 Comparison

To summarize, we can see that Norway and Poland is equal in being individualistic and normative societies. However, they differ in that the Norwegian culture is a feminine culture of low power distance, whilst Poland has a masculine culture of high power distance and uncertainty avoidance. Further, one can see that Russia and Norway is similar in only the masculinity-dimension; both countries have a feminine culture. The countries differ in power distance, individualism and pragmatism. Lastly, Poland and Russia have a more similar national culture than Norway has with either of the two. Russia and Poland are both restrained cultures with high power distance and uncertainty avoidance. However, the Polish culture is individualistic, masculine and normative, whilst the Russian culture is collectivistic, feminine and pragmatic.

3 METHOD

In this chapter, the thesis' use of method will be described. First, I reason the choice of method and describe the research design and research method. Then, follows a description of the methods used to collect data, and the reasoning for the selection of these various methods.

3.1 Choice of method

According to Yin (2014) one has to choose a method in order to answer a research question. Grønmo (2004, p. 29) defines the term "method" as "*the specific procedures for the planning and implementation of specific scientific studies*". Which method is most appropriate to use in a study is dependent on which social topic and issue is being studied (Grønmo, 2004). Therefore, I have used my research question actively when searching for the most appropriate method to apply to this study. Yin (2014) explains that when answering questions of "why" and "how", and the investigators have little control over the events, the preferred method is case studies. The research question presented in this paper asks a "how"-question, which implies that this thesis should be conducted as a case study. Further, Yin (2014) points out that a choice must be made between conducting a single- or a multiple- case study. Yin (2014) stresses that one should always choose a multiple-case study if possible, because it will strengthen the analytical findings and conclusions. In my research, I decided to conduct a multiple-case study.

The first thing I had to decide upon when conducting the research for my thesis was the research design, which will be addressed below.

3.2 Research design

Yin (2014) states that there is an implicit, if not explicit, research design to every empirical study. He further explains that the research design of a study is the logic that links the data to be collected to the initial research questions and further to the conclusions being drawn.

When conducting research, one should try to avoid the situation in which the evidence does not address the initial research questions, and the main purpose of a research design is to help with this (Yin, 2014). Frankfort-Nachmias and Nachmias (1992, pp. 77-78), has a more specific definition of the research design of a study and say it is the plan that *“guides the investigator in the process of collecting, analyzing, and interpreting observations. It is a logical model of proof that allows the researcher to draw inferences concerning causal relations among the variables under investigation”*. Both definitions emphasize the importance of having a research design when conducting a study. The research design used in this assignment is the case study. Yin (2014) has a twofold definition of case studies consisting of its scope and features. The latter will not be address further here. The scope of a case study is formulated as follows: *“A case study is an empirical inquiry that investigates a contemporary phenomenon (the “case”) in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident”* (Yin, 2014, p. 16).

There are several reasons why the case study was chosen as the research design of this thesis. First of all, the research question of this thesis is explanatory and rise a “how”-question, which according to Yin (2014) is likely to lead to the use of a case study, history, or experiment as the preferred research method. Secondly, Jacobsen (2005) states that case studies are suitable when one wishes to describe what is specific by and characterises a phenomenon, for instance an organisation or a unit within an organization. This suits well with my thesis, as I search to describe the characteristics of knowledge transfer happening across organisational units. Thirdly, as shown above, Yin (2014) claims that a case study is especially appropriate when the phenomenon is investigated within its real-world context and one does not have control over behavioural events. This also suits well with my thesis, as I conduct my research on teams within Powel and Conformat in the context in which they conduct their daily operations, and I take into account how they are affected by this context. Further, I do not have control over behavioural events that might affect the team members.

Yin (2014) presents a 2x2-matrix including four basic types of designs for case studies. The four types are: single-case holistic designs, single-case embedded designs, multiple-case holistic designs, and multiple-case embedded designs. The matrix is presented in Figure 99 below.

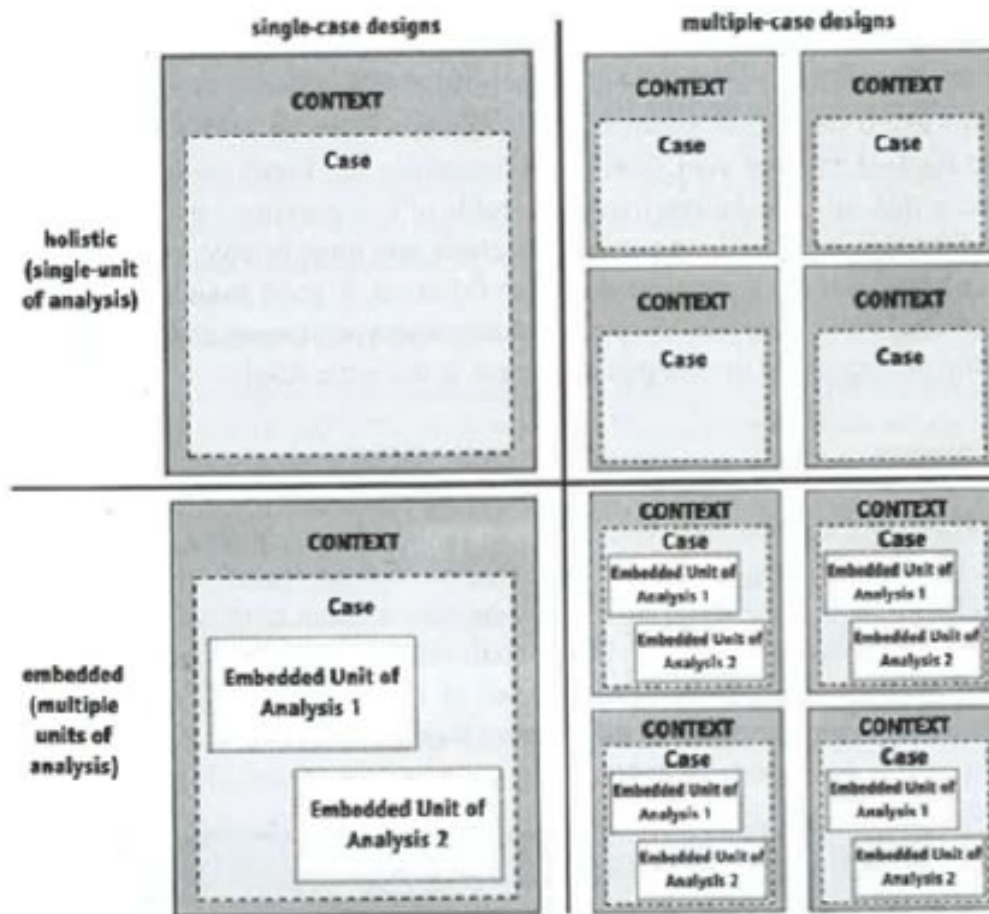


Figure 9: Basic Types of Designs for Case Studies. Adapted from “Case study research: design and methods” by Robert K Yin, 2014, p. 50. Copyright 2014 by SAGE. Reprinted for scholarly usage.

The common feature of all the four basic types is that they all include the desire to analyse contextual conditions in relations to the case. The dotted line between the case and the context implies that the boundaries between the two are not likely to be sharp. Most qualitative researchers believe that the behaviour of a person has to be understood within a specific context, the context of this person’s life, and this context cannot be ignored or held constant (Miles & Huberman, 1994). If one does not take this context into account, one

is in the risk of misunderstanding and misinterpreting the entire situation. Based on the context in which each individual is situated within, each of the respondents might have a different approach to the subject in question, and the researcher needs therefore to check for bias (Ketokivi & Schroeder, 2004).

According to Yin (2014), the main difference in designing case studies lies between single- and multiple-case study designs. The single-case design is appropriate (a) where the case represents (1) a critical test of existing theory, (2) an extreme or unusual circumstance, or (3) a common case, or (b) where the case serves a (1) revelatory or (2) longitudinal purpose (Yin, 2014). As already shown, single-case studies can be divided into two parts depending on whether they are holistic or embedded. A single-case study is holistic if it examines only the global nature of an organisation, and it is the preferred design if there are no sub-units. Embedded single-case studies, however, involve units of analysis at more than one level. This is the case when one gives attention to several subunits when examining only one organisation (Yin, 2014).

In the situation where one study contains more than one single case, the study has used a multiple-case design. In recent years, such designs have increased in frequency (Yin, 2014). The logic underlying the use of multiple-case study design is replication, not sampling. Hence, each case must in advance be selected carefully so that it either predicts similar results (literal replication) or predict contrasting results for anticipatable reasons (theoretical replication)(Yin, 2014). According to Herriott and Firestone (1983), the evidence from multiple-case studies are often considered more compelling than evidence from single-case studies; hence multiple-case studies are regarded as being more robust than single-case studies. However, multiple-case studies often require more resources and time than single-case studies. There are researchers arguing for both designs (single- and multiple-case studies) to be better than the other. For example, Eisenhardt (1991) supports the use of multiple-case study design, whilst Dyer and Wilkins (1991) prefer the single-case study design. From this, one can draw the conclusion that it is possible to create good theory both

through the use of single- and multiple- cases as long as one chooses the design most appropriate for the setting one is in.

In this thesis I chose to use a multiple-case design, as I had access to respondents in two companies. These two companies are both knowledge-intensive and both use the Scrum-methodology of working in their daily operations. I expect the results in the two companies to be similar, i.e. literal replication. Further, as I am investigating two different offices (i.e. sub-units of one organisation) within both Powel and Conformat, it is evident that my study has an embedded multiple-case design.

When choosing the case, the most important criterion is that I can use the case to answer the research question. In this relation, I am focusing on companies that have divisions in several different countries. Further, for a company to be chosen as the case, it had to be possible for me to get in contact with the specific company to conduct interviews. The company also had to be willing to spend time and resources to help me conduct the research. Based on the criteria listed above, I came in contact with both Powel and Conformat, who were willing to provide me with useful respondents within their companies.

3.3 Research method

As the research design for the thesis is chosen, the research methods has to be determined. A research method is a strategy of inquiry which moves from the underlying philosophical assumptions to research design and data collection (Myers, 1997). Hence, it is simply a technique for collecting data (Bryman, 2008). Following, the way in which the researcher collects data is influenced by the choice of research method (Myers, 1997). There are numerous different research methods to use in a case study, and the most common are documentation, archival records, interviews, direct observation, participant-observation, and physical artefacts (Yin, 2014). Research methods are traditionally divided into two categories; qualitative and quantitative (Johannessen, Tufte, & Christoffersen, 2006). Qualitative research is to collect, analyse, and interpret data by observing what people do and say, and refers to the meanings, concepts, definitions, characteristics, metaphors,

symbols and descriptions of things. Quantitative research, on the other hand, refers to counts and measures of things (Geocities, 2006). The research question is usually guiding the choice between qualitative and quantitative design (Askheim & Grenness, 2008). Where possible, one should use as many different sources of evidence as possible. This is called triangulation and might make the findings of the study more accurate and convincing (Yin, 2014).

To enlighten the research question in an appropriate manner, I chose to combine quantitative and qualitative research. The main part of the collected data is qualitative and obtained from interviews and documents, but there has also been collected some quantitative data through an SPGR-survey. Both Grønmo (2004) and (Yin, 2014) supports the combined use of qualitative and quantitative research in one study, as they underline that the two methods are complementary methods, not substitutes. The SPGR-surveys and the interviews were conducted at different points in time, and were not combined until they were interpreted and analysed. This combination of qualitative and quantitative research is called mixed method research. Mixed methods research enable addressing more complex research questions and to gather a richer and stronger selection of evidence than what could be completed with the use of only one method. Hence, mixed methods research provides a greater basis for drawing a conclusion (Yin, 2014).

The next subsections describe the methods used, and how they have been applied for data collection.

3.3.1 Documentation

Document data are a stable, precise and subtle source and has wide coverage in terms of both time and actions (Yin, 2014). According to Yin (2014), almost all case study topics may have use for relevant documentary information. Some of the document data I have had access to during the study were and are publicly available (e.g. on Confermit's and Powel's websites). Examples of document data used in this study are the annual reports for Powel (2012 and 2013) and Confermit (2012). Archival data differs from document data in that they

often are internal documents that are more difficult to access, but they are attractive to access as they have the same positive properties as document data, in addition to being more precise (Yin, 2014). Examples of archival data made accessible for me during this research are the SPGR data of two teams in Confermit from 2011, and the new organizational chart for Powel valid from 01.02.2014 not publicly accessible at this time. By using both document data and archival data in my study I have been able to obtain a more comprehensive picture of the case, and the findings are probably more valid.

3.3.2 SPGR

SPGR (Sjøvold, 2006b, 2007, 2010) is short for “Systematizing the Person-Group Relation”, and has its roots in ideas from Parsons, Rarson, Bales, and Shils (1953), Bales, Cohen, and Williamson (1979) and Bales (2000). The idea is that there exist certain social patterns that can be identified through systematically observation of behaviour (Sjøvold, 2010). A detailed description of SPGR will be given in the following chapters.

3.3.2.1 SPGR field diagram



Figure 10: SPGR field diagram. Adapted from “The SPGR manual” by Endre Sjøvold, 2002. Copyright 2002 by SPGR publishing. Reprinted for scholarly usage. Translated.

Several different analyses based on SPGR data exists, and the degree of detail and focus of these analyses is dependent on level of feedback and intervention (Sjøvold, 2002). One of the most basic and most frequently used displays is the field diagram, which shows the relations between the subjects being analysed (Sjøvold, 2006b). The virtually presentation of the relations between the subjects is a “snap-shot” of the group’s dynamic at a given point in time, and one might therefore take several “snap-shots” to monitor the group’s development over time (Sjøvold, 2002).

The diagram is divided into three parts representing the three behaviours control, nurture and opposition, and is coloured blue, green and red, respectively. The objects or persons analysed will appear as circles in the chart, where the size, colour and location is dependent on the characteristics of the specific object or person (Sjøvold, 2006b). Persons being analysed are usually members of a particular group, whilst objects being analysed might be for instance “the ideal leader” (Sjøvold, 2002). The size of the circle indicates the degree of influence the object or person has on the other objects or persons, the larger the more influence (Sjøvold, 2010). Further, the colours of the border of the diagram limits sectors of behaviour that have a specific meaning to a team’s cooperation: the area limited by a yellow border illustrate behaviour that supports constructive and goal oriented work; light grey limits an area of behaviour that is occasionally necessary, but might be dangerous if it is too much of it; the dark grey area symbolises behaviour that inhibits constructive teamwork (Sjøvold, 2002).

The colour of a circle indicates which specific role or function the object or person holds (Sjøvold, 2014). A blue circle indicates that the unit of analysis is holding a control role. These objects or persons are task-oriented and analytical, and if the circle is large and close to the red sector the object or persons might be perceived as rigid and sticking to the rules (Sjøvold, 2002). Persons or objects symbolised by green circles are holding nurture roles and are friendly, informal, open and democratic. However, if the circle is large and located far down in the green sector, they might be perceived as overprotective (Sjøvold, 2002). Further, red circles illustrate person or objects that holds opposition roles and shows a

distinct intolerance for control, express resistance towards authorities and refuses to conform. Still, this type of roles might sometimes be an important corrective for a group (Sjøvold, 2002). Persons or objects symbolised by light grey circles holds dependency roles and are humble, cautious and loyal. Such roles are not likely to raise their voices if not specifically asked to do so (Sjøvold, 2002). Behaviour supporting the dependence feature is marked as small circles in the area around the line between the control- and nurture-parts (Sjøvold, 2006b). Circles in the SPGR field diagram might also have a dark grey colour, symbolising persons or objects holding withdrawal roles. When these circles occur in the red sector and are small of size, it indicates that the person or object is showing signs of discouragement, resignation and that they believe the teamwork is too demanding or entirely tedious (Sjøvold, 2002). Lastly, a yellow circle indicates that a person or object holds a synergy role. This means the person or object use a relatively balanced range of behaviour and do not take on specific roles. These circles will be located in the part of the field diagram marked by the yellow borders. As an example, one can find a large yellow circle towards the border of the diagram and in between the green and the blue sector, which implies that this person or object shows though behaviour, engagement and ability to wake people to action (Sjøvold, 2002).

Next the location of the circles within the field diagram must be addressed. If a circle is in centre of the charts, the object or person does not exercise any specific type of behaviour over others. The further away from one of the parts of the chart, the less the unit of analysis holds of this type of behaviour. Likewise, the further into one of the parts the circle moves, the more of this behaviour does the object or person exercise. In fact, the circles are placed in the charts based on the three values x , y and z ranging from -18 to $+18$, where "0" is placed in the centre of the diagram (Sjøvold, 2002). The first value, x , describes where the circle should be placed from left (negative values) to right (positive values) in the chart. The higher the absolute value of the score is, the further away from the centre of the diagram the object is located. The second value, y , describes where the circle should be placed from bottom (negative values) to top (positive values). Similarly as for the x -values, the higher the absolute score of the z -values the further away from the centre of the circle the object is

located. The third value, z , indicates the size of the circle and hence how much space the team member takes up within the group. For all negative values, the team member is considered to be dependent, whilst all positive values indicates in principle that the group members are operating within synergy roles, as long as no other behaviour is standing out (Sjøvold, 2002).

3.3.2.2 SPGR-vectors

Several researchers agree with Sjøvold (2010) in that systematic observation of behaviour can reveal certain social patterns (i.e. Bales, 1955, 2000; W. R. Bion, 1961; Wilfred Ruprecht Bion, 2013; McGrath, 1991; Parsons et al., 1953; Schutz, 1958, 1966; Sjøvold, 2006b; Tuckman, 1965; Tuckman & Jensen, 1977), and a review of their literature reveals four basic features for groups to master in order to have a sustainable development. In SPGR-theory these four features are named control, nurture, opposition and dependence, and they are all supported by specific behaviour (Sjøvold, 2010). The features have been described earlier in this thesis (2.2.4). Further, Sjøvold (2006b) has identified two features indicating the robustness and flexibility of groups, and therefore also the maturity of a group. They are called withdrawal and synergy, and are also previously explained in this thesis (2.2.4). Each of these six features encompasses two different kinds of roles used in SPGR-observations. Hence, there are 12 different role types in SPGR in total. Figure 11 below gives an illustrative explanation of the 12 different roles within the SPGR field diagram, and table 1 gives a short summary of the 12 different roles.

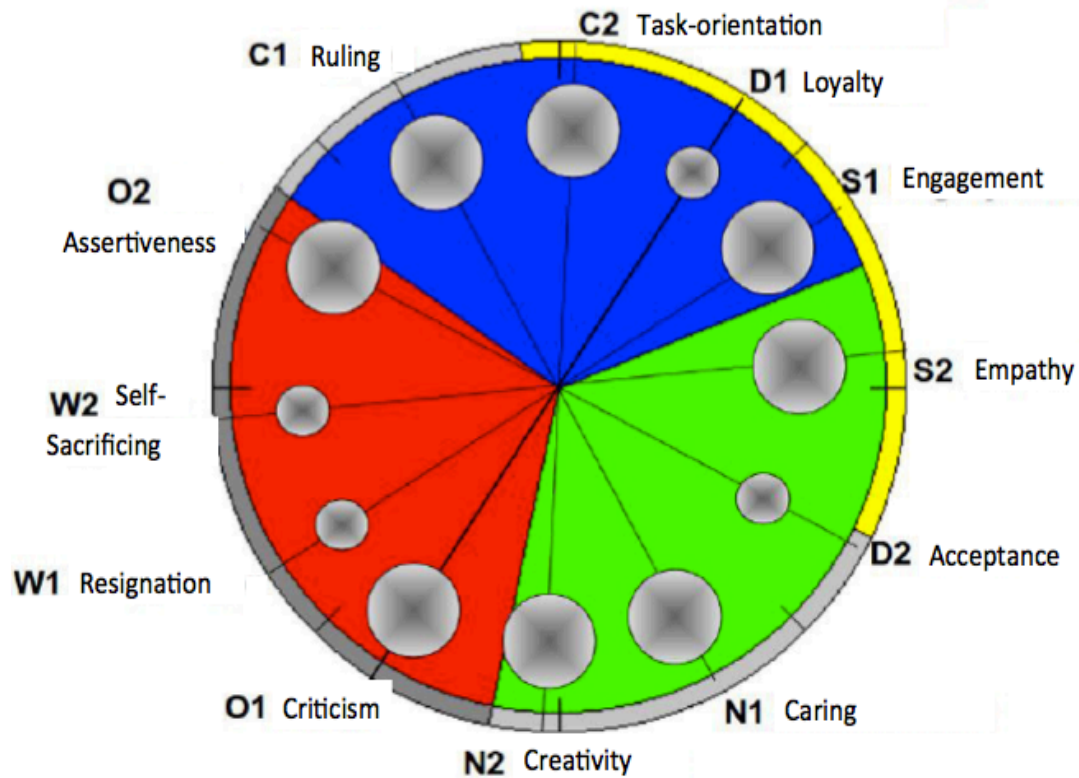


Figure 11: The 12 SPGR-vectors. Adapted from "Resultater gjennom team" by Endre Sjøvold, 2014, p. 137. Copyright 2014 by Universitetsforlaget. Reprinted for scholarly usage. Translated by Sjøvold himself.

Table 1: The different SPGR role types. Adapted from “Teamet: Utvikling, effektivitet og endring i grupper” by Endre Sjøvold, 2006, p108. Copyright 2006 by Universitetsforlaget. Reprinted for scholarly usage. Translated by Sjøvold himself.

SPGR-code	SPGR-vector	Typical behaviour
C	Control	
C1	Ruling	Authoritarian, controlling, pedantic
C2	Task-orientation	Efficient, analytical, rational
N	Nurture	
N1	Caring	Sociable, protective, warm
N2	Creativity	Unconventional, spontaneous, amusing
D	Dependence	
D1	Loyalty	Obedient, conform, accepts tasks
D2	Acceptance	Submissive, satisfied, trustful
O	Opposition	
O1	Criticism	Self-centered, provocative, unruly
O2	Assertiveness	Self-sufficient, tough, competitive
W	Withdrawal	
W1	Resignation	Apprehensive, tense, self-deprecating
W2	Self-sacrificing	Sacrificing, self-pitying, complaining
S	Synergy	
S1	Engagement	Inspiring, inviting others to contribute
S2	Empathy	Listen, show interest in others, understand

These 12 different SPGR role types will be used actively when presenting the findings from the SPGR-surveys in chapter 6.1 below. In this presentation, each team member has been assigned a score between 0 and 4 for each dimension, based on the evaluations of another team member, and these scores are summed up in tables. It is worth noting that the vectors given above are mutually exclusive from the ones standing diametrically opposite from each other.

3.3.2.3 Conducting the data collection through SPGR

The collection of SPGR-data in Powel was conducted in March and April 2014. The team members in Powel received an e-mail containing a cover letter with information regarding the SPGR survey at 19.03.2014, and received the link to the survey at March 26.03.2014. The data collection was completed on 05.04.2014. A cover letter, like the one sent out 19.03.2014, is supposed to provide the participants information regarding the purpose of the study, why the study is conducted and who to contact if they have any questions regarding the study (Jacobsen, 2005; Riksrevisjonen, 2013; Robson, 2002). By providing such cover letters to the respondents, an interest in answering the survey may be created, and the respondents might allocate more time to answer the survey (Riksrevisjonen, 2013). This might result in more valid answers from the participants (Riksrevisjonen, 2013). The cover letter sent to the employees in Powel can be seen in appendix 1. This letter contained personal information about me and the purpose of the master's thesis. Further, it explained how every respondent will be held anonymous and clarified how much time the SPGR survey would take.

The SPGR survey the employees received is a standardised survey developed by Endre Sjøvold, where assertions are used to map various aspects of a team (Sjøvold, 2006b). In the survey, the respondents are asked to evaluate 24 claims in relation to a scale ranging from "seldom" to "sometimes" to "often". Each respondent was asked to evaluate how their own unit cooperate with other units within the organisation and how other units cooperate with their unit. Further, the respondents were asked to evaluate themselves and the other team members within the same team.

The SPGR survey was sent to the four team members in Trondheim and the six team members in Poland as described in chapters 1.2.1.1 and 1.2.1.2.

3.3.3 Interviews

Interviews are a qualitative research method often used to collect data in case studies (Kvale, 1997), and is a well-suited method for collection of valid, reliable and relevant data

(P. Lewis, Thornhill, & Saunders, 2003). There are three different ways to conduct an interview: structured, semi-structured and unstructured (Bryman, 2008; Robson, 2002). In a fully structured interview the questions are predetermined and usually with a fixed wording and a pre-set order. The technique separates from interview based survey questionnaires in mainly applying open-response questions (Robson, 2002). Semi-structured interviews also have predetermined questions, but the order can be changed based on the interviewer's perception of what seems most appropriate. Further, the wording of the questions can be changed, some questions may be omitted and some additional questions might be included. This interview technique has a fairly open framework, which allows for focused, conversational, two-way communication (Robson, 2002). In semi-structured interviews, the interviewee has considerable room in how to reply (Bryman, 2008). Unstructured interviews, on the other hand, is conducted with no questions prepared in advance, and is similar to an informal discussion about a topic (Robson, 2002).

In this study, semi-structured interviews were conducted. It is claimed that a semi-structured form on the interview creates a dialogue that contribute to the interviewer's possibility of collecting a rich and detailed set of data (P. Lewis et al., 2003). This is considered appropriate for my study, as it might help me capture the complexity of the information I am looking for regarding how Powel and Confirmit conducts knowledge transfer today, and what is considered as challenges associated with transferring knowledge across cultures. However, this interview method also has some drawbacks; first of all, it is a time-consuming process. This limits my opportunities, as a researcher, to gather data from a large sample (Ryen, 2002). Further, the close dialogue between the interviewer and the interviewee might be a source of error and affect the study's validity and reliability. This is because the interviewer's behavior might affect the responses of the interviewee and the interviewee's behavior (Yin, 2014).

Semi-structured interviews were used to collect data from two different teams in Powel: one team in Trondheim and one team in Gdansk. Obtaining information from several different departments in an organization is another form for data triangulation. A total of five

interviews were conducted during the period from 09.04.2014 till 23.04.2014. Interview guides were used when conducting these interviews. The interviews conducted at Powel's headquarters in Trondheim were completed in Norwegian and a Norwegian interview guide was used, whilst the interviews conducted at the Polish office were completed in English and therefore with an English interview guide. The Interview guides in English and Norwegian are supposed to ask the exact same questions, or at least very similar questions. The only element that is supposed to be different in the two interview guides is the language, and I have tried to translate the Norwegian interview guide to English in the most straight forward manner possible. Both interview guides are attached in appendix 3 and 4. By using the same interview structure in all the investigated cases, the cross-case comparability of the findings is improved (Bryman & Bell, 2007). The interviews were conducted at different levels of the organization, as the Polish team consists of developers whilst the Norwegian team consists of product owners, a business manager and a chief architect. This difference in organisational level is yet another form of triangulation. The interviewees in Trondheim and Gdansk were selected in cooperation with my contact person in Powel, to secure a best possible and representative sample. I wanted to interview both leaders and non-leaders in each location. In Gdansk I interviewed the team-leader and two senior developers in the team, and in Trondheim I interviewed one technical architect and a product manager.

The interviews conducted at Powel's office in Gdansk were all conducted on the same day, 09.04.2014, with approximately one hour in between each one. I travelled to Gdansk to conduct the interviews face-to-face, rather than conducting them using videoconference. This was done because I believe that it might be more difficult to capture the true essence of the interviewee's answers when the two parties are not sitting in the same room, as the electronic aids used might make it difficult to get a relaxed atmosphere and it might make it harder to read each other's body language. The length of the interviews differed: the first interview lasted 51 minutes, the second interview lasted 42 minutes, and the last interview lasted 27 minutes. The interviews in Trondheim, on the other hand, were conducted on two separate days for practical reasons. The first interview in Trondheim was conducted on 11.04.2014, two days after the interviews in Gdansk, and lasted approximately 50 minutes.

The second interview with a team member from the Norwegian team was conducted at Powel's office in Trondheim 23.04.2014, and lasted 40 minutes.

Further, I conducted interviews with key personnel at Conconfirm, which have been introduced earlier in this thesis (1.4). The interview conducted at Conconfirm had a similar structure as the once conducted at Powel, as I used a similar interview guide. The difference in the interview guides was due to the different situations the companies are situated within, hence, I adapted some changes to the interview guide to reflect this. For instance, as Conconfirm has more years of experience in cooperating with teams in other countries than Powel has, I added some questions about the experiences made. By using similar interview guides, the cross-case comparability of the findings were strengthened (Bryman & Bell, 2007). One of the interviews was conducted at 03.04.2014, whilst the two other interviews were conducted at 07.04.2014. All three interviews were executed at Conconfirm's headquarters at Skøyen in Oslo. The lengths of the interviews were 45, 50 and 25 minutes, respectively.

As all the interviews in Powel and Conconfirm were conducted face-to-face, I believe the basis for comparison is greater than if the interviews' were conducted differently. The semi-structured interviews were recorded and transcribed.

An interview guide is a guide to how an interview shall be conducted and which topics and questions one wants answers to (Askheim & Grenness, 2008). Hence, an interview guide might help the interviewer to get a systematic overview of the topics, subjects and questions that is to be attended during the interview (Johannessen et al., 2006). As the interview guide is set up and used during an interview, one is originally to attend each subject at a specific line of order, but this might be changed if the interviewee brings a new subject into focus (Askheim & Grenness, 2008). The interview guides (see appendix 3, 4 and 5) used during the semi-structured interview at both Powel and Conconfirm was created by me, and was adapted to the separate situations. However, I tried to hold the interview guides as similar as possible, to create the best possible comparison basis. Due to the interviews being

unstructured, naturally each of the interviews focused on different themes based on the interviewee's point of view, but all the interviews attended the same main topics. First in the interview guide, I seek to uncover the social situation in the company, to form a basis. Further, the guide moves on to ask questions about the teams and the teamwork in the situation, to reveal some information on the team culture and the team maturity. Then, the focus moves on to address knowledge transfer within the company, before national culture is the subject of discussion. In the interview guide targeting Confirmit, an additional subject is addressed; experience. As Confirmit has more experience in transferring knowledge to an office outside the country of the headquarters, I wanted to explore the experience they have gained in this relation. The setup of the interview guide was clearly structured with regards to the subjects, so that I was able to focus on one topic at a time. Yin (2014) stresses the importance of preparing good questions in advance of an interview, as the selection of questions to rise during an interview is essential to the result. In this manner, I had prepared well and chosen a broad and open range of representative questions that I had planned carefully in advance. This was done to be sure to discuss every important and relevant topic during the interviews, in addition to topics that appeared along the way. The interview guides were examined by my supervisors prior to the conduction of the interviews.

3.4 My role

McCracken (1988) highlights that the researcher of any study is an instrument in the research and that the researcher have to understand this and what it means and implies. This is linked to the previous experiences the researcher carries and how he/she perceives the world according to his/her epistemology. Even though the role of the researcher is downplayed or ignored in many studies, Lyons and Coyle (2007) support McCracken (1988) by emphasizing the necessity of understanding the role a qualitative researcher possesses.

When conducting interviews, the researcher might affect the responds from the interviewees by which questions are being asked, how the interviewer respond and how the body language is articulated. During the interviews conducted in this study I strived to stay as neutral as possible by adopting a receptive and interested position, both mentally and physically. This

was done to help make the situation as comfortable and safe as possible for the interviewees. However, when conducting the analysis of this study, I have to account for my possible influence on the respondents. In advance of the interviews I sent the company a letter containing information about me and about the upcoming SPGR survey and interviews, and the company distributed it to the respondents. The main purpose of this letter was to try to make the study less “scary”. A copy of the letter is attached in appendix 1.

4 METHOD OF ANALYSIS

According to D. W. Stewart and Zinkhan (2006), data is not a substitute for theory, and the authors emphasize the importance of understanding that theory and data are two very different elements in research. One can interpret Miles and Huberman (1994) to imply that the analysis of qualitative studies takes place during the entire research process, and the research itself might therefore be changed along the way based on the findings that emerge.

The method used for answering the research question in this thesis and to link the theory to the collected data, is the pattern-matching technique (Yin, 2014). According to Yin (2014) this is one of the most desirable techniques for case study analysis. The method compares an empirically based pattern, the pattern found from the collected data in the research, with a predicted pattern made prior to the data collection. The internal validity of the case study might be strengthened if these patterns appear to be similar (Yin, 2014). In this thesis I seek to use this logic to link the theory presented above with the data collected from Powel and Confront. The analysis in this thesis follows the same structure as the theory-chapter, as this constitute the predicted pattern. This is done by analyzing the collected data against each of the variables in the research question separately: the teams' situations in relation to team maturity, team culture and national culture is analyzed by linking the collected data to the theory presented in chapter 2. Based on this, I was able to give an analysis of whether or not the teams' situations are satisfactory in relation to how it affects the knowledge transfer. As the analysis-chapter follows the same structure as the theory-chapter, the read friendliness of the thesis is greater and the reader can more easily observe the relationship among the different parts of the paper and it is easier for the reader to follow the reasoning throughout the thesis and to the final conclusion. Based on this, the thesis meets Yin (2014) principles for creating a chain of evidence for the reader to follow.

In this thesis, it is chosen to analyze the collected data in a qualitative way, even though it is used both qualitative and quantitative methods to collect the data. This is based on the belief that one is able to reveal nuances in the data material by using a qualitative analysis

method without any statistical techniques. Regarding the data obtained through quantitative methods, the SPGR data, the analysis is enabled by intending the analysis to search for specific patterns or characteristics in the data that might enlighten the research question (Johannessen et al., 2006).

According to Ryen (2002) the most appropriate number of respondents in a study has to be related to the width and complexity of the subject studied and to which degree the chosen respondents provide sufficient information. When no new information is revealed through interviews/surveys/observations etc. one can say that one has reached the point of saturation. When this happens, there is no need to continue collecting data. In this study 2-3 interviews were conducted at each office, and this might be considered a small number to reach a saturation point. However, as the main part of most of the interviews rendered the same information, I believe that the point of saturation was reached within each of the locations. Still, as the interviewees all had different employment positions and was at different levels in the organisations, I got to see each situation from a different point of view in each interview. Therefore, I acquired useful insights in each of the interviews, even though I believe I reached the point of saturation.

The transcribing of the audiotapes from the interviews is the first step in analysing the data, and is helping the researcher to become more familiar with the collected data (Langdrige, 2004). How much of the audiotapes that should be transcribed is a question that needs to be addressed by the researcher himself/herself, who should take into account how much time is available for such activities (King & Horrocks, 2010). Even though I had a relatively tight time schedule, I chose to transcribe all of the audiotapes. This decision is based on the fact that I am not an experienced researcher and, hence, it was hard for me to know prior to the analysis which information might become important when I get deeper into the analysis. When all the audiotapes had been transcribed, I had a large amount of raw material to analyse. The qualitative raw material is a collection of non-standardized data, and analysis of these kinds of data usually involves an intensive process that cannot be measured in a simple way (Yin, 2014). In contrast to analysing quantitative data, there is no standardized method I find applicable to use in analysing the data, as I do not believe any of the methods

will be able to capture the richness of my data. The data must be classified and analysed through a thorough and comprehensive conceptualization process (P. Lewis et al., 2003).

5 EVALUATION OF THE DATA

When the data collection is completed, it is important to conduct a critical evaluation of this material to clarify whether or not it holds the quality needed to draw good and analytical conclusions based on the data (Grønmo, 2004). Yin (2014) states that as the research design is supposed to represent a logical statement, one can judge the quality of the design by using different logical tests. Similarly, Grønmo (2004) states that the quality of the collected data concerns how good the data is in shedding light on the research question. The most common criteria for conducting an evaluation of the quality of the collected data are to address the reliability and validity (Yin, 2014). The validity of a study is strong if the data collected actually is the data that was searched for, in relation to the research question (Grønmo, 2004). The reliability of a study is to which degree the results are consistent and hence possible to reproduce with the same result (Mehmetoglu, 2004). From this, it is evident that it is possible to measure the same variable repeatedly and always get the same result (high reliability), but this does not ensure that the correct variable is being measured in accordance to the research question (low validity). For example, one can measure the length of a table, but you will not get a good result if you are actually looking for the height. Hence, it is possible for a study to have a high reliability and low validity at the same time, but it cannot have low reliability if the validity is high (Gripsrud, Olsson, & Silkoset, 2004). The reliability and validity of this study will be addressed below.

5.1 Reliability

Reliability is the ability to reproduce the research results, and is of major importance for the level of quality of any research design (Yin, 2014). The reliability is said to be high if the data collection gives data that can be tested and verified, and that is not due to coincidences or variations in gauges (Yin, 2014). Naturally, the process of reproducing the research results is more difficult in qualitative studies than in quantitative. This is partly because qualitative studies do not have standardized gauges, so that the researcher takes mid stage. Therefore, one has to account for the possibility that the researcher have affected the interview process by being a human that is affected by its discretion and context (Kvale, 1997). Hence,

it is impossible to avoid all possible factors affecting the reliability of the study, based on the characteristics of qualitative studies. However, as I have been aware of this aspect, I have done my best to not let any of the factors get a big influence on my research. This has been done by approaching the research question systematically, and retaining all the document data, archival data, audiotapes, transcripts and SPGR data. Naturally, all these files are not attached to this paper, and will be stored for possible use in the larger overall project on operational management.

To strengthen the reliability of this study, I have had focus on making sure all the collected data can be tested and verified later on. I have approached this attribute in several different ways. Firstly, chapter 3 in this thesis concerns the choice of method and the procedure of the research conducted for data collection, and gives a thorough description and reasoning for these methods and processes. Secondly, as Yin (2014) emphasize the importance of it, I have attached all interview guides used in the research in the appendix of this paper (see appendix 3, 4 and 5), so anybody who wants to get a deeper insight into how I proceeded in collecting the presented data is able to get it. However, all the collected data is extremely dependent upon the context, which might make it difficult to validate the data later on.

5.1.1 The reliability of the interviews

A challenge in regards to the reliability of the thesis is that, as already argued, the interviewer might affect the situation in which the interviews are conducted (Kvale, 1997). As the use of interview guides might strengthen the reliability of the interviews (Jacobsen, 2005; Kvale, 1997), interview guides were used when conducting interviews in this study. Further, all interviews were audio taped, so I was able to go through the interviews afterwards and make sure nothing was misinterpreted and that all information is taken correctly into account. I believe this strengthens the reliability of the study.

5.1.2 The reliability of the SPGR survey

According to Robson (2002), standardized questions will result in high reliability among the answers. The SPGR survey used in this study is developed by Endre Sjøvold (2006b), and

consists of 24 standardized statements. Hence, the reliability of the SPGR survey is regarded as high.

5.2 Validity

The validity of a paper concerns whether or not it actually measures what it sets out to measure (Sjøvold, 2006b; Vaughan & Morrow, 1989), and is hence an essential factor for whether or not one can arrive at good conclusions from the data set. Whether a research fulfils the requirements of validity is determined by the extent to which the gathered data is relevant for the research question, and the validity can be said to be high if the research results in data that is relevant or valid for the research question (Grønmo, 2004).

Yin (2014) highlights validity as an important factor for the quality of the research design, and divides it into three parts: (1) construct validity, (2) internal validity and (3) external validity. Yin (2014) emphasises that internal validity is applicable for explanatory or causal studies only, not for descriptive or exploratory studies. This study falls into the first category: hence, all three validity types will be addressed. Below is a description of how I set out to maintain the construct validity, internal validity and external validity of this study.

5.2.1 Construct validity

Construct validity is said to identify correct operational measures for the concepts being studied, and is simply explained as the degree to which one actually measure what one has set out to measure (Yin, 2014). The construct validity is strengthened by using multiple sources of evidence (Yin, 2014). To ensure the construct validity of this paper, I have deliberately tried to establish a chain of evidence, as explained in chapter 4. Further, I have used several sources of evidence by using the method of triangulation. Triangulation implies that the case has been reviewed from different angles, and that the research question has been enlightened using several different methods (Grønmo, 2004). The four methods used in this study to enlighten the research question are the SPGR surveys, interviews, document data and archival data. Additionally, the SPGR survey and the interviews were conducted at different physical locations and organisational levels, and with respondents/employees with

different seniorities and positions within the case companies. According to Grønmo (2004), triangulation will give the researcher a better and broader understanding of the phenomenon being studied. Lastly, the respondents of the study were given the opportunity to review the paper prior to publication, which was done by providing the final draft of the thesis to my contact persons in Powel and Confermit. By conducting these actions I made sure that I had not misinterpreted or misunderstood anything, so that flawed data was not included in the published thesis. All of these elements are mentioned by Yin (2014) as tactics for increasing the construct validity of a study. Based on this, I argue that the construct validity of this assignment is safeguarded in a satisfying manner.

5.2.2 Internal validity

Internal validity has to do with the accuracy of the study. Yin (2014, p. 239) describes the internal validity as *“the strength of a cause-effect link made by a case study, in part determined by showing the absence of spurious relationships and the rejection of rival hypotheses”*. In other words, the internal validity of a study is the assurance that there actually is a causal relationship between the dependent variable and the independent, and that the linkage between the variables did not occur randomly (the relationship is not spurious). When ensuring that a study has high internal validity, there are four tactics that can be used; pattern matching, explanation building, addressing rival explanations and the use of logic models (Yin, 2014).

When discussing the internal validity of this study, it is natural to start by discussing the interview guides used. I have spent a considerable amount of time studying theory and methodology, and I am therefore convinced that the guides are appropriate for the study. However, there is a chance that the interviewees might have interpreted the questions differently from each other and given different responses, as the interviewees come from two different organisational and national contexts and the interviews were conducted in different locations and at different points in time. However, this was known prior to conducting the interviews, and so the selection of key informants for the research was conducted carefully. I also had this in mind throughout the data collection. Therefore, I

believe that it did not affect the internal validity of the study more negatively than what is reasonable for the given context of this thesis.

As previously addressed, the researcher(s) of a study will affect the internal validity of the study. There has been great focus on this aspect during the conduction of this study, and I have tried to minimize the effect I might have had on the studies. Examples of actions taken: I have tried not to disturb the existing social context; I have triangulated; I have used expertise from colleagues (other students and supervisors); I have been open to Powell, Confirmit and the respondents about the intentions of this study; I have tried to follow data rather than leading it in a certain direction. Further, I did not take notes during any of the interviews, so it did not become a distraction for the respondents.

Throughout this study, I have at all times had focus on ensuring the internal validity, first and foremost by being familiar with theory and methodology. Further, the research question has constantly been in the centre of my mind. Therefore, I argue that this study has high internal validity given the constraints and limitations set by the context.

5.2.3 External validity

External validity defines the domain to which the findings of a study can be generalised beyond the immediate study (Yin, 2014). Case studies has often been criticized for not being generalizable beyond the specific case, but Yin (2014) argues that this is a misinterpretation as case studies provide more detailed knowledge that can be generalised by analytical generalization. This form of generalization exploits existing theory as a benchmark for empirical data obtained from studies (Yin, 2014). This study is actively and extensively based on prior knowledge and theory, which is exploited within the technique of pattern matching, as explained earlier (4). It has been tried to establish a logic link between the existing theoretical foundation and the empirical data collected in the study. The prior knowledge and theory, however, is based on a number of different disciplines, which entails that some of the theory used might have limitations when it is linked to the complex research question of this assignment. However, it is assumed that the main points of the presented theory are still valid within the context of the research question. Further, I have pointed out that this

study should be interesting and relevant for most international companies, large or small. Hence, I argue that the external validity of this assignment is safeguarded in a satisfying manner.

Above I argued for the internal validity of this study, and it is evident that some of the external validity of the study had to be sacrificed to ensure the internal validity. However, I still argue that the external validity of this study is safeguarded in a sufficient manner and that the findings can be generalised for most multinational companies.

5.2.4 The validity of the SPGR-survey and the interviews

The SPGR-survey was sent to the team members through an e-mail, and of the ten potential respondents, everyone replied. As the response rate is high, and hence the teams have a good representation, the validity of the study is strengthened. However, when conducting a survey, there is always a risk that the respondents might answer the questions in the way they believe the researcher(s) wants them to, instead of being honest. Further, the respondents might answer the questions with how they *want* it to be rather than how the situation actually is. Robson (2002) supports this by arguing that there is a gap between what people answer in a survey and how they actually act. All respondents in the SPGR-survey is held anonymous, which according to Yin (2014) increases the sincerity of the answers. Robson (2002) points out that the use of online surveys increase the respondents' feeling of anonymity. Further, the statements in the survey might be interpreted differently for each individual respondent, based on his or her context. This risk is somehow reduced by using a standardized survey, as in this case.

In regards to the interviews, two actions were taken to increase the validity. Firstly, the respondents were extensively informed and reminded that they would be anonymised in the publication of this thesis. Any quotes that might make it possible for anyone to recognise the specific respondent would not be published. Secondly, both companies had the opportunity to read the thesis prior to publication, allowing them to make sure that I did not use any undesired quotes or interpretations. Hopefully, these actions increased the sincerity and

honesty in the answers given from the interviewees, and therefore increased the validity of the interviews.

5.3 Conclusion on reliability and validity

Through all the elements listed, explained and argued above, I argue that the reliability, construct validity, internal validity and external validity of this thesis are safeguarded in a satisfying manner. Based on this, I argue that the quality of the collected data in this study is high, and it allows for drawing good and solid analytical conclusions.

It is argued that the findings revealed are real, and therefore reflect the reality in a correct way. However, the complexity of the topic must be underlined in addition to the fact that this thesis only measures a small fragment of the reality. Due to this, I have had to ask myself critical questions regarding all the findings. When in doubt, I have used the triangulation methodology through asking peers, supervisors and others for their perspective. Based on this, I argue that this thesis create a solid basis for further research.

5.4 Research ethics

Ethics in research is important, and there is a social responsibility accompanying researchers as they contribute to the development of technology and technical solutions, with consequences for individuals and for the society as a whole. Additionally, their research may form the basis for important social decisions.

The Norwegian Government has stated that the purpose of research ethics is to create awareness among researchers and the society in general about the ethical issues that occurs due to modern research, be it associated with the results or the process of the research (Kunnskapsdepartementet, 2014). The Norwegian Government claims that the basis for the research ethics lies within three types of norm systems: (1) norms and rules for good scientific practice, associated with the researcher's search for the truth, (2) norms and rules

that govern the relationship between the researchers and what is good/effective research practices, and (3) norms and rules that govern research based on general human values, such as concern for human dignity (Kunnskapsdepartementet, 2014).

Yin (2014) address research ethics, and list “knowing how to conduct research ethically” as a desired attribute for a researcher. He states eight guidelines when striving for the highest ethical standards: (1) having a responsibility to scholarship, such as neither plagiarizing nor falsifying information, (2) being honest, (3) avoiding deception, (4) accepting responsibility for one’s own work, (5) maintaining a strong professional competence that includes keeping up with related research, (6) ensuring accuracy, (7) striving for credibility, and (8) understanding and divulging the needed methodological qualifiers and limitations to one’s work.

Mitchell and Jolley (2012) list nine ethical guidelines for studies involving human participants, and as I am conducting my research on employees in Powel and Confrimit this is highly interesting. The nine guidelines are: (1) participants must volunteer to be in the study, (2) participants should have a general idea of what will happen to them if they choose to be in the study, (3) participants should be told that they can quit the study at any point, (4) investigators should keep each individual participant’s responses confidential, (5) investigators should try to anticipate all possible risks to the participants and take steps to prevent these potential problems from occurring, (6) investigators are responsible for making sure that all people working for them behave ethically, (7) at the end of the study, investigators should probe participants for signs of harm and take steps to undo any harm detected, (8) at the end of the study, investigators should explain the purpose of the study and answer any questions participants may have, and (9) researchers should get approval from appropriate committees (Mitchell & Jolley, 2012, p. 59). I find it reasonable to combine these nine ethical guidelines with Yin (2014)’s eight guidelines for high ethical standards when conducting my study, as I to a large extent will have direct contact with the respondents of the study and might uncover sensitive data.

To hold my thesis to the highest possible standard of research ethics, I anonymised all respondents. Further, I am not conducting my research on behalf of any principal expecting any specific results. Moreover, I have tried to render the data collected as honestly and accurate as possible, and described the context surrounding my research in a best possible manner. The participants in my research all had the opportunity to withdraw from the study at any point in time, and were aware of this. They were informed thoroughly of the purpose of the study and provided with my contact information in case they had any questions. Lastly, the participants were given the opportunity to read the thesis prior to publication, and to put forward any comments or objections.

5.5 Limitations of the study

This study is conducted as part of a master thesis, and is hence restricted by limited resources. The most obvious limitation is the time constraint, as the University has set a deadline for finishing and delivering this thesis.

During my research, I have kept in mind the differences between the background I have and the background the employees in Powel and Confirmat have, both in relation to education and in relation to culture in which one is raised and live. Most of the respondents in this study have higher education within computing or other technological sciences, whilst my degree is within industrial economics and technology management. Further, some of the respondents in this research are raised and currently live in a different national culture than I do. Consequently, we might interpret information, statements, actions etc. differently. This may have caused the respondents to interpret the questions, statements, actions etc. in another way than how it was intended to be interpreted, and hence have given a “wrong” response.

Another possible bias in this study is that I collected most of the data during the spring of 2014, whilst a small part was collected by Endre Sjøvold during December 2011. This data was made available for me by Confirmat and Endre Sjøvold in cooperation. The data this concerns is the SPGR data on the teams in Confirmat. Throughout this thesis, one needs to

take into account that the SPGR data of Conconfirm is 2,5 years old whilst the interview data is newer. This might create a bias, as the characteristics of the teams investigated in Conconfirm might be slightly different today than it was 2,5 years ago, and this might affect what is said in the interviews as the interviewees might have a different view of the teams today than they had 2,5 years ago.

It was intended to differentiate between data transfer, information transfer and knowledge transfer in this study. However, the interviewees did not seem to be very aware of the distinction between the three types of transfers, and it is therefore not strictly separated between them in the following study. This is considered a third bias.

The elements highlighted above are all considered limitations of the study. However, I still argue that my research is sufficient, acceptable, suitable and satisfactory for the research question, the scope of this assignment and the context in which it is conducted.

6 PRESENTATION OF THE EMPIRICAL FINDINGS

In this chapter a presentation of the relevant empirical findings from the data collection will be given. First, a presentation of the most important data from the SPGR-survey is provided. Next, the results of the three different groups of interviews are presented, separately.

6.1 Presentation of data from SPGR-survey

In this thesis, two clusters of SPGR data are used: one from Powel and one from Conformat. The SPGR data from Powel was gathered in March and April 2014, and it was set up in two parts. The first part asked the members of each team to evaluate themselves and the other members of the same team, whilst the second part asked the members to evaluate the team's ability to cooperate with the other team, and to evaluate the other team's ability to cooperate with the first team. Further, The SPGR data on Conformat was gathered in 2011 by Endre Sjøvold. This SPGR data was given to me by Conformat and Endre Sjøvold in April 2014, and I was given permission to use it as a foundation when analysing the information gathered in the interviews conducted within the company. The data presents how each team member evaluates themselves and the other team members. This SPGR data will be presented below, after the presentation of the Powel data.

6.1.1 Powel

The SPGR-survey conducted in Powel includes two teams consisting of four and six members each. The team with four members are located in Trondheim, whilst the six-member team is located in Gdansk (1.3.1.1 and 1.3.1.2). In this chapter I will first present the data obtained from the Gdansk-branch regarding their view of the team they constitute. Further, the corresponding data of the Trondheim-branch will be presented. Lastly, I will put forward the data representing how the two offices view the relationship between the offices.

6.1.1.1 Gdansk

The team members at the Gdansk-office of Powel give a relatively dispersed description of their behaviour. Figure 12 below presents the field diagram of the group as a whole, based

on the average of the evaluations each team member has given. The spread in the evaluations is given by the dotted lines, and it is evident that the team members have a wide spread perception of the composition of the team.

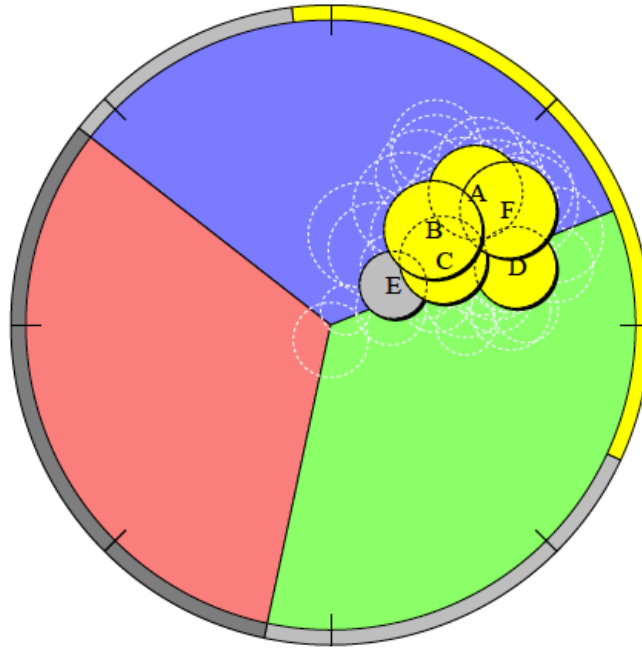


Figure 12: Field diagram of Powel Gdansk: the group as a whole.

The scores of each circle along the different SPGR-dimensions are given in Table 2.

Table 2: Scores for Powel Gdansk as a whole.

Gdansk Group															
	X	Y	Z	S2	D2	N1	N2	O1	W1	W2	O2	C1	C2	D1	S1
A	9,67	8,83	2,83	2,67	3,17	2,83	0,17	0,5	0	0,33	1,5	2,83	3,67	3,33	3,83
B	6,83	6,5	3,67	2,67	2,17	2,67	0,5	0,33	0,17	0,5	2,17	2,33	3,17	2,5	3,17
C	7,5	4,33	1,5	2,67	2,67	3,17	0,67	0,5	0	0,5	2,17	2,33	2,17	2,5	3,67
D	12,3	3,67	0,33	3	3,83	3,67	0,5	0,33	0,17	0,17	1	1,67	2	2,67	3,67
E	4,17	2,33	-2,5	1,33	3	1,83	0,83	0,67	0,67	1,17	1,83	1,33	1,17	2,17	2
F	11,8	7,67	3,33	3,33	3,5	3,67	0	0,33	0	0	1,17	3	3,17	3,33	3,83

From the field diagram and the table above, it is evident that the team in Gdansk is perceived by themselves to be empathic, accepting, preserving, task-oriented, loyal and engaged. They do not, however, see themselves as creative, and there is not much critique,

resignation or self-sacrifice in the group. The big difference in size for all the circles in the field diagram is noticeable, and indicates that some of the team members take up more space in the group than others.

Circle E clearly differs from the rest of the circles. Team member E is evaluated to be light grey, meaning that he takes on a dependency role and indicating that he is humble and cautious yet loyal. Since circle E is the only dependency role amongst a group of people with synergy roles, it follows that he is the team member taking up the least space in the group. This is also indicated by the fact that circle E is the smallest circle in the field diagram, and that he is the only team member to have a negative z-value in table 2. It is also indicated by the fact that this team member has the lowest score in the group for engagement, S1. Moreover, this circle is positioned closest to the centre out of all the team members, which implies that this team member holds more oppositional behaviour than the rest of the team members. This is also indicated by him holding the highest score in the group for critique and resignation, and having amongst top three scores for assertiveness. Further, team member E has the lowest score for empathy, caring, task-orientation and loyalty. However, he has the highest score in the group for creativity.

From the field diagram it is evident that the overall evaluation is that team members B and F take up the biggest space in the group, which is indicated by their big circles. From the z-values in table 2 it can be understood that team member B is perceived to take up a little more space than team member F. These team members are coloured yellow, indicating that they have synergy-roles and are able to show a relatively balanced spectre of behaviour. Except from this characteristic, team member B does not stand out from the group significantly, and is, as the rest of the group, perceived as empathic, accepting, preserving, task-oriented, loyal and engaged. Team member F also have many of the same characteristics as the rest of the group, but stands out a little by having the highest or second highest score within empathy, acceptance, caring, ruling, task-orientation, loyalty and engagement. Further, he does not possess any creativity, resignation or self-sacrifice, and has the lowest score for critique within the group.

Team members A, C and D take up a medium space in the group, and are all operating within synergy roles. They all share many characteristics with the rest of the group, but stand out at certain points: team member A has no resignation at all, and is the most task-oriented, loyal and engaged member of the group; team member C has no resignation either, but is the most assertive team member in Gdansk together with team member B; team member D is characterised as the most accepting and preserving member of the group, but show the least behaviour connected to critique and assertiveness.

The representation of the group given above is an average of all the individual team members' evaluation of each other and self. Figure 13 below display all the team members' separate evaluations, and enlighten the difference in how they perceive the group and each other.

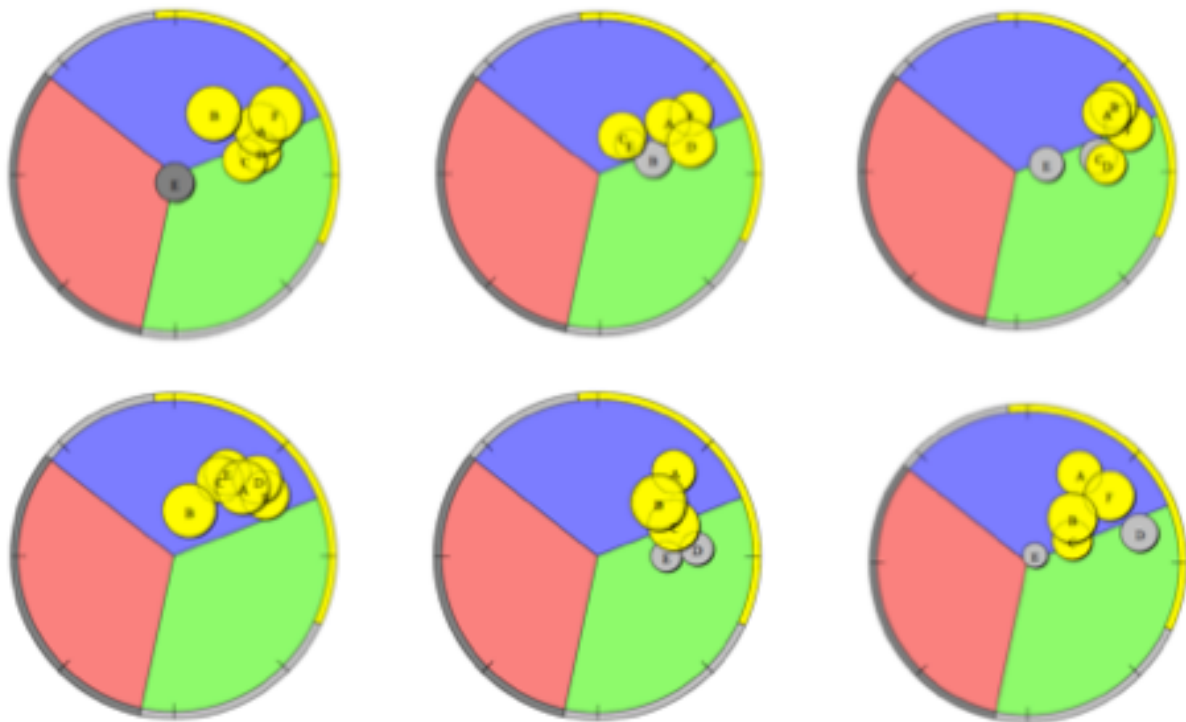


Figure 13: Field diagrams for the separate evaluations of the team members in Powel Gdansk.

From figure 13 above, it is obvious that there are some differences in how each of the team members evaluates the group. I do not see the need for going into detail on each of these

evaluations, but I will present two of them further on for illustrative purposes. The two evaluations chosen are team member D and F's evaluations, whose field diagrams are displayed in the bottom and top left corner of figure 13, respectively. The scores the candidates give themselves and their team members along the 12 SPGR dimensions are presented in table 3 below.

Table 3: Scores for Powel Gdansk, evaluated by D and F.

Gdansk Group																
Evaluator	X	Y	Z	S2	D2	N1	N2	O1	W1	W2	O2	C1	C2	D1	S1	
D	A	9	9	5	3	3	3	1	0	0	0	2	4	4	3	4
D	B	2	7	5	2	2	2	3	2	1	2	3	3	4	2	4
D	C	6	10	2	2	3	4	1	1	0	2	3	4	4	4	4
D	D	11	10	3	3	4	4	0	0	0	0	2	4	4	4	4
D	E	7	11	2	3	4	2	0	1	0	2	2	4	2	4	4
D	F	12	8	3	4	3	4	0	0	0	0	1	3	4	3	4
F	A	11	6	4	3	2	4	0	1	0	0	2	2	4	3	4
F	B	5	8	5	3	2	2	0	0	0	1	2	3	4	2	3
F	C	9	2	1	3	3	4	1	1	0	1	2	2	1	2	3
F	D	11	2	0	2	4	4	1	1	1	0	1	2	2	2	4
F	E	0	-1	-1	2	2	2	2	2	2	2	3	2	1	2	2
F	F	13	8	5	4	4	4	0	1	0	0	2	3	4	4	4

Team member D perceives the group as more controlling and less nurturing than how it is pictured in the average evaluation. However, his evaluation is more equal to the average result than any of the other separate evaluations when it comes to the spread of the circles, even though the cluster of circles is moved upwards further into the control-area. This is the only evaluation where all team members are operating within synergy-roles, which can be seen both in the field diagram and in column Z in the table above, where all scores are positive. Further, candidate D believes that there is only one team member showing resignation, and that half of the team do not display any behaviour related to creativity, criticism and self-sacrifice. He does, however, believe that the group is heavily engaged in the team, which can be read from the high scores in column S1 in the table above.

Team member A is here evaluated not to show any behaviour related to criticism, resignation and self-sacrifice, but is one of the team members showing the most behaviour of ruling, task-orientation and engagement. Further, he gains a medium score for the dimensions of empathy, acceptance, caring, assertiveness and loyalty in candidate D's evaluation. Moreover, this team member is in the creative half of the group. Team member B is also in the creative half of the group, according to candidate D. He is further evaluated to show behaviour related to criticism, resignation and self-sacrifice. Moreover, candidate D evaluates team member B to show the least behaviour related to empathy, acceptance, caring, ruling and loyalty, out of all the members of the group. In opposite, this team member is here evaluated to be one of the most task-oriented and assertive members of the group. Team member C is also one of the creative, critical and self-sacrificing members of the group, according to candidate D. He is given a medium and low score for the dimensions of acceptance and empathy, and is in the top of the group for behaviour related to caring, assertiveness, ruling, task-orientation, loyalty and engagement.

According to himself, team member D does not display any behaviour related to creativity, criticism, resignation and self-sacrifice. The candidate believes that he scores medium to high on all other dimensions, compared to the other group members. The dimensions D considers himself to score medium within is empathy and assertiveness, whilst the ones with high scores are acceptance, caring, ruling, task-orientation, loyalty and engagement. Team member E is here considered to be in the part of the group that show behaviour of criticism and self-sacrifice, but no behaviour related to creativity and resignation. According to candidate D, he is showing less behaviour related to caring and task-orientation than the rest of the group, but is one of the team members to show the most behaviour related to acceptance, ruling, loyalty and engagement. He does not stand out from the group in relation to empathy and assertiveness. Lastly, similar to team member D, team member F is here evaluated to not display any behaviour related to creativity, criticism, resignation and self-sacrifice. He is further evaluated to show only a little behaviour of assertiveness, the least of all the group's members. However, the team member is given the highest score in the group for empathy, caring, task-orientation and engagement.

Team member F describes the group as more polarised than how it is displayed in the average evaluation, and argues that it is mostly team member E who is creating this polarisation, even though team member B also separates from the group slightly more than the other members. This is evident from column X and Y in table 3 above, where E's values are considerably lower than for the rest of the group. Candidate F believes that team members A, B, C, D and F hold synergy roles, whilst he evaluates team member E to hold a withdrawal role. This indicates that candidate F perceives team member E as showing signs of discouragement and resignation, and candidate F believes that team member E thinks team work is too demanding or completely uninteresting. This is noticeable, as none of the other team members have evaluated any of the group members to hold withdrawal roles. Further, it is evident from column N2 in the same table that candidate F believes that half of the team display criticism, and that this half consists of team members C, D and E. These team members are given considerably higher values for criticism here than in the average evaluation, especially candidate E. Candidate E is also considered to display behaviour related to resignation, as well as candidate D. However, candidate D is given a lower value for this type of behaviour. Lastly, it is worth noticing the high scores candidate F gives himself and candidate B in column Z, indicating that they take up far more space in the group than most of the other team members.

Candidate F believes that candidate A is the team member to show the least acceptance and ruling, and he does not believe that A shows any self-sacrificing behaviour. He does, however, believe that team member A shows a lot of behaviour related to caring, task-orientation and engagement. Further, Candidate F believes team member B is one of the members in the group displaying the most behaviour related to task-orientation, and the least behaviour related to acceptance and loyalty. He also believes team member B shows self-sacrificing behaviour. Both in the average evaluation and in candidate F's evaluation team member C gets a medium score for empathy and acceptance. Candidate F does further believe that team member C is one of the team members to show the most behaviour related to caring, assertiveness and self-sacrifice, and to be one of the team members showing *some* criticism

and self-sacrifice. Moreover, candidate F considers him to be the one to show the least behaviour of ruling, task-orientation, acceptance and loyalty within the group.

In regards to team member D, candidate F believes that that he displays no resignation at all, and that he holds some behaviour of criticism. He is further evaluated to display the most acceptance and the least assertiveness in the group in both the average evaluation and candidate F's evaluation. Moreover, F believes that this team member displays the least behaviour related to control, empathy and loyalty within the group, but the most engagement. Candidate E is considered both by candidate F and the average evaluation to be the member showing the least empathy, caring, ruling, task-orientation, loyalty and engagement. Lastly, team member F is evaluated by himself and the average evaluation to not show any self-sacrificing behaviour at all. Further, candidate F believes he shows some criticism. The team member gives himself high values on several of the dimensions, and considers himself to be one of the team members showing the most empathy, acceptance, care and engagement. Moreover, candidate F sees himself as one of the most ruling, task-oriented and loyal members of the group.

6.1.1.2 Trondheim

Figure 14 below presents the field diagram of the team at Powel's headquarters in Trondheim as a whole, based on the average of the evaluations each team member has given. Even though there is a spread in the evaluations, given by the dotted lines, the spread is smaller for the Trondheim-office than what it is for the team in Gdansk (figure 12). Three out of the four team members are evaluated to hold synergy roles, whilst the last team member has a dependency role. This means that most of the team members show a relatively balanced specter of behaviour and do not take on specific roles. The team member constituting the grey circle is showing behaviour of dependency and is perceived as humble, cautious and loyal.

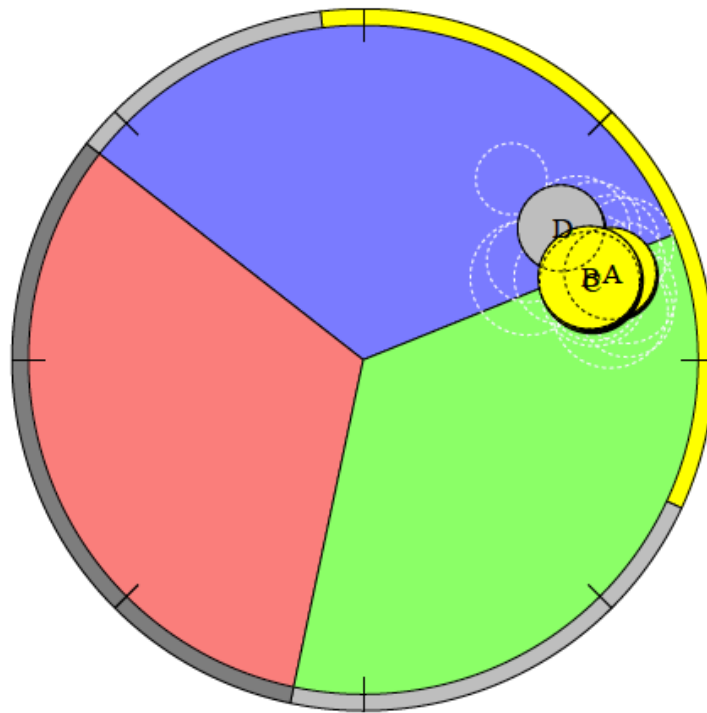


Figure 14: Field diagram of Powel Trondheim: the group as a whole.

The scores of each circle along the different SPGR-dimensions are given in the table below.

Table 4: Scores for Powel Trondheim as a whole.

Trondheim Group															
	X	Y	Z	S2	D2	N1	N2	O1	W1	W2	O2	C1	C2	D1	S1
A	15	5,25	0,75	3,5	3,75	3,75	0	0,25	0	0	0	1,25	3,25	2,75	4
B	13,8	5	2,75	4	3,75	3,5	0	0	0	0	0,75	1,5	2,75	2,5	3,75
C	13,8	4,75	2,25	3,25	3,5	4	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75
D	12	7,75	-0,25	2,75	3,75	3	0	0	0,25	0,5	0,25	1,5	3,75	3,25	3,75

As can be seen from the figure above, there are two members in the team that takes up the biggest space within the group: candidate B and C. Candidate B takes up a little bit more space than candidate C. The two team members overlap almost completely, but there are some differences: member B is considered not to display any behaviour related to creativity, criticism, resignation or self-sacrifice, whilst candidate C is considered to be the team member holding the most of this behaviour (though not much). Further, it is evident from the scores in table 4 that team member B and C shows different amounts of task-orientation, loyalty and engagement. Moreover, candidate B is considered as the group

member showing the most control, whilst team member C is considered in this average evaluation to show the least. However, they are both considered to be the team members showing the most behaviour of assertiveness. Further, candidate C is considered to show less acceptance than the rest of the group, but the most care. Candidate B is seen as the person showing the most empathy in the group.

Circle A is the third largest in the field diagram, and the candidate holds a synergy role. This means that the candidate takes up the third largest space in the group, and that he or she shows a wide specter of behaviour. He or she is evaluated by the group to not display any behaviour related to creativity, resignation, self-sacrifice and assertiveness, but does show *some* criticism. This person is also evaluated to be the one to show the most engagement in the group. Team member D is also considered not to show any creativity, and is further evaluated to not show any criticism, but does however display some resignation and self-sacrifice. He or she is also considered to be the one to show the most behaviour of ruling, task-orientation and loyalty. However, he or she is showing the least empathy and care, according to this average evaluation. It is important to realise that this is the only team member evaluated to hold a dependency role, and that he or she takes up the smallest space in the group.

The presentation of the group given above is an average of all the individual team members' evaluation of each other and self. Figure 15 below display all the team members' separate evaluations, and enlighten the difference in how they perceive the group and each other.

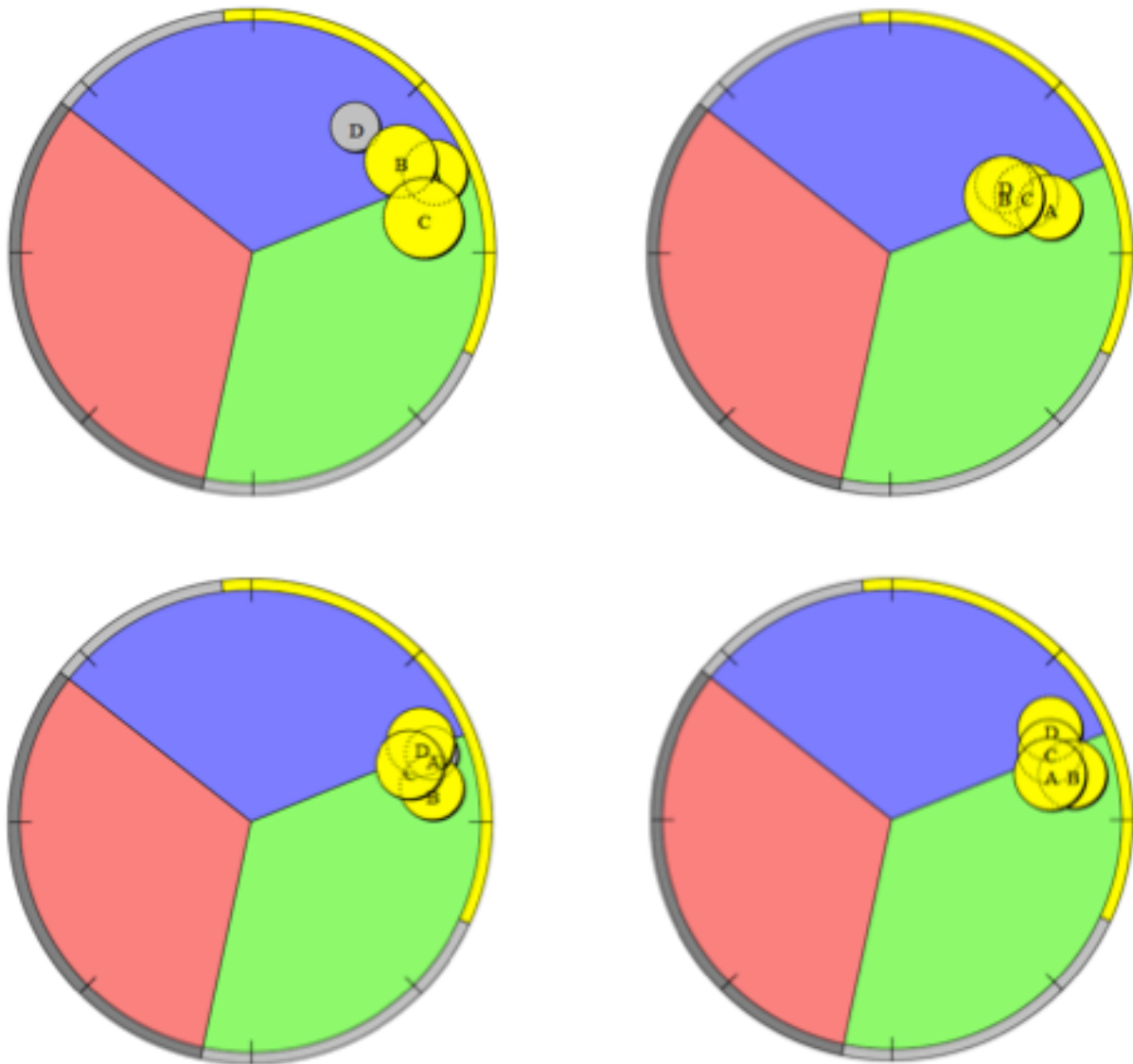


Figure 15: Field diagrams for the separate evaluations of the team members in Powel Trondheim.

From figure 15 above, it is obvious that there are some differences in how each of the team members evaluates the group. I do not see the need for going into detail on each of these evaluations, but I will present one of them further on for illustrative purposes. The evaluation chosen is team member D’s evaluation, whose field diagram is displayed in the top left corner of figure 15. The scores the candidate gives himself/herself and his/her team members along the 12 SPGR dimensions are presented in table 5 below.

Table 5: Scores for Powel Trondheim, evaluated by D.

Trondheim Group															
	X	Y	Z	S2	D2	N1	N2	O1	W1	W2	O2	C1	C2	D1	S1
A	16	7	1	4	4	4	0	1	0	0	0	2	4	4	4
B	13	8	3	4	4	4	0	0	0	0	2	3	3	4	4
C	15	3	5	4	4	4	1	2	0	0	1	1	4	3	4
D	9	10	-3	2	4	3	0	0	1	1	1	3	4	4	4

Team member D perceives the group as more widespread and less conform than what is the average opinion of the group as a whole (see figure 14), and how the other team members evaluate the group (see figure 15). He or she perceives the group members to be more widespread and the difference in how much space each team member takes up to be larger. Further, in candidate D's view three of the team members are holding synergy-roles, whilst the last team member is holding a dependency-role. The member holding the dependency-role in this evaluation is himself/herself. This complies with the result in figure 14. As candidate D considers himself/herself to be the only team member holding a dependency role, it follows that he/she considers himself/herself to be the team member taking up the least space in the group. The one considered by candidate D to take up the most space in the group is team member C.

In candidate D's view, all the group members shows a high amount of acceptance and engagement. Further, he/she believes that candidate C is the only person to hold creative behaviour in the group, and himself/herself to be the only team member to show behaviour related to resignation and self-sacrifice. Moreover, team members B and D are here evaluated to not show any criticism, whilst candidate A shows *some* and candidate C shows *some more*. The opposite is the fact for the control dimensions, where candidate C is given the lowest score, and candidate B and D both score the highest values in the group. Team member C is also considered to be less loyal than the rest of the group, according to candidate D. Moreover, the candidate evaluates himself/herself to show less empathy and care than the rest of the group, and team member B to be less task-oriented than the other group members. Lastly, candidate D does not believe that team member A display any

behaviour related to assertiveness, as the only member of the team not holding this characteristic.

6.1.1.3 The relationship between the offices

Below is two field diagrams presented. The first illustrates the average evaluation of how the team members at the office in Gdansk perceive themselves as a team and how they perceive the team at the office in Trondheim (figure 16). The second illustrates the average evaluation of how the team members at the office in Trondheim perceive themselves as a team and how they perceive the team at the office in Gdansk (figure 17). In these diagrams, circle A is illustrating the Gdansk-office, whilst circle B is illustrating the Trondheim-office. It is important to realise that these field diagrams display the average evaluations, and that there is a spread in how each of the individual team members evaluates the offices. The spread is given by the dashed lines in the two diagrams, and it is easy to observe that the spread is largest for the Gdansk-office. This implies that the team members in Gdansk have a more dispersed view of the teams than the members in Trondheim has.

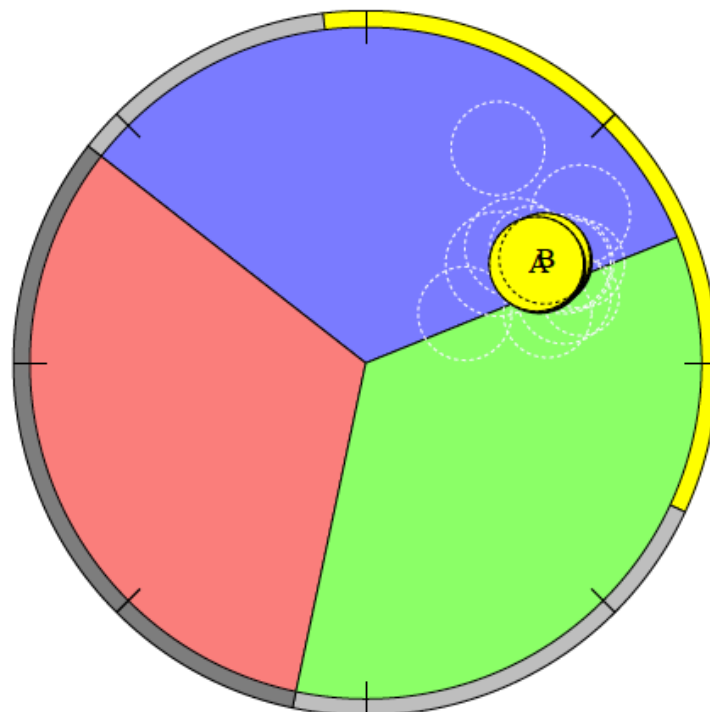


Figure 16: Field diagram: How the Gdansk-office perceives their own team and the team at the Trondheim-office.

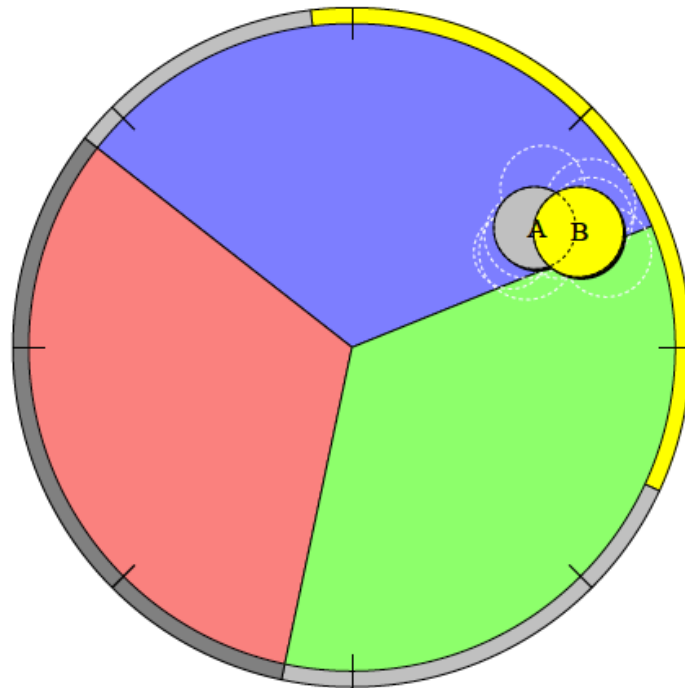


Figure 17: Field diagram: How the Trondheim-office perceives their own team and the team at the Gdansk-office.

The scores of each circle along the different SPGR-dimensions are given in the table below.

Table 6: Scores for Powel Gdansk and Trondheim, evaluated by themselves and each other.

Gdansk Group															
	X	Y	Z	S2	D2	N1	N2	O1	W1	W2	O2	C1	C2	D1	S1
A	10,33	6	1,17	3	3,67	3,33	0,17	0	0,33	0,17	1,83	2,33	2,67	3,17	3,67
B	10,83	6,17	0,5	2,83	3,67	3	0	0	0,17	0,17	0,83	2,33	2,17	2,67	3,83
Trondheim Group															
A	11,5	7,5	-0,5	2,5	3	2,5	0	0	0	0,25	0,5	0,75	3,25	3,5	3,5
B	14,25	7,25	1	3,5	4	3,75	0	0	0	0	0,5	1,75	3,75	3,25	3,75

The two offices do not share the same view of the cooperation between the offices, and which characteristics each office has. Firstly, both offices believe they take up the most space in the relationship themselves, which is easily visible in the field diagrams above. However, the Gdansk-office believes the difference in how much space each office takes up is smaller than what the Trondheim-office thinks. In fact, the team in Trondheim has evaluated the Gdansk team to take up so little space that they are characterised by a

dependency role in their view. Further, both offices consider themselves as showing the most behaviour related to empathy, caring and task-orientation.

Both the Trondheim-office and the Gdansk-office believe there is a lot of acceptance in their relationship, but whilst the Gdansk-office evaluates both offices to be equally accepting, the Trondheim team believes they are more accepting than the other team. Further, the Gdansk-team believes the offices are equally controlling, autocratic and attentive to rules and procedures, whilst the team in Trondheim perceives their own team to show more of this behaviour than the team members in Gdansk. In opposite, the team in Trondheim believes both offices show the same, small amount of assertive and self-sufficient behaviour, whilst the Gdansk-office evaluates themselves to be more assertive and self-sufficient than the Trondheim-office. However, the offices agree on some points: both offices believe that the Gdansk-branch is more loyal, obedient and confirming than the office in Trondheim, and that the Trondheim-office is more engaged than the Gdansk-office. The Trondheim-office believes there is no creativity, spontaneity or resignation in any of the offices, whilst the team in Gdansk believes they themselves show *some* creativity and that both offices show a little resignation. Further, the team in Trondheim do not believe they show any self-sacrificing behaviour at all, but evaluate the team in Gdansk to show *some*, whilst the team in Gdansk believes the two offices show the same small amount of this behaviour. What is noticeable, however, is that both offices agree that none of the offices display any criticism.

6.1.2 Confirmit

The SPGR-survey conducted in Confirmit in 2011 includes two teams consisting of four members each, who were and are located in Oslo and Yaroslavl. The team in Oslo consisted of Norwegian males and the team in Yaroslavl consisted of Russian males. Below, I will first present the data obtained from the Oslo-team regarding their view of the team they constitute. Further, the corresponding data of the Yaroslavl-branch will be presented.

6.1.2.1 Oslo

The team members in Oslo give a somewhat dispersed description of the behaviour of the members of the team. Figure 18 below presents the field diagram of the group as a whole, based on the average of the evaluations each team member has given.

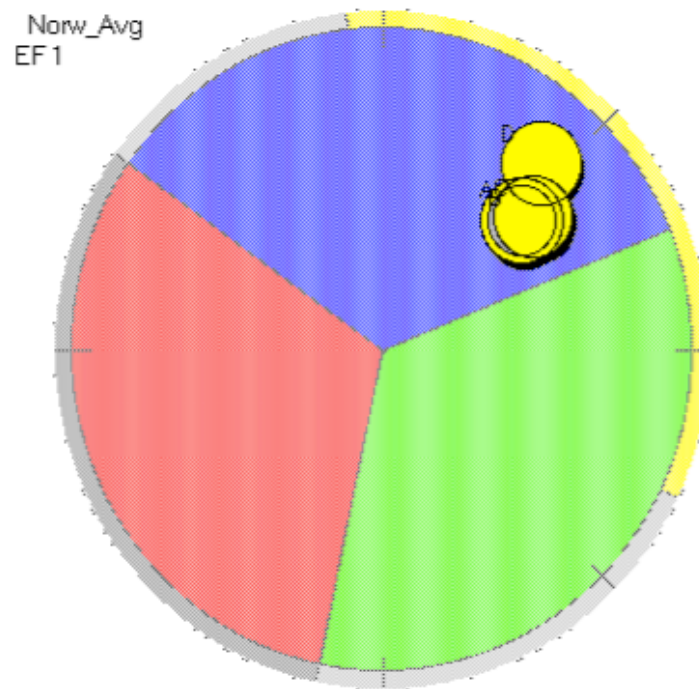


Figure 18: Field diagram of Confirmit Oslo: the group as a whole.

I was not able to access the scores for each of the team members in Confirmit along the 12 dimensions described in table 1, but I did get the scores for the X, Y and Z-values of each team member. The scores of each circle are given in the table below.

Table 7: Scores for Confirmit Oslo as a whole.

Oslo Group			
	X	Y	Z
A	8,75	6,75	2,25
B	8,75	6,5	-1,5
C	9,5	7	1,5
D	10	9,75	2

In this average evaluation, the team members seem to display relatively equal behaviour, except from team member D who stands out a little from the group. Three out of four team members are evaluated to take on synergy roles, whilst one team member, B, holds a dependence role. This can be seen from the grey colour of circle B in figure 18 and the negative value in the Z-column in table 7 for this team member. This means most of the team members show a relatively balanced specter of behaviour and do not take on specific roles. The behaviour most prominent within these synergy-roles is behaviour that promotes cooperation, dedication and empathy. The team member constituting the grey circle is showing behaviour of dependency and is perceived as humble, cautious and loyal. In this average evaluation, candidate A is considered to take up the most space in the group, followed by team member D. Further, all team members are evaluated to be fully within the control-area of the diagram, indicating that they are loyal, engaged and task-oriented.

The representation of the group given above is an average of all the individual team members' evaluation of each other and self. Figure 19 below display all the team members' separate evaluations, and enlighten the difference in how they perceive the group and each other.

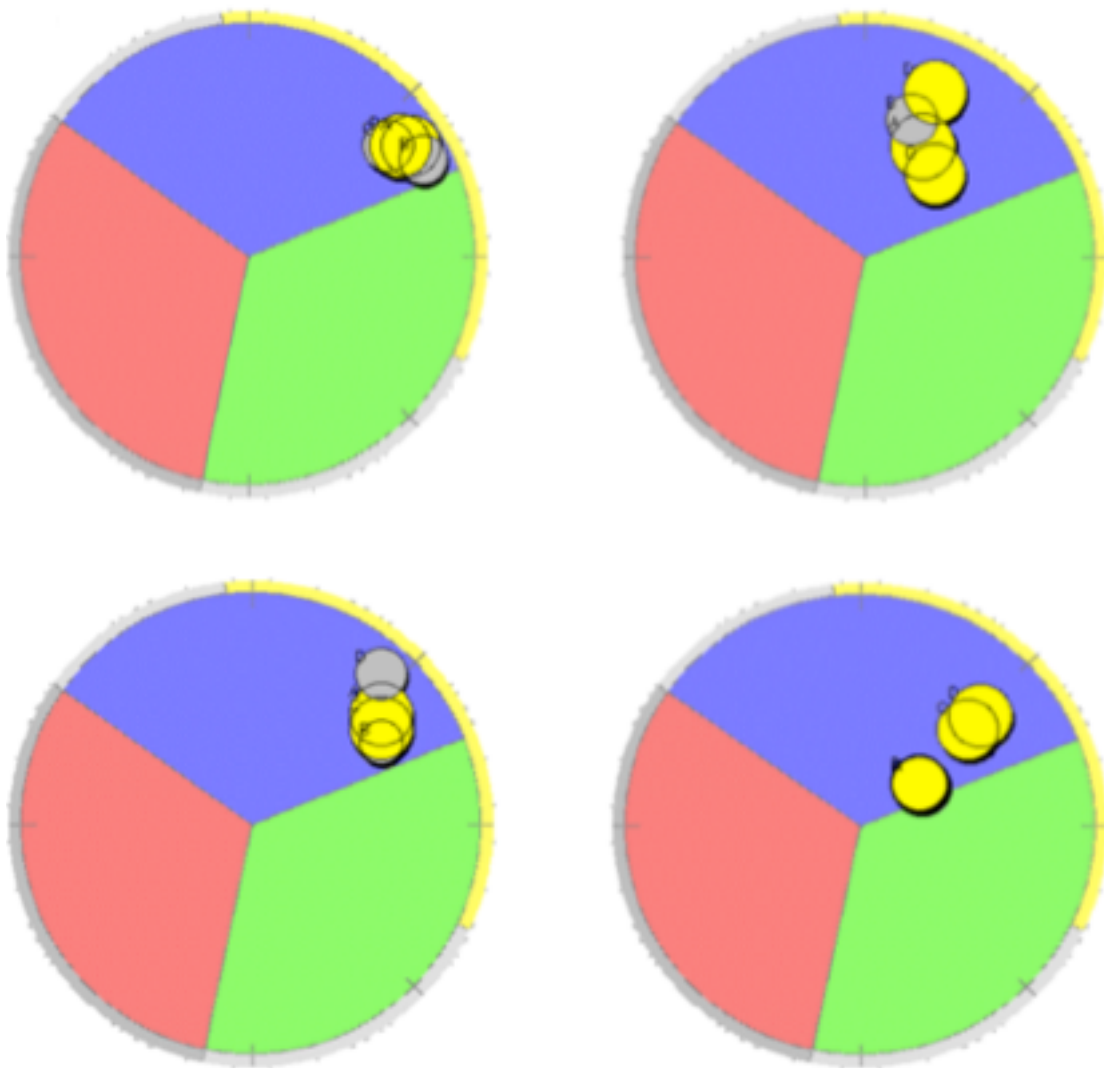


Figure 19: Field diagrams for the separate evaluations of the team members in Confrimit Oslo.

From figure 19 above, it is obvious that there are some differences in how each of the team members evaluates the group. I do not see the need for going into detail on each of these evaluations, but I will present one of them further in for illustrative purposes. The evaluation chosen is team member A's evaluation, whose field diagram is displayed in the bottom right corner of figure 19. The X-, Y- and Z-scores candidate A gives himself and his team members are presented in table 8 below.

Table 8: Scores of Confirmit Oslo, evaluated by A.

Oslo Group			
	X	Y	Z
A	5	3	0
B	5	3	1
C	9	7	2
D	10	8	3

Team member A perceives the group as more polarised than what is the overall opinion among the group, where A and B constitute one sub-group and C and D constitute the other. Candidate A believes that the sub-group in which he is not a part of, takes up the most space in the team. Moreover, he believes that this sub-group holds more behaviour of loyalty, engagement and task-orientation than his own sub-group, which he perceives as more caring, creative and critical. He also believes that his own sub-group displays more behaviour of resignation. Further, the candidate believes all of the team members hold synergy roles, even team member B who holds a dependency role in all other evaluations. It is noticeable from table 8 that team member A gives himself the lowest score along the Z-dimension, even though the average evaluation of the group is that he takes up the most space within the group (see table 7).

6.1.2.2 Yaroslavl

The team members in Yaroslavl evaluate themselves to hold more nurturing behaviour than what the Oslo-office evaluates themselves to have. Figure 20 below presents the field diagram of the group as a whole, based on the average of the evaluations each team member has given.

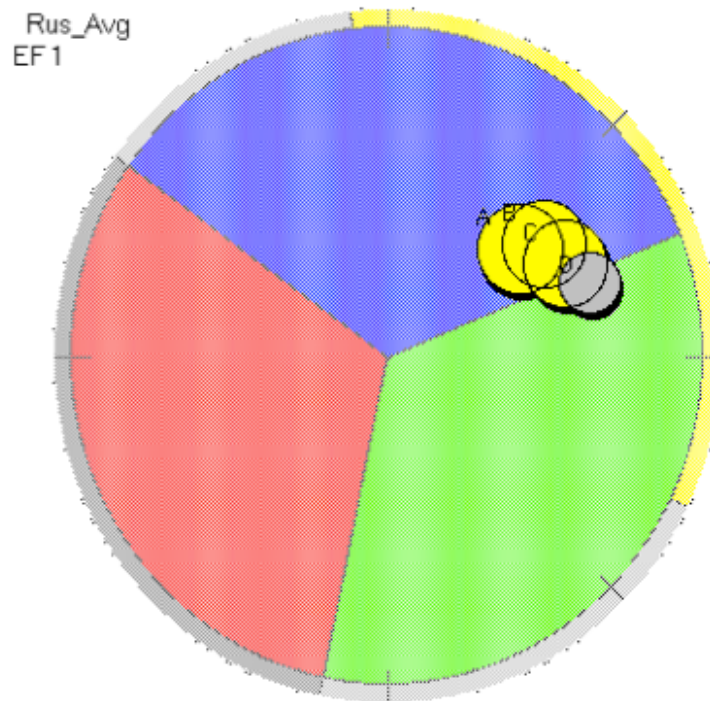


Figure 20: Field diagram of Confirmit Yaroslavl: the group as a whole.

The scores of each circle are given in the table below.

Table 9: Scores for Confirmit Yaroslavl as a whole.

Yaroslavl Group			
	X	Y	Z
A	8,25	5,5	3
B	9,75	5,75	2,5
C	11	4,75	2,5
D	12,5	3,75	-3,75

In this average evaluation, there is one team member standing out from the rest: team member D. This team member takes up far less space than rest of the members (see column Z table 9), and is the only member evaluated to hold a dependency role. This means that he is perceived as humble, cautious and loyal. Further, as this team member is located further into the green area than the rest of the group, he displays more behaviour of empathy and acceptance than the rest. The other three members of the group are evaluated to hold synergy roles, meaning that they show a relatively balanced specter of behaviour and do not

take on specific roles. Behaviour related to cooperation, dedication and empathy is the most prominent within these roles. Further, these three team members show behaviour of engagement. The difference in how much space each team member is evaluated to take up within the group is greater than the difference within the team at the Oslo-office (see figure 20 and table 9 above). In this average evaluation, the three team members holding synergy roles is taking up almost the same amount of space in the group, but team member A takes up a little more than the rest.

The presentation of the group given above is an average of all the individual team members' evaluation of each other and self. Figure 21 below display all the team members' separate evaluations, and enlighten the difference in how they perceive the group and each other.

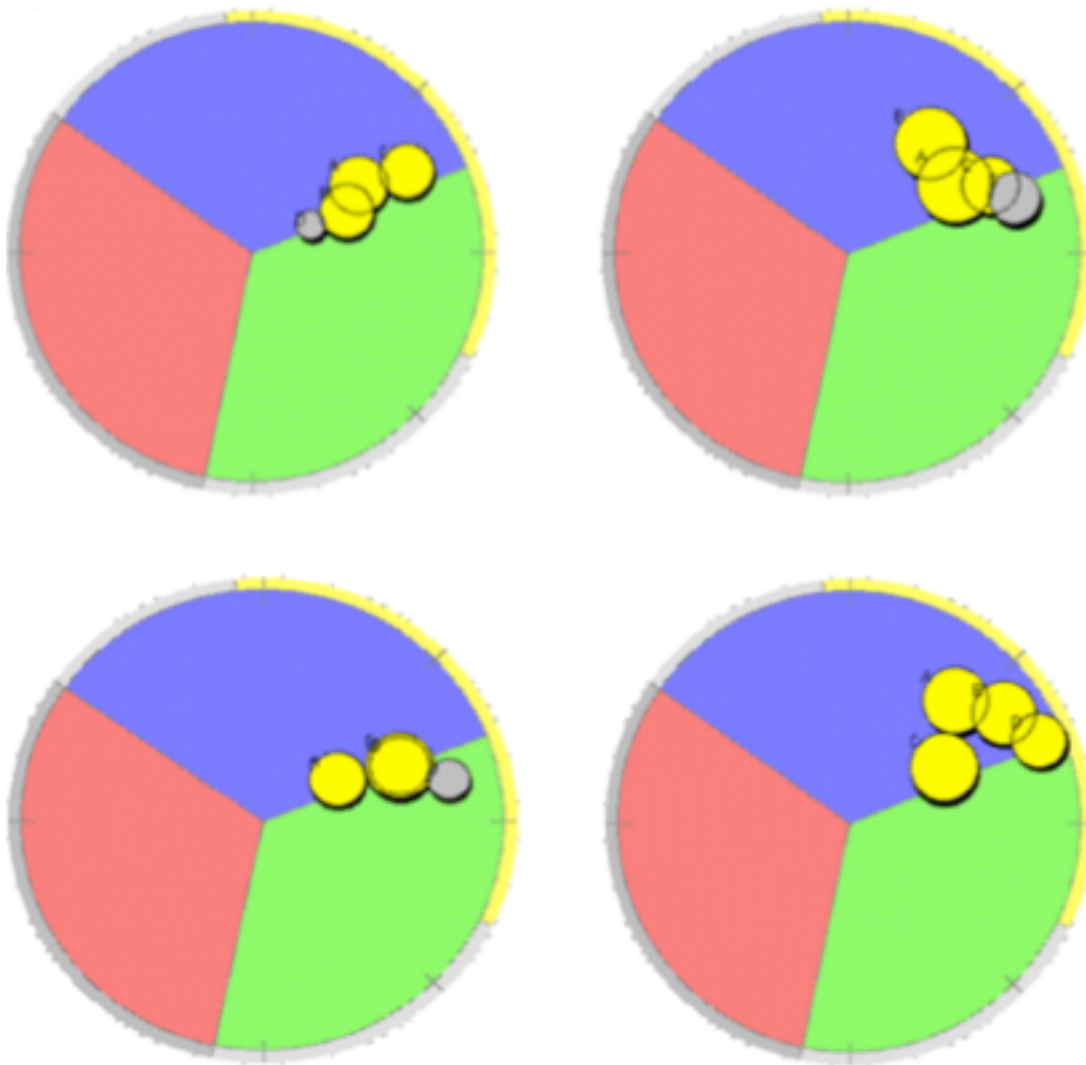


Figure 21: Field diagrams for the separate evaluations of the team members in Confirmit Yaroslavl.

From figure 21 above, it is obvious that there are some differences in how each of the team members evaluates the group. I do not see the need for going into detail on each of these evaluations, but I will present one of them further on for illustrative purposes. The evaluation chosen is team member D's evaluation, whose field diagram is displayed in the top left corner of figure 21. The X-, Y- and Z-scores candidate D gives himself and his team members are presented in table 10 below.

Table 10: Scores for Confirmity Yaroslavl, evaluated by D.

Yaroslavl Group			
	X	Y	Z
A	9	5	1
B	8	3	0
C	13	6	0
D	5	2	-9

Team member D separates himself from the average evaluation on several points. In team member D's view, all team members in the group takes up less space than how it is illustrated in the average evaluation. However, both evaluations agree that team member A takes up the biggest space. What is noticeable is the very low score candidate D gives himself along the Z-dimension; he believes he takes up far less space in the group than the rest of the team members think. From this it follows naturally that candidate D perceives himself to hold a dependency role, as the only team member. The rest of the team members are holding synergy roles, according to candidate D. Further, candidate D evaluates himself to hold more oppositional behaviour and less behaviour of engagement, empathy and loyalty than what is the average opinion of the group. Circle B is also moved a little closer to the centre of the field diagram, indicating the same changes in characteristics as with candidate D, but to a lower degree. Further, candidate C is here moved closer to the border of the diagram, indicating that he is perceived by candidate D to hold more behaviour of engagement than in the average evaluation.

6.2 Presentation of data from interviews

In April 2014, I conducted a total of eight interviews (3.3.3). The data from these interviews will be presented below. Where possible, the presentation of the data is given according to the structure of the theory-chapter.

6.2.1 Interviews at Powel Trondheim

6.2.1.1 Social relationship

In both interviews at Powel Trondheim it was stated that the social conditions and relations in the office are good and that the employees spend time together in their spare time:

“Powel is a very nice place to work, because there is a very positive working environment here [...] It is one of the strengths of Powel, as a company.” Says interviewee 1. Interviewee 2 expresses the same viewpoints and adds that: *“it is very informal. [...] Several of the employees spend time together after work-hours”*. Interviewee 2 elaborates on this by explaining that the company has several different sports teams, and that some of the employees take dance classes together.

The interviewees also state that the social relationship with the department in Gdansk is good. Interviewee 2 expresses that it has been *“quite nice and very social”* and states that they have the same humour. Interviewee 1 describes the tone between the offices as *“informal and pleasant”* and explain that he talks with members of the other team almost daily. It is explained that the Polish employees spent their first 2-3 weeks in the company at the headquarters in Trondheim, where it was a mix of professional business activities and social activities. Further, the interviews reveal that all of the Norwegian team members have visited the office in Gdansk and been doing social activities with the Polish employees in their hometown. Interviewee 1 underlines that these elements helped them get to know each other better. Interviewee 2 believe that the social relationship between the offices is so good that *“I think that if they had moved to Trondheim they would fit quite right, socially”*, and that *“it is people that I would consider being friends with if they lived here”*.

6.2.1.2 Knowledge transfer

Interviewee 1 explains that most of the knowledge transfer happening within Powel is performed because someone ask to get the knowledge. He/she explains that: *“If you need to know something, you first have to find out who you can ask, and then you ask your question”*. Interviewee 2 agrees that this is the way most of the knowledge transfer happens, and adds that the Polish team often asks questions. However, interviewee 2

underlines that he/she often shares knowledge with the polish team of his/her own initiative, but that there is no routine in this sharing. He/she adds that the sharing happens: *“ad hoc, but with the basis in that there is some sort of framework present”*. Interviewee 1 explains that inquiries about sharing ones knowledge is received in a good manner and that most people are usually very helpful: *“People are very helpful, and people understand that their knowledge needs to be shared with others. [...] In general, it is no problem to ask for help”*.

The interviews conducted in Trondheim revealed that most of the knowledge transfer between the offices has been one-way from Trondheim to Gdansk: *“Up till now it has been quite one-way from us to them”* says interviewee 2 and explain it by saying that it is because: *“it is us who knows our products and the history”*. Interviewee 1 was also asked if there has been any knowledge transfer from Gdansk to Trondheim and answers: *“No, not yet”*, but believes that the framework needed for it to happen is establishing. Interviewee 2 also believes that the knowledge transfer will be more two-way in the future, but do not think that it will be equally amounts from both sides: *“I believe that the dialogue between us, or the knowledge transfer, will be more evened out the more knowledge they have about the products. [...] I do not believe that it will be 50/50”*.

Interviewee 2 elaborate on how the knowledge transfer is different in this case than from the situation where both teams are located in the same office: *“Of course, it demands a bigger effort of you [...] It is not as informal as popping your head up from your stall and asking the person next to you”* and argues that this creates a barrier for asking because it is more cumbersome. However, the interviewee underlines that many of the misunderstandings and barriers created between the teams are simply because the team in Poland consists exclusively of new employees who did not have any prior knowledge about Powel’s products, and believes they would face a lot of the same “problems” if they had hired new employees to form a team in the same office in Trondheim.

6.2.1.3 Team roles and Team culture

When asked about informal roles within the team, the two interviewees in Trondheim answered differently. Interviewee 1 believes that there are someone in the team being more controlling than others, whilst interviewee 2 states that none of the team members are very controlling, and that no one is taking up a lot more space in the group than others. However, he/she states that *"It is a difference in personality, so some are a little shy"*, indicating that the team members behave differently from each other. Interviewee 1 sums up that he believes the team culture is good and states: *"I think we cooperate very good. I perceive the others in the group as easy to work with and to talk to [...] We have an informal and good tone"*.

Interviewee 2 comments on the team roles of the Polish team by explaining that one of the team members asks the Trondheim-office more questions than the others and that one of the members asks less questions than the rest of the group, indicating that there are team members taking up more and less space in the group than the other members in the team.

6.2.1.4 National culture

In regards to national culture, interviewee 2 stated that: *"how they (the Polish) are as individuals, I do not notice any cultural differences. [...] But the rituals are a little different"*. When he/she is asked if the differences affect the work or is visible in how they work, the answer is: *"I don't believe so. No, I don't believe so"*. Interviewee 1, however, explains that there is one evident difference between Poland and Norway: the Polish people have a very high work morale.

The interviews reveal that the Norwegian team members believe that there is a stronger sense of hierarchy and routines in Poland, and that this is evident through their daily work and opinions: *"Of course there are some cultural differences here that we just have to accept [...] In Poland, one is a little bit more concerned with hierarchy and ranking"* interviewee 1 states. Interviewee 1 further explains that he believes that they are more used to clear instructions on what do to and how to do it, and thinks that they might not be completely

comfortable in working in the iterative way that Powel does. However, he believes that they have managed and adapted to the way of working well, and believes that they will get even more used to it in the future.

6.2.1.5 Factors of success

Interviewee 1 believes that the most important element for the good cooperation with the office in Gdansk is that *“We have people here that have the possibility to set aside most of their time to follow up the team in Poland”*.

Interviewee 1 believes that another factor of success for the cooperation between the offices is the establishment of a good social foundation: *“We had them visiting Trondheim for two weeks, so that we became familiar with them, and so that they got to know the culture in the company and the people they will have to deal with when they go back to Poland. This was also important the other way around, so when someone in Trondheim have to help them they are not only a strange person with a funny name, but someone you have actually met and who you know a little”*. Interviewee 2 agrees with this viewpoint of the social foundation being an important factor of success: *“We have had social happenings that makes us know each other as a person before we started to communicate technically. I think that it was very important”*.

6.2.1.6 Challenges and barriers

Interviewee 1 explains one weakness for the knowledge flow between the offices: *“It might be a weakness that on very many areas there are only one person that knows much about the subject. We should be better at spreading the expertise and competence on more than one person. One gets vulnerable regarding this person”*. Interviewee 2 also identifies two challenges related to the knowledge transfer between the two offices: *“I believe that the biggest challenges in regards to the knowledge sharing is time and size. Time considering that knowledge transfer often is put in the back of the pile of other things to do [...] and size in relation to the size of the company: the bigger the company will be and the more countries it will have units or offices in, the harder it will be to continue the knowledge transfer”*.

When asked whether he/she sees any barriers for the knowledge transfer between the offices, interviewee 2 answers: *“No, not much really”*. Further, both interviewee 1 and interviewee 2 agree that they do not see language as a barrier for the knowledge transfer and cooperation between the offices. Interviewee 2 states: *“Linguistically it is going well, because none of us have English as a mother tongue, so I do not believe they think they have to speak perfect English to talk to us, and we do not feel that way with them either”*.

However, interviewee 1 explain that even though it is not a barrier, much of the social relationship is set back due to the difference in language, and that it is not as easy to for instance make jokes as it is when they interact with Norwegian teams.

6.2.2 Interviews at Powel Poland

6.2.2.1 Social relationship

The interviewees at the Powel-office in Gdansk revealed that the employees are satisfied with the social conditions and relationships in the office: *“The social relationship in the office is great in my opinion [...] The atmosphere in the office is really good”* states interviewee 1. Interviewee 2 agrees: *“I think it is excellent. [...] I think everyone is happy, including me obviously. [...] I think the atmosphere is very good”*. Interviewee 3 shares the same view as the others: *“ [...] it is fun to spent time together. [...] The atmosphere is really good in the office”*. However, the three interviewees do not share the same viewpoint regarding spending time with each other outside the office: *“We have spent time outside the office a few times for beers”* says interviewee 1, whilst interviewee 3 states that *“I don’t think that we spend much time together outside the office, I think eight hours is enough”*. Interviewee 2 explain this by saying that the office is still new so they have not yet had time to spend a lot of their spare time together, but that they *“are planning to”*.

The interviews reveal that the office in Gdansk also has a good relationship to the team located in Trondheim, and interviewee 1 states: *“We feel here as equals, so we can say everything”*. He also believes that this might be because they have spent time together outside the office in their introduction-weeks in Trondheim in February: *“We spent a lot of time together in Norway when we had our introduction to the company [...] Without the*

evening meetings it (the relationship between the offices) would not have been so close now. So I feel that it was very important". Interviewee 2 also express good thoughts about the relationship between the offices: "It is a very friendly relationship I think [...] We don't have any tensions or politics or something. It is very straightforward to work with each other".

Interviewee 3 also confirms that the relationship towards the Trondheim-office is good, and states: "I trust them [...] I believe in their professionalism". He explains that he feels very free to contact them and ask questions.

6.2.2.2 Knowledge transfer

When addressing the knowledge transfer between the office in Trondheim and Gdansk, interviewee 1 states: "The knowledge transfer from Trondheim to Gdansk is great". He further explains that there are many specialists and experts in Trondheim available if they have any questions: "There are a lot of possibilities to get knowledge from Norwegian specialists". He also believes that it is important that they have several communication channels, and explain that they use the intranet to share documents with the whole company, chatting and mail for sharing knowledge with specific persons or groups and videoconferences for face-to-face knowledge sharing.

The interviews in Gdansk revealed the same information as in Trondheim regarding the knowledge transfer between the offices being mostly one-way. Interviewee 1 explicitly states that the knowledge transfer between the offices is conducted from Trondheim to Gdansk, whilst interviewees 2 and 3 both answer "No" when asked if they believe that there is any knowledge transfer from the Gdansk-office to the Trondheim-office: "Not yet done, but in the plans" interviewee 2 says. Interviewee 3 supports this: "I think we are planning to". Interviewee 2 is asked whether he believes that the knowledge transfer between the offices will be two-ways in the future, and answers: "Yes, I think so. Yes, of course".

Interviewee 1, however, believes that they have *some* knowledge transfer from their office to the rest of the organisation (and hence the Trondheim-office), and states that: "We often share our documents on the intranet". Further, interviewee 3 explains that when someone in the team finds smart solutions for their problems in Gdansk, they usually tell the rest of the

team during the daily stand-up meetings, and since some of the Norwegian team members usually join these meeting through videoconference or Lync call there might be some knowledge transfer from Gdansk to Trondheim this way.

The interviews reveal that the office in Gdansk often has to take responsibility for the knowledge flow from Trondheim to Gdansk: *“It is our responsibility to get all the necessary information”* interviewee 2 says, which correlates with the interviews at the Trondheim-office where it was said that the Gdansk-office is encouraged to ask a lot of questions, and that they do. Further, interviewee 2 explains that the team in Trondheim is *“responding very quickly and is keen and happy to educate us and help us. So it is very good I think”*.

Similar to what was expressed in the interviews at the office in Trondheim, it was revealed here that even though the knowledge transfer and the relationship between the offices is considered to work very well, it would be easier if everyone was located in the same place: *“We have a lot of talks during the day about problems we are facing and how we can solve them in a better way. But we have to do that with the people here, because it is kind of hard to do the same with people who are not on site since most of our talks are discussions and they are not planned, they just pop up”* interviewee 3 says.

6.2.2.3 Team roles and Team culture

All the interviewees agree that some of the team members take up more space in the group than others. Interviewee 1 says that some of the team members talk more than others, whilst interviewee 3 says that some of the team members talk less than others. However, interviewee 3 believes that *“it is just a matter of time”*. Interviewee 2 agree with both of them in stating that some of them speak a lot whilst others are more quiet and listens more. It was expressed that how much space each of the team members takes up in teamwork and discussions is dependent on the topic addressed. Further, how much space the members take up is not necessarily dependent on the position they have in the company, and interviewee 1 emphasise that *“ideas from junior engineers are equal to the ideas from senior engineers”*. When asked if he believes there are distinct informal roles within the team,

interviewee 3 answers: *"Yes, it is"*. In fact, interviewee 3 argues that he can predict the behaviour of some of the members of the team, indicating distinct informal roles.

Interviewee 1 states: *"We inherited the Norwegian culture, or maybe the Powel culture, to our Gdansk branch of Powel. And it is really nice"*. Further, interviewee 2 argues that they have a good team culture and office culture because of the low pressure from the office in Trondheim to deliver results, and that they in this way can focus the details and on delivering quality instead of quantity. He explains how it is in most companies in Poland: *"Most companies in Poland have tight budgets and have to deliver fast"* and calls it a *constant fight*. *"Powel don't have that kind of "be or not to be" pressure as the companies in Poland"* he says and explains that this creates a more relaxed atmosphere and good team culture in the company. Interviewee 3 has the same viewpoint and states: *"I think the atmosphere is good because we do not have any pressure, or so much pressure, from our product owner, so we can focus on delivering high quality software"*.

6.2.2.4 National culture

The interviewees in Poland have different views on the cultural differences between Norway and Poland. Interviewee 1 do not believe there are any significant differences, and state: *"I feel that we are very similar [...] Culture in work is very similar, I am sure that it is pretty much the same culture"*. However, he expresses that a small difference in national culture might be that Norwegians seem to have more respect for peoples' private life, and do not contact a colleague when he is on vacation. Interviewee 2, however, argues that *"There are some visible differences"*, and make an example: *"I think that Norwegian people are more introverts and more closed [...] I think the Polish people are more expressive"*, but concludes that he believes the two cultures are a good match. Lastly, interviewee 3 do not take an active stand in whether there are cultural differences between the offices based on national culture, because *"I do not know what is the cultural differences and what is company differences. Because different companies have different cultures itself. So I do not know what is strictly Norwegian and what is strictly Powel"*.

In the same way that the Norwegian team members point out that the Polish team has a stronger mind-set for hierarchy, all the interviewed Polish team members points out that Powel has a flat organisation. However, they all express good feelings about it, and seem to be satisfied: *"I feel that it is a flat organisation, and it makes a good atmosphere [...] I like it very much"* interviewee 1 says. Interviewee 2 also reflects upon how this difference in hierarchical mind-set is affecting the daily work: *"The Norwegian ethics of work is much more relaxed than Polish"*. Further, the hierarchical mind-set of the Polish team members is evident from their desire to document their work. Interviewee 3 state: *"Whenever you think your knowledge is important to anyone else, you can publish a document"*. Moreover, interviewee 1 in Gdansk believes that publishing documents is *"a very good way to transfer knowledge"*.

6.2.2.5 Factors of success

Interviewee 1 identifies one factor of success in the relationship between the offices, which correlates strongly with what is discovered in the interviews conducted in Trondheim: *"The most important is that everybody in Trondheim is helpful and that they want to help us with our tasks [...] They are helping us every time and as soon as possible"*.

6.2.2.6 Challenges and barriers

Language might be seen as a barrier when two departments from different countries cooperate. The team members in Gdansk do not perceive it as a problem that they have to speak and write in English in their work, and when asked if they perceive it as a barrier interviewee 2 answer: *"Not quite, not frankly"*. Further, Interviewee 1 presents a claim similar to what was revealed in the interviews in Trondheim: *"communication in English is much easier if the second side use foreign language as well"* and argues that *"it is much easier to communicate with Norwegians than with Canadians or people from the US"*. Further he says: *"I feel better, because both for me and for them it is a foreign language"*. However, interviewee 2 admits that some of the team members might participate less in meetings where they have to speak English: *"Yes, it might be the case"*. However, he believes that *"it is a matter of time"*. Interviewee 3 does not agree with this and when asked

if someone in the team participate less in meetings where you have to speak English he answers: *"No, I don't think so"*.

Even though the team members are not agreeing to which degree the difference in language is affecting the relationship between the two offices, all the interviewees agree that there are no other barriers present: *"In Powel, there are no barriers to talk [...] I can talk with everybody in our office"* interviewee 1 states. Interviewee 2 answers constantly *"No"* when asked if he see any barriers or challenges for the knowledge transfer. However, interviewee 1 changes his mind and explains that there is one barrier: it is often only one or two persons in Powel holding some specific knowledge, and if these persons are not available there is no other place to go to get this knowledge. He sees this as a problem, and recommends *"to share this knowledge to more people"*. This corresponds to what has been expressed in the interviews in Trondheim as well.

6.2.3 Interviews at Conformat

6.2.3.1 Social relationship

All the interviewees express that the social conditions in Conformat as a company is good: *"It is a very good social environment"* interviewee 1 says. Interviewee 3 explain the good social environment by stating that most of the employees are in the same age range and have the same background and educational level. However, all the interviewees agree that the social environment was even better earlier: *"It was probably more social in the beginning when it was a start-up company"* interviewee 1 says. Interviewee 2 states that: *"When I started in the company 14 years ago, everyone working here was in their late twenties [...] We were like a group of friends working together. We were spending a lot of time together after work-hours"*. All the interviewees state the same reason why they don't spend as much time together after work-hours as previously: *"people are older and have kids now"*. However, interviewee 3 emphasize that they still have some social happenings outside the office.

The interviewees also elaborate on the social relationship within the Russian offices and between the office in Oslo and the two Russian offices. Interviewee 2 explains that there, for

historically reasons, has been two different generations there: the ones who lived during the communism and the ones who are too young to have experienced it. He points out that: *“You notice some differences between the ones who are a little older and those who are younger”*. It is further explained that the older employees are usually located in the Moscow-office, whilst the younger employees are located in Yaroslavl. This is because the office in Yaroslavl recruits many of its employees directly from the University in Yaroslavl. Further, the social relationship between the offices is characterised as good as well: *“It has become a good social environment, and we know them well”* interviewee 1 says. Interviewee 2 states that: *“I think it has been really good for a very long time”*. He further explains that: *“The Russians are actually very nice and easy to deal with, they mostly say what they mean and do what they are supposed to do. And they are smart and independent”*. When they bought the offices in Russia, the first thing they did was to bring the whole Norwegian department over to Russia to establish a social foundation, interviewee 1 explains. He further explains that he considers it strategically smart to bring the Norwegians to Russia instead of the other way around: *“I think it was nice, I think it was smart that we travelled there and visited them. Then they could feel that they had home ground”*.

In all of the interviews it was revealed that the employees in Conformat communicate frequently with employees at the Russian offices, and that they believe the communication is efficient. It is explained that they have daily formal meetings, but that the team members communicate with each other frequently outside the formal meetings too, both within each office and across the offices.

6.2.3.2 Knowledge transfer

In the interviews it is discovered that they do not have any routines in how they share knowledge in the company in general and between Norway and Russia: *“We do not have a standardised way to conduct knowledge sharing”* interviewee 2 says. Interviewee 3 agrees and states: *“It is done ad hoc when one needs information”*. Interviewee 2 also explain that most of the knowledge transfer happens face-to-face, over the phone, over e-mail or over chat, not so much through documents, the intranet or discussion groups. He emphasises that this way of sharing knowledge ad hoc works well in Conformat, because they have

managed to create a low threshold in social settings. He further explains that *“you should have a good reason for documenting something, there have to be a reason why someone should have interest in reading this in a year or so”*. It was further explained that the Russian team members might be more inclined to conduct documentation than the Norwegian employees.

None of the interviewees believe that anyone in the offices withhold their knowledge to make themselves more valuable for the company. Interviewee 1 explain that everyone in the company are *“competition-people”* and want to be better as a group and want Conformat to be better than other companies, and this is the motivation they have to share the knowledge they have to others within the company, so that Conformat can be better as a company. Even though the interviewees do not believe anyone in the company is consciously withholding any of their knowledge from everyone else, interviewee 1 confirms that it can happen unconsciously. Further, he emphasise that not all knowledge is interesting or useful for everyone all the time, so people do not and should not share with everyone all the time. *“Then there is no time left for working. There has to be something important about the knowledge, it have to be valuable”*.

Interviewee 1 explains that the knowledge transfer in the company in general is mostly conducted from Norway to Russia, not the other way around. Interviewee 2 agrees: *“I believe it is shared maybe mostly from Norway, but I believe the Russians share also”*. He also expresses that he believes that the reason why it is shared mostly from Norway is not because it is a Norwegian office, but because it is the headquarters and many of the experts is hence located in Oslo. Interviewee 3, however, states the following about the knowledge transfer: *“It happens both ways”*.

6.2.3.3 Team roles and team culture

All three interviewees agree that some of the team members in Norway and Russia possess very distinct informal roles, especially within the control role. However, it is stated that other team members take on more subtle roles. It is also expressed that the team members

take up different amounts of space in the group: *“You have those who can talk all throughout the meeting [...] you have all the types”* interviewee 3 states.

The interviewees also talk about the Russian Yaroslavl team. Interviewee 1 states: *“the roles is taken independently from country, in my opinion”*. However, both interviewee 2 and 3 express that the Russians might be more quiet and withdrawn: *“Some of the Russians are more quiet and some of them only say what needs to be said and nothing more”* interviewee 3 says, whilst interviewee 2 describe how they behave in meetings between the two offices: *“Even though it is said more in Oslo than in Russia during the meetings, they are also involved and they talk too”*. However, interviewee 2 explains that this has been addressed previously, and it turned out that even though the Norwegian team members believe the Russians take up only a little space and don't talk much during the meetings, the Russian members think that they are the most influential ones.

In regards to the team culture in both the Norwegian and the Russian team, it was expressed that the interviewees perceived it as good. However, it was further stated by interviewee 1 that there is a somewhat clear and evident pattern of team roles in both teams, and the control-role was emphasised as the most prominent. Interviewee 2 and 3 agree that there is a clear role pattern within the teams, and interviewee 3 also underlines that there is a difference in how much each of the team members talks during the meetings. This is true for both the Norwegian and the Russian team.

6.2.3.4 National culture

“There are cultural differences, it is!” interviewee 2 states, and interviewee 3 argues that the cultural differences have had an affect on the way the offices work together. He explains: *“The Russians are very benevolent to tasks they are given, and this might be because they are used to having a strong leader giving them assignments”*. He further states that as the Norwegians know the Russians always accept assigned tasks, even if they are boring or difficult, the Norwegians might sometimes not take on some tasks because they *know* one of the Russians will do it.

In all three interviews conducted in Oslo, it is revealed that the Norwegian team members believe the Russian employees have a stronger mind-set for hierarchy and that this is shown in the work in many ways. Interviewee 1 gives an example: *“We wish to change to more autonomous teams with less visible leaders and for the team itself to take on more responsibility [...] Not all the Russians are happy about that, and maybe especially the older ones”*. This correlates with how interviewee 2 describes the differences between the younger and the older Russians: *“In Russia, hierarchy is incorporated in the workplace. For the younger ones it is easier to move away from this and adapt to a more Scandinavian organisational culture, which is flatter [...] For the older ones it is maybe more difficult to move away from a hierarchy where you don’t do anything without asking your boss about it”*. Interviewee 1 further explain that it is probably easier to implement the autonomous teams in Oslo than in Russia where the older employees are used to clear commands and instructions and to be told specifically what to do. *“So there is resistance”* he says, but he does not rule out that they might meet some resistance in Norway too.

Interviewee 2 explains another way in which the Russians are different in hierarchical mind-sets: *“They have more respect for what they call the big boss than what we have in Norway. [...] They have enormous respect for those who are located higher in the hierarchy than themselves”*. He further gives an example on how this is displayed: *“If the big boss is present in a phone-meeting, it is awfully quiet and it is only the boss who speaks [...] As soon as the big boss leaves the room people start talking again [...] Even people who have been working in the company for ten years don’t say a word if the big boss is in the room”*. He further states that at the Oslo-office many people are talking to the CEO on a daily basis, about random subjects that might not even be related to the work. This correlates with interviewee 1’s statement: *“We are not very hierarchical in Norway, very little hierarchical”*. It further match the statement of interviewee 3 about the Russians being more used to having a strong leader, whilst in Oslo there is a flatter organisational structure and one is not afraid of speaking their mind.

6.2.3.5 Factors of success

The interviewees believe one factor of success for them was that they were able to create a good social foundation between the offices from the beginning. Further, they believe that this created a low threshold for contacting one another and asking questions and speaking their mind, which they also consider a factor of success for their cooperation.

Interviewee 1 believes another factor why the relationship between Norway and Russia is so good is because they have a low turnover rate among the employees both in Norway and in Russia. The social foundation that was created carefully early on still exists and is good, because most of the people are the same as from the beginning and they know each other well. This low turnover rate is considered a factor of success.

6.2.3.6 Challenges and barriers

Interviewee 1 in Conformat express that language might be a barrier for the knowledge transfer and the communication between the teams in Norway and Russia: *"I think some of the Russians are both shy and embarrassed by bad spoken English, which make them not participate in the discussion in the same way they would have if it was in Russian"*. Further he explains that it is not a barrier only for the Russians: *"You also have people here in Norway who are shy and who are a little reluctant to speak"*. Still, when interviewee 2 is asked if he believes language is a barrier, he answers: *"to a limited extent"*. Additionally, interviewee 3 don't believe there is a language barrier between Norway and Russia anymore either, but states that *"maybe there was some in the beginning"*.

In the interviews in Conformat, it is my overall impression that the employees believe that the biggest challenge in the cooperation with the Russia-branch is the distance itself and all the technological difficulties in relation to communicating with them: *"There is no doubt that if everyone was located in the same place, surrounding the same table, things would be easier"* interviewee 2 says. He also expresses that they would probably have many of the same problems and challenges if they put a divider wall in the middle of the office space in Oslo and they were only allowed to speak to each other using electronic equipment. Interviewee

3 explains that he often uses electronically devices such as Lync to talk to employees at the office in Oslo as well, instead of meeting that person face-to-face, and that in this way there is no difference whether he contact someone located at the Oslo-office or the offices in Russia.

When asked if there is a barrier present for contacting the team members in Russia on an ad hoc basis, interviewee 2 answers: *"I have not really experienced a big barrier"*. Interviewee 1 has the same experience and states: *"the threshold is very low. We have been working together for a long time, so I don't believe there are anyone who are reluctant to make contact across the countries"*. Interviewee 3, however, highlights pride as a possible barrier for communication between the teams. *"It seems like the Russians might sense a defeat by asking about things they think they are expected to know. I don't see the same trend among Norwegian colleagues"*.

According to interviewee 1 it has definitely occurred misunderstandings in the communication and knowledge transfer between Norway and Russia due to the background of the team members, but he emphasise that it does not happen often and that it has not arisen any negative consequences based on this. He also emphasises that this is mostly misunderstandings related to differences in language. Interviewee 3 however does not believe there have been any misunderstandings based on language-differences or language-barriers. According to interviewee 3 there have been misunderstandings related to the differences in culture between Norway and Russia: he explain that one of the leaders in Russia had trouble adapting to the flat organisation in Conformat and not having all the power in the group, so he ended up asking a lot of questions, not being able to make any decisions and being too vague. *"It has lead to confusion because in some cases no one has had the impression that it was their responsibility to do some specific task"* he explains.

6.2.3.7 Experiences and recommendations

Even though there have been some process losses, interviewee 2 expresses that he thinks the relationship between the offices has developed and worked way better than he had though it would when they started, and states that one has to expect some process losses.

Interviewee 1 also emphasise that there will be some transaction costs in using time, money and resources to create a good relationship between two offices in different countries.

Interviewee 2 argues that it is important to make the cultural differences as small as possible and states that: “it takes time and it is difficult, but it makes it a lot easier when having a shared cultural foundation or a shared way to take responsibility, but at the same time have the possibility to make own decisions without anyone yelling at you afterwards.”

Interviewee 3 also emphasizes creating a shared foundation by figuring things out and agreeing on how to do things from the beginning: “*To agree on processes and such from the outset*”. Interviewee 2 agrees to this and states: “*you cannot just set up some procedures and rules, I don’t think that is enough. I believe you have to create some sort of social setting both sides can accept*”. Interviewee 1 shares the same viewpoint as the other two when he recommends to: “*establish some informal and formal venues pretty quickly*”. He further emphasise his experience: “*I am glad that we started working on things together early on [...] It made us get to know each other better*”. Moreover, Interviewee 3 argues that it is very important to create a low threshold for contacting each other across the offices, but he is not sure how Conformat managed to create such a low threshold.

Interviewee 1 recommends for Powel to make the leader seem more harmless to the Polish department and create recognition that everyone is allowed to speak their true opinions without being criticised. “*It is important to show, as a leader, that one appreciate constructive feedback and don’t take on a defensive position, but give credit for thinking outside the box*”. This is important to decrease the differences in hierarchical mind-set of the team members of the two teams. Interviewee 1 further states that “*Micro-management works really bad in knowledge-based companies*”, so Powel should not make their Norwegian team micro-manage the team in Poland. Interviewee 2 expresses something similar when he states: “*Take them seriously! Give them (Poland) some responsibilities. Show clearly that they are given responsibilities*”. Interviewee 3 takes it one step further when he recommends: “*To treat them exactly the same way as colleagues and team members in Norway and to have daily meetings to follow up*”.

Lastly, Interviewee 1 recommends having focus on team development as a part of the formal meetings, and to set aside five minutes in the meetings to summarize “*what is working, whether everyone participated in the meeting or not and if not then why not? That is smart*”.

7 ANALYSIS

In this chapter, the analysis of the assignment is submitted, and through this analysis the assignment's research question is sought to be answered. In the first part of this analysis the knowledge transfer situation in each of the two case companies will be analysed. Next, this chapter will take a look at and analyse the maturity of the four teams evaluated in this thesis. Then, the team culture of these teams will be addressed and analysed. Lastly, the national culture of each of the teams will be evaluated.

7.1 The knowledge transfer situations

From the interviews in Powel and Conformat, it is evident that the knowledge transfer in both companies has been conducted mostly from the Norwegian team to the team outside Norway (6.2.1.2, 6.2.2.2 and 6.2.3.2). Powel believes that this is because the team in Poland is new and that they have a lot to learn about the company, its products etc., and that the knowledge transfer will be conducted both ways in the future (6.2.1.2). However, they still believe the knowledge flow will be heavier from the Norwegian office than from the Polish office (6.2.1.2). The experience gained in Conformat, however, is that there is no guarantee for the knowledge transfer to develop to be conducted both ways over time. Two out of the three interviewees in Conformat still believes that the Russian employees do not transfer much knowledge to the Norwegian office, and that most of the knowledge transfer is still conducted from Norway to Russia, after seven years (6.2.3.2). In the interviews conducted in both Powel and Conformat it was expressed that the knowledge transfer between the teams is good, but there was also uttered some wishes for improvement by most of the interviewees.

7.2 Team maturity

When analysing the maturity level of a team, one needs to identify which role structure characterises the team, if there are any sub-groups, polarisations or satellites within the team, distribution of influence and whether there is a large gap between the team

members' mental models. This information will give an overall indication about which maturity level the team is operating most frequently on (Sjøvold, 2014).

7.2.1 Powel

A similarity in both teams' SPGR-results is that there is a relatively large difference in the circle sizes within each of the teams (6.1.1). This is also supported by the interviews conducted with the members of both teams, where it was emphasised that some of the team members talk more than others in the meetings (6.2.1.3 and 6.2.2.3). This difference in how much space each of the team members takes up within the group is an indication of a low maturity level (2.2.2). However, it was also revealed in the interviews that who is most active in discussions and meetings is to a certain degree dependent on the subject or topic at hand (6.2.2.3), which suggests that the team members are able to change their behaviour in regards to the specific situation. Being able to switch between different types of behaviour indicates a higher maturity level (2.2.2). It is important to note that this was only pointed out by *one* of the interviewees, and it is therefore possible that this is not the standard behaviour of the group. The other interviewees expressed that the behaviour of the team members is somewhat consistent and predictable (6.2.2.3), which indicates relatively evident and clear team roles. This is a warning that the teams might be operating on a somewhat low maturity level.

When analysing the SPGR data for Powel, a few other similarities of the teams were noticed as well:

- Both teams have a high degree of engagement and acceptance
- Both teams have a low degree of resignation and self-sacrifice
- Both teams have a low degree of criticism and creativity

These results indicate that the teamwork is characterised by cooperation, interest, involvement and acceptance. This is also apparent from the interviews, where it was expressed that both teams in Powel is perceived as heavily involved in the cooperation between the offices, and that both sides perceive the other team to be easy to work and cooperate with (6.2.1.3 and 6.2.2.3). The high degree of engagement and acceptance is

further strengthened by the low degree of resignation in both teams. This low degree of resignation, in addition to the lack of self-sacrifice, is positive for both the cooperation within the teams and the communication and cooperation between the two teams. This is because the low levels of resignation and self-sacrifice make room for engagement and empathy. Any presence of behaviour related to resignation and self-sacrifice would lower the maturity levels of the teams, and the lack of such behaviour is therefore positively affecting the maturity levels.

From the SPGR-data (6.1.1), it is evident that the teams in Trondheim and Gdansk cooperate without criticising each other or rising critical questions. Further, new approaches or alternative ways to think are rarely expressed, as the cooperation is characterised by a low degree of creativity and innovation. In the interviews, however, it was stated that the team members feel like they can say everything they want (6.2.2.1). As the interviews were conducted only with a few members of the teams whilst the SPGR-survey was answered by every team member, it is rational to think that the results from the SPGR-survey better reflects the actual opinion within the group. As there is no acceptance for activating oppositional roles in the teams, and this type of behaviour seems to be undesired, it is difficult for each of the members to activate this role. A consequence of this is that the teams then locks themselves to certain approaches and solutions, indicating a low maturity level. Acceptance for activating oppositional behaviour is required to reach the highest level of maturity within a team, and it is often the last behaviour to be activated prior to reaching this maturity level (2.2.2). As there is a lack of oppositional behaviour in both teams studied in Powel, it is argued that they operate on a somewhat low maturity level.

From figures 16 and 17 and table 6 it is easy to see that both teams studied in Powel evaluate themselves as “better” than the other team, in certain desired dimensions. This suggests that the teams operate on a low maturity level, as teams operating on lower maturity levels often are sceptical to everyone that can be viewed as “the others” (2.2.2).

It has previously been argued that shared mental models are important for the maturity level of a team (2.2.3). The difference in how each team member perceives the composition of the group they are a part of is a signal of them not having shared mental models. This difference in perception is evident from the SPGR-results presented in chapter 6.1.1. Here, it can be seen that some of the team members in Gdansk believe there are sub-groups, polarisations and satellites within the teams, whilst others believe none of the team members are standing out significantly. The team members in Trondheim do not believe that there are sub-group, polarisations or satellites within the group they constitute, but they still have a relatively different view from each other on how the group is structured in regards to who takes up the most and least space in the group and who holds synergy and dependency roles. This low degree of shared mental models might be negative for the cooperation and collaboration within the teams and lowers the maturity levels of the teams. Further, the interviews revealed that the team members almost always have to ask for the information and knowledge they need, both within each team and across the teams (6.2.2.2). This suggest that they have a low degree of shared mental models regarding which information and knowledge is needed for each team member to do their job. This might lead to the information and knowledge sharing being less effective and more time consuming, as they have to ask for the information and knowledge rather than getting it automatically. This also might have a negative effect on the collaboration within and between the teams, as the team members always asking the questions might feel like no one knows and understands their need for information and knowledge and might be frustrated and irritated. However, the interviews indicates that no such frustration or irritation exist at the time being, and that the team members believe that they can ask any question they want and that their questions are welcomed (6.2.1.2 and 6.2.2.2). The interviews also revealed that the team members in Gdansk experience that the team in Trondheim share too little knowledge in the project start-ups and that it is their own responsibility to uncover which knowledge they need to conduct their tasks (6.2.2.2). The interviews in Trondheim also revealed this, and it is evident that the team in Trondheim is aware of the team members in Gdansk's feelings about this and that they have reflected upon it. The interviews in Trondheim also revealed that they perceive the members in Gdansk to be frustrated about this.

It has been shown above that the teams in both Trondheim and Gdansk lack shared mental models regarding the composition of their teams, and the information and knowledge needs. This might lead to a worse cooperation and collaboration both within each team and between the two teams. The low degree of shared mental models is hence an indication of a low maturity level within the teams in Trondheim and Gdansk.

The analysis above gives several indicators that the teams in Powel are seemingly operating at a low maturity level. However, the teams are not completely equal in all factors affecting the maturity levels of the teams. Therefore, it is below given separate analyses of the characteristics the teams do not share.

7.2.1.1 Trondheim

In addition to the characteristics analysed above, the Powel team located in Trondheim has a high degree of empathy and caring (6.1.1.2), both characteristics belonging to the nurture-role. This is supported by the interviews, where it was pointed out that the members of the Trondheim-team is strongly caring about the work the Gdansk-team conducts and shows this by being very helpful towards the members in the other team (6.2.2.5). The empathic and caring behaviour creates a strong group cohesion within the team, which might also strengthen the team trust. As the level of group cohesion and trust is high, it might positively affect the maturity level of the team, as long as groupthink is not developed.

7.2.1.2 Gdansk

In the analysis given above, several arguments were presented for the Gdansk-team operating on a low maturity level. However, the team also holds other characteristics affecting its maturity level, not presented above: the team has a high degree of task-orientation (6.1.1.1). This is evident from the interviews, where it was stated that they are concerned with the quality of the results they deliver (6.2.2.3). It was also expressed in the interviews conducted in Trondheim that they perceived the members of the Gdansk-team to be very task-oriented (6.2.1). This high degree of task-orientation is at the expense of group-orientation, and a low group-orientation might imply a low degree of group cohesion within the team. Lack of group cohesion might also lead to low levels of trust within the team. It

has previous been argued for the link between trust and team maturity (2.2.4.1), and it is reasoned that low levels of trust lowers the maturity level of a team. However, the low level of group cohesion and trust within the teams inhibits the development of groupthink, so that it is not present to lower the team maturity. The lack of groupthink has, hence, a positive affect on the team maturity level.

7.2.2 Confirmit

As the scores along the 12 dimensions of behaviour in the SPGR framework for the two teams in Confirmit was not provided by the company, it is somewhat more difficult to analyse the SPGR data and evaluate the team maturity of these two teams. However, the SPGR field diagrams provided give a basis for assessing the problem.

It is shown in the SPGR-data (6.1.2) that there is a difference in how much space each of the team members take up within each of the teams. This is also evident from the interviews conducted at Confirmit, where it was stated that some team members talk more than others in the team meetings, and hence take up more space in the group than others (6.2.3.3). This difference in how much space each of the members takes up indicate that the teams operate on a low maturity level (2.2.2). Further, there is a difference in perception among the team members as to how big the difference is and in who takes up the most and the least space within the teams (see figures 19 and 21). In general, the difference seems to be smaller within the Norwegian team and bigger within the Russian team. The variance in how big the team members perceive the difference to be is also bigger in Russia, compared to the Norwegian team. This is similar to the situation in Powel, where the Polish team members perceived a bigger difference in the group than how the Norwegian team members perceived each other. The fact that the team members, both in Oslo and Yaroslavl, have such a different view on how much space each of the members take up within the group is an implication of lack of shared mental models. Further, it is evident that the team members within each of the teams do not completely agree on the composition of the teams (see figures 19 and 21). Within the Norwegian team, one member perceives the team to consist of two subgroups, whilst the others believe there are no sub-groups or satellites within the team. However, the spread of the team members is differently perceived for all the

members. Within the Russian team there is an agreement that the spread between the members is relatively big. However, the characteristics of the spread are perceived differently for each of the team members. This indicates that there is further lack of mental models within the teams in Norway and Russia. The importance of shared mental models and the affect it has on team maturity and knowledge sharing is described in the previous chapter, and will not be repeated here. The relatively low degree of shared mental models within the teams in Confirmit might have a negative effect on the teams' maturity level and the knowledge sharing process between the teams.

Even though the Norwegian team members might be lacking shared mental models on how much space each of the team members take up within the group and the general composition of the team, they seem to agree about other group characteristics; most of the team members are holding synergy roles and they are located within the blue control-area of the field diagram (see figure 19). As most of the team members are evaluated to hold synergy roles, they are likely to hold a wide specter of behaviour (3.3.2.1), which raises the maturity level of the team (2.2.1.2). Further, the team members are located within the control-area, indicating that most of the team members hold behaviour related to task-orientation, loyalty and engagement (3.3.2.1). The interviews support this, as it was pointed out that many of the team members hold control-roles (6.2.3.3). The team seem to hold little oppositional behaviour, and this might have had an effect on the team maturity and the knowledge transfer process over the past seven years. As a mature team is able to activate its oppositional roles (2.2.2), the Norwegian team's low level of oppositional behaviour indicates that the team operates on a somewhat low maturity level.

The Russian team in Confirmit also has some shared mental models: the team members agree that the team consists mostly of synergy roles, and that the team is both controlling and nurturing, with its team members located on the border between the blue and the green area in the field diagram (see figure 21). As most of the team members are evaluated to hold synergy roles, they are likely to hold a wide specter of behaviour, which raises the maturity level of the team. The location of the circles in the field diagrams for the Russian

team indicate that the Russian team holds more nurturing behaviour than the Norwegian team, whilst still expressing some controlling behaviour. This indicates that the Russian team members display more behaviour of empathy, engagement and loyalty (2.2.1.2) than the Norwegian team. Moreover, the Russian team members do not show much oppositional behaviour, which affects the team maturity and might have had an effect on the knowledge transfer process between Norway and Russia the past seven years. As stated above, a mature team is able to activate its oppositional roles, and this implies that the Russian team operates on a fairly low maturity level.

7.3 Team culture

7.3.1 Powel

When the interviewees were asked about their team culture, the answer was that all team members feels as equals, that they can say everything and that the ideas from junior engineers are equal to the senior engineers' (6.2.2.3). It is further pointed out that the team culture in both teams is relaxed, and that the cooperation between the offices is very good. The interviewees seem to be satisfied and happy with the team culture.

The SPGR results might, however, paint another picture of the team culture than how it was described in the interviews. In the SPGR data retrieved from Powel's teams (6.1.1), it was revealed that some of the team members take up more space in the group than others. It was also discovered that there is no room for creativity and criticism within the team, suggesting that new and alternative viewpoints might not be put forward. Hence, these results indicate that the team culture might not facilitate knowledge sharing to the same extent as the interviewees claim it does, as behaviour promoting new angles and viewpoints, criticism and breach of rules and procedures seem to be undesired behaviour within both teams (6.1.1).

The team culture in both teams in Powel needs to facilitate knowledge sharing both within and between the teams. To create such a culture, the teams need to operate on a relatively

high maturity level. It was earlier in the analysis presented arguments for the team operating on a low maturity level (7.2.1), which does not facilitate the development of a team culture optimal for knowledge sharing. Further, it has already been argued that the teams in Powel has difficulty activating the opposition role, and this is likely to have a negative affect on the team culture in relation to facilitating knowledge transfer.

It is important for the teams to have an appropriate team culture, as it is setting the guidelines for the group cohesion, and a lack of group cohesion might limit the teams' ability to cooperate well within the separate teams and to cooperate well and share knowledge with each other. This is because the team members will feel less committed and involved in the team and the organisation. The interviews revealed that some of the team members are less involved and engaged in the teamwork and discussions than others, but that this might be because the specific subject discussed is not directly connected to that team member's responsibility or interest (6.2.2.3), not necessarily because the group cohesion is at a low level.

Strongly related to group cohesion is team trust. In the SPGR-results (6.1.1) it was revealed that there is no room for creativity and criticism within the groups, indicating that the team is characterised by low levels of team trust. However, as stated above, both teams investigated in Powel have a high degree of acceptance, which implies that the team members are obedient and trusting. Further, it was revealed in the interviews that the most common way of sharing knowledge between the two teams is for one of the team members to first ask a question, and then the other team member (either on the same or the other team) gladly shares his knowledge (6.2.2.2). This indicates that there might be a high level of team trust within both teams and between the teams. Further, all the interviewees emphasised the importance of the two weeks the Polish team spent in Trondheim in the beginning of February, and it is obvious that these two weeks were used to establish team trust both within the teams and between the teams. It is noticeable that the SPGR-results indicate low levels of trust, while the findings in the interviews suggest high levels of trust. As the interviews were conducted among three of the team members, whilst the SPGR-

survey was answered by the whole team, it is natural to assume that the SPGR-data give a more righteous view of the situation in the team in Powel. Hence, it is assumed that the level of trust within the teams is low.

This analysis has revealed that there are indications that the teams in Powel have a team culture that makes it hard and challenging for the team members to raise critical questions, give constructive and critical feedback, and to promote divergent opinions and viewpoints. It was further argued that a possible reason for this is that the teams might operate on a low maturity level, so that the opposition function is not activated. A consequence of this might be that groupthink might arise within the teams. Lastly, it was argued that the teams have a low level of team trust.

7.3.2 Confirmit

In the interviews conducted in Confirmit it was revealed that the Norwegian team members are satisfied with the team culture within the Norwegian team, and that they also believe the team culture in Russia is good. Further, it was expressed that the cooperation between the teams is good and effective.

The SPGR results does not directly support the results from the interviews in regards to the team culture, as they revealed that some of the team members take up more space in the group than others (6.1.2). This might be seen as an implication of a team culture not optimally facilitating knowledge transfer, as some team members are not expressing themselves actively or being "heard". The SPGR data also revealed that some of the team members believe the group is divided into sub-groups, which is a further implication of the team culture not being as positive as it is painted in the interviews. However, as there is a time-difference of two and a half years between the collection of SPGR-data and the conduction of the interviews, it is possible that the team culture has developed and improved during this time.

The team culture needs to facilitate knowledge sharing both within and between the two teams in Confirmit. As previously stated, the teams need to operate on a relatively high

maturity level to create such a culture. The SPGR data of Conconfirm (6.1.2) indicated a low level of oppositional behaviour within the team, and this might create problems for the teams to reach the needed level of maturity for creating an appropriate team culture for effective knowledge sharing.

As stated above, the group cohesion is dependent on the team culture, and it is important for the cooperation within and between the teams. The interviews in Conconfirm revealed that some of the team members are less involved and engaged in the teamwork and discussions than others (6.2.3.3), and this is supported by the SPGR data that shows a difference in circle sizes in the field diagrams. This indicates a relatively low level of group cohesion. Even though this low level of group cohesion might have a negative effect on the cooperation of the teams, it has a positive effect on the team culture as it hinders the development of groupthink. This is important for Conconfirm, as their low maturity level and low degree of oppositional behaviour facilitates the growth of groupthink.

There is a strong relation between group cohesion and team trust. The importance of team trust has been emphasised earlier in this thesis (2.2.4.1). To create team trust, the team members need to get to know each other and be able to challenge each other, and it has to be created room and tolerance for raising critical questions and feedback within the teams. In the interviews in Conconfirm, it was expressed that there was conducted deliberate actions to establish trust between the teams in Norway and Russia, when they were first part of the same company seven years ago. This was done through getting to know each other on the personal level (6.2.3.1). However, it has previously been pointed out that the team members do not hold much oppositional behaviour and that they do not seem to be able to express criticism to any significant extent (7.2.2). This lack of oppositional behaviour indicates that the team members do not trust each other well enough to raise critical questions and to challenge each other. Based on this, it is reasonable to believe that the teams in Conconfirm have an average amount of team trust.

This analysis has uncovered that the teams in Conconfirmit express a low degree of oppositional behaviour, has a low level of maturity, group cohesion and groupthink, and they have an average amount of team trust. Based on this, it is argued that the team culture within the teams in Conconfirmit might not be ideal for the knowledge sharing between the teams.

7.4 National culture

From chapter 2.3.1 and the conducted interviews in Powel and Conconfirmit it is evident that the Polish, Russian and Norwegian culture differs in certain points. When addressing the national culture, it is important to realise that its characteristics might be mitigated by the organisational culture within the company studied. This is especially important in this thesis, as the teams investigated have different national cultures but the same organisational culture. This was also emphasised in the interviews in Powel (6.2.2.4). Below I will address the difference in these cultures in relation to how it might affect the cooperation and collaboration within each team and between the teams.

7.4.1 Powel

From the comparison of Norway and Poland along Hofstede's dimensions (2.3.1), it is evident that the dimensions in which Norway and Poland differs the most are masculinity, uncertainty avoidance and power distance. However, the difference in masculinity and power distance is the most significant, as the Norwegian culture is neutral to uncertainty avoidance.

As presented earlier in this thesis, the Norwegian culture has a very strong feminine culture whilst the Polish national culture tends to be more masculine (2.3.1). This might suit the situation in Powel as it is now, as the relationship between the two teams is based on the Norwegian team giving instructions, support and knowledge to the Polish team whilst the Polish team conducts projects, tasks and work based on the instructions from the Norwegian team. Even though the Norwegian team is not directly the managers of the Polish team, and the Polish team also has leaders and managers in the Polish office, it is in fact the Norwegian team that is giving projects and work tasks to the Polish team. The masculine culture in

Poland requires the managers to be decisive and assertive, and the Norwegian team is perceived this way by the Polish team members. Further, the feminine culture in Norway affects the Norwegian team to be “soft” and not to be competitive or try to be better than others. This helps the Norwegian team in their role of supporting the team in Gdansk, in addition to being managers who conducts decision-making through involvement. It is evident from the interviews conducted in Trondheim and Gdansk (6.2.1 and 6.2.2) that they do conduct decision-making through involvement, as it was emphasised in the interviews that the team members in Gdansk affect the work and decisions through the iterative work method in Powel.

The Norwegian and Polish culture differs somewhat in how they relate to power distance. The Norwegian culture has in general low power distance. This also seem to be true for the Norwegian offices of Powel, as all the interviewees in Gdansk pointed out the flat hierarchical structure within the organisation (6.2.2.4). In contrast, the Polish culture is characterised as a culture of high power distance. In the interviewees with the members of the Norwegian team in Powel it was revealed that they perceived the Polish team members to have a more hierarchical mind-set than the Norwegians (6.2.1.4).

The high uncertainty avoidance in the Polish culture is reflected in Powel’s team in Gdansk, to a certain degree: the SPGR data revealed that the Polish team is very task-orientated and from the interviews in Trondheim it is evident that the Polish team members are not completely satisfied with the iterative work method in Powel and that they tend to be more eager to document than the Norwegian employees in Powel. This is in line with the characteristics of the uncertainty avoidance-dimension: having an emotional need for rules and procedures, and having rigid codes of behaviour.

Even though the Norwegian and Polish national culture differs in certain points, as illustrated and analysed above, both cultures are individualistic (2.3.1). In such cultures, individual and personal opinions are valued and expressed. This is somewhat consistent with the SPGR-results (6.1.1), as some of the team members express their opinions easily and take up much

space in the teams. However, some of the team members do not express their individual and personal opinions as easily, and it has previously been argued that the teams should facilitate for these team members to take up more space in the group and be less dependent on the other team members. Even though both countries are seen as individualistic, Norway gets a higher score on this dimension in Hofstede's evaluation (2.3.1), and this was verified in the interviews conducted in Gdansk where one of the team members pointed out that the distinction between work and private life is stronger in Norway than Poland (6.2.2.4).

7.4.2 Confirmit

From the comparison of Norway and Russia along Hofstede's dimensions (2.3.1), it is evident that the difference of Norway and Russia is bigger than the difference of Norway and Poland. Norway and Russia seem to be opposites in half of the dimensions; Power distance, individualism and pragmatism. I will focus on power distance and individualism, as they are the most interesting dimensions in relation to cross-cultural knowledge transfer. However, the individualism-dimension will be addressed in the discussion below, rather than in this analysis, as there are no significant findings on individualism in Confirmit.

Whilst the Norwegian culture is characterised by a relatively low power distance, the Russian culture is strongly power distant. This is seemingly true for the teams in Confirmit, as the interviews revealed that the Norwegian employees perceive the Russian team members to have a much stronger sense of hierarchy than themselves (6.2.3.4). One of the interviewees exemplifies this by stating that there is an enormous respect for "the big boss" in Russia (6.2.3.4). This might have an impact on the team composition and the behaviour of the team members, and hence the team culture and team maturity. The interviews reveal that the Norwegian team members believe this sense of hierarchy affect how involved the Russians are in the team, in a negative way (6.2.3.4). However, the Russian team members themselves believe they are more involved in the team and the cooperation between the teams than the Norwegian team members are in their team.

8 DISCUSSION

Through the analysis, the perceived maturity level and culture of the teams in Powel and Confirmat are assessed. The national culture in the teams is also addressed. Further, it has been pointed out how the team culture, team maturity and national culture in the teams might affect the knowledge transfer between the teams. This has further been linked to desired attributes for the optimization of the knowledge transfer.

The data on which the analysis is built upon is completely subjective, from the viewpoints of the team members (both in SPGR-survey and in what the interviewees chose to tell during the interviews). This needs to be taken in consideration when analysing and discussing the findings. In the previous chapter, an analysis of the team maturity, team culture, and national culture of the teams in Powel was presented, as the situation is today. The same situation was presented for the teams in Confirmat, but based on both the situation 2,5 years ago (SPGR-data) and today (interview). The analysis has pointed to both positive and negative aspects of the teams' knowledge sharing situation.

8.1 Team maturity

In the analysis it was revealed that the difference in how much space each of the team members takes up within the teams in Powel and Confirmat has a negative effect on the team maturity level. Further, this difference might also be negative for the discussions in the team meetings, as the opinions of the team members talking the most might be emphasised more than the opinions of the team members talking less. Further, it might have a negative effect on the group as the discussions and meetings might take up much time if the more withdrawn team members use a long time to join the discussion. It is seen as positive that the "big" team members are involved and engaged in discussions and actively share their opinions, viewpoints and experiences, but it is also important that they are conscious of letting others speak their minds as well. To manage all the team roles, the team members need to know when to be active and step forward, and when to step back and let others promote their opinions and viewpoints. If the individuals identified as taking up the most

space in the group do not know how to do this, there might occur problems for the cooperation within the team and the maturity level of the team will be lower. This is because the team members need to be able of holding several different team roles for the team to reach a high maturity level.

For the teams to obtain a role structure that facilitates for the distribution of all relevant opinions and experiences within the teams, all the team members need to dare to be active in the discussions and meetings of the team, especially the ones that are taking up the least space in the groups today. Further, the team members taking up the most space in the groups need to be more conscious about their roles and take a step back when the situation indicates that it is the reasonable thing to do.

The findings from the SPGR-survey in Powel indicate that there is no room for criticism and creativity, and the findings from the SPGR-data on Confermit also indicate this. In the analysis, it was argued that this leads to a cooperation where it is difficult to raise critical questions and that new approaches and alternative ways of thinking rarely are expressed. This type of cooperation would work fine in companies with lower knowledge-intensity, where the employees can simply follow rules, procedures and routines in their daily operations. However, Powel and Confermit are knowledge-intensive companies that need their employees to handle challenges and problems on their own without being told what to do. Based on the way the teams cooperate now, there might occur problems if they run into tasks that challenge the teams to be critical, either towards each other or within each team. If the teams are not able to adopt to the new challenging situation, a problem might occur, as the cooperation within the teams and between the teams as it is today do not have room for criticism and the team members do not have the ability to look for alternative solutions and approaches. The teams must be able to raise their levels of criticism and creativity to handle such situations.

Another interesting observation made from the SPGR-surveys in Powel is that both teams evaluate themselves as “better” than the other team in certain desired dimensions. In the

analysis it is argued that this indicates that the teams are operating on a low maturity level. This might also have a negative effect on the cooperation and the knowledge sharing between the offices directly, as it might prevent the teams from seeing that the other team might have valuable insights, experiences, viewpoints and procedures they can learn from. It might hence prevent the experience- and knowledge transfer from the other team and prevent the teams from learning from each other.

By the argumentation given above, it follows that the teams' ability to operate on a high maturity level is crucial for how good and effective the knowledge transfer between the teams is. The findings implies that all the four teams investigated in this thesis operates on a somewhat low maturity level, and that this might explain why the knowledge transfer between the teams in both cases is not considered optimal. A summary of the indicators for low maturity levels in the teams in Powel and Confermit discovered in the analysis (7.2) is given in table 11 below.

Table 11: List over indications of low maturity levels in the teams in Powel and Confermit.

Powel	Confermit
<ul style="list-style-type: none"> • No room for criticism • No creativity • Lack of shared mental models • Difference in how much space each team members takes up • The teams regards themselves as "better" than the other team on a number of dimensions, indicating a "we against the others"-attitude • Low levels of team trust 	<ul style="list-style-type: none"> • Lack of oppositional behaviour • Lack of shared mental models • Difference in how much space each team members takes up

If the teams want to conduct good and effective knowledge transfers, they need to be able to operate on a higher maturity level: they need the critical voices, they need innovation and new solutions and approaches. The teams in both case companies need to activate the

dimensions of criticism and creativity to cooperate and collaborate better, to better face future challenges, and to reach a higher level of team maturity. Further, they also need to develop their shared mental models to be able to reach a higher maturity level.

8.2 Team culture

With regards to the team culture within the teams studied in Powel and Confrimit, it is important to point out that the teams need to have a culture that facilitates for the team and its members' wish to learn from their experiences, while wishing to gain new experiences and knowledge. If the teams have a culture that does not support learning and acquisition of new experiences and new knowledge, it will be hard to facilitate the acquisition of new knowledge for each individual team member.

In the analysis, it was revealed that certain team members do not engage as much in discussions as others, in all four teams studied. If the reason for this is because the group cohesion within the teams is not strong enough, it will have a negative effect on the teamwork, as possibly valuable viewpoints are not being promoted and the teams might miss inputs that could have been enlightening for the discussions and the teamwork. It might also have a negative effect on the knowledge transfer between the teams, as the team members contributing less in the team might hold knowledge relevant for the other team. Based on this, it is evident that it is important to engage all the team members in Powel and Confrimit to participate in the discussions and teamwork. To facilitate this, one needs to establish trust within the team. Team trust helps everyone engage in the teamwork and is therefore raising the maturity level of the teams, which also might improve the team culture. Moreover, team trust might also raise the team maturity through helping the teams to dare activating all four group functions, including the oppositional roles. This is especially important for the teams in Powel and Confrimit, as it seems to be the function they have the most difficulty activating. Team trust is created by cooperation between the team members; the team members get to know each other, become confident that it is OK to ask for help, challenge each other and request and share information and knowledge. If the team wants

to have a culture with high levels of team trust they have to be able to challenge each other, and it has to be created room and tolerance for raising critical questions and feedback.

There is a downside to creating too much trust within a team and having a too supportive team culture: groupthink might arise. To avoid this, it is important that the team members dare to disagree with each other and are capable of being critical to their own and others work, opinions and viewpoints. How exposed a team is to groupthink is therefore dependent on their team maturity, as it is only groups operating on high maturity levels that are able to activate critical behaviour without destroying the team. Hence, it is important for the teams in Powel and Confrimit to be able to operate at a higher maturity level where criticism and oppositional behaviour are activated. Teams with a low maturity level are more concerned about being careful and nice to each other, disagreements are often ignored, overlooked or swept under the carpet and the risk of groupthink increases. As it has previously been presented arguments stating that the teams in both case companies are operating at a somewhat low maturity level, the risk of groupthink is real. Teams with a low maturity level often have a distinct “we”-attitude where the value of the contribution of others is often ignored. This is a threat to the knowledge transfer between the teams in both Powel and Confrimit, in addition to increasing the risk of groupthink arising in their teams. Because of this, it is important for the teams studied to actively avoid the development of groupthink, by activating the opposition role and accepting creativity to a higher degree than what it is today. This is a challenge for the teams in Powel and Confrimit, as the SPGR data revealed that divergent opinions and viewpoints are not wanted, and that the most important thing is for the teams to reach an agreement.

The argumentation given in the analysis (7.3) and the discussion above implies that the team culture affects the knowledge transfer between the teams, and that the cultures in the teams in this study could be better in relation to facilitating knowledge transfer. Both Powel and Confrimit should therefore address the cultures in their teams and take actions to optimize it in facilitating the knowledge flow between the teams.

8.3 National culture

Regarding how the national culture affects the knowledge transfer between the teams, it is important for Powel to realise that the difference in feminine and masculine national culture in Norway and Poland might become a bigger challenge in the future, when the Polish teams are expected to cooperate with Norwegian teams on the same organisational level as themselves. It is therefore important to address this difference in national culture rather sooner than later. As the Polish team culture is masculine, and masculine cultures are often characterised by conflicts being solved by fighting them out, it is noticeable that the team in Poland received such a low score on criticism and oppositional roles in the SPGR survey. It is important for the team to be able to activate these roles, as their national culture predicts them to wind up in conflicts where they would want to fight to solve the problem. If the oppositional roles are not developed in stable and safe environments prior to such conflicts arising, the conflict might destroy the team.

In the analysis above (7.4), it was further revealed that both the Norwegian and the Polish culture are individualistic, whilst the Russian culture is collectivistic. The individualism in both teams in Powel might both have a positive and a negative effect on the knowledge transfer. Firstly, it might have a negative effect as the team members might consider the knowledge they hold to be their own property and might choose not to share it with their team members and the other team. This is in contrast to collectivist societies, where the team members would have considered the knowledge to be everyone's property, especially the company's. However, it might have a positive effect as well, as employees in individualistic societies will be willing to share their knowledge if they are credited for it and get recognition for it Powel needs to create a culture in which knowledge sharing is acknowledged. In contrast, collectivist cultures, as the Russians, regards knowledge they hold as belonging to the team or company in which they work. This might have a positive effect on the Russian Conformat-team's willingness to share knowledge. Further, it is evident that the Conformat-teams' individualistic and collectivistic cultures affect the creation and development of team trust, group cohesion and groupthink within the teams, differently. One might argue that it is easier to create team trust within collectivist cultures than in

individualistic cultures, but the trust within collectivist cultures might be considered “weaker” than the trust that may occur in individualistic cultures. Further, it might be considered easier to create a good group cohesion in collectivistic societies, but these societies are also more vulnerable for the occurrence of groupthink. It is therefore important for Conformat to be especially aware of any development of groupthink within the Russian team.

In the analysis given above (7.4), it is shown that the Polish culture is characterised as both individualistic and as having a high power distance. This is interesting and noticeable, and can be seen as a “contradiction”. The combination of high power distance and individualism creates a specific tension in the culture; the managers in such cultures need to establish a second level of communication where he/she has a personal contact with every employee, giving the impression that everybody in the company is important, although unequal. This is likely to have an affect on the team maturity and team culture of the Polish team in Powel.

What recurs in the analysis and discussion of the findings is that the teams in Powel and Conformat seem to be performing well in relation to the knowledge sharing, as long as they do not face any challenges, problems or other situations where one needs to be critical or creative. If the teams are not able to raise their performance when a challenge or problem occurs, by activating their critical and creative roles, then the challenge or problem will have a negative affect on the team maturity and team culture, and therefore also the knowledge transfer.

8.4 Comparison

The situation Powel is in today is similar to the situation in Conformat in 2007, with a few obvious exceptions: Powel started a brand new office in Poland and put together a new team consisting of employees who did not know each other and had not worked together previously. This means the team in Poland had to get comfortable with working together at the same time as getting to know the Norwegian team in Powel. In Conformat, however, the office in Russia was founded prior to being acquired by Conformat. This is a big difference that

needs to be considered when comparing the two cases in this thesis. Further, there is a difference in the national cultures in Russia and Poland, as previously argued (2.3.1). However, the similarities of the two cases are many: Both companies are working in knowledge-intensive industries, where they develop software through an iterative work process and use the Scrum methodology. Further, both companies have experienced strong growth over a relatively short period of time. Moreover, the SPGR-data and the analysis given above indicate that the teams in Powel and Confirmat all are operating on a somewhat low maturity level, and lack the ability to activate the oppositional roles within the teams. Lastly, the interviews with the employees in both companies revealed that the characteristics of knowledge transfer is similar in the companies, as it flows mostly from Norway to Poland/Russia, the difference in language is not considered a barrier and the transfer happens mostly on an ad hoc basis. Based on the similarities of the two cases, it is evident that Powel will gain from learning from Confirmat's experiences.

One of the most noticeable things in the analysis is the similarities in the situations in Powel and Confirmat, even though Confirmat is "seven years ahead". It is reasonable to expect that the situation in Confirmat should have developed further than what it seem to have done. However, it is *not* reasonable to expect the situation to develop automatically without taking any actions, and it is evident from the interviews conducted in Confirmat that they did not take any specific actions to develop their knowledge transfer processes since the two teams first started communicating and cooperating. This should be interesting for Powel, as they seem to believe that the knowledge transfer will be better over time, and do not express any thoughts about discussion or conducting specific actions to improve it. It was revealed in the analysis of the teams in Confirmat that they are seemingly operating with relatively fixed team roles and a team culture that is not optimal for the knowledge transfer process they have. These fixed roles and the team culture create a "locked" situation in which it will remain until actions are taken to "unlock" the situation. It is reasonable to assume that the teams got into this situation relatively early on, and that this is the reason why they have not developed further over the next seven years. What might be concluded from the experience in Confirmat is that if there is a wish and a need to improve the knowledge transfer between

two teams in a company, there should be taken specific actions, as it will not automatically improve over time.

Another interesting point for Powel to learn from Conconfirm is that the team composition they have is not optimal for knowledge transfer to happen between the teams, and as Powel's team seem to have the same characteristics as the ones in Conconfirm, they might want to take some actions to change these characteristics. It has been pointed out in this thesis that the teams in Powel should make room for criticism and new, alternative viewpoints, and that this should be done by activating the oppositional roles and the creativity within the teams. This will also improve the trust within and between the teams

The difference in national culture between Poland and Russia needs to be pointed out once more, because it does indeed have an affect on the knowledge transfer in the companies. This means that even if Powel learns a lot of lessons from the situation in Conconfirm, and takes actions accordingly, they might still not get optimal knowledge transfer processes.

8.5 Practical implications

From the analysis and discussion provided above, some practical implications follow, and they should be highlighted. Firstly, it is important for multinational companies to realise that it requires a certain level of team maturity to create a basis for good and effective knowledge transfer. Findings from this study suggest that it is especially important for teams to be aware of their critical and creative behaviour, as it is the last step towards a high maturity level. Secondly, multinational companies are advised to address their teams' cultures, as it has been thoroughly argued here that it has an influence on the knowledge transfer within the company. The team culture affects and is affected by the team trust and the group cohesion present or not present. It is therefore also important for the multinational companies to facilitate the development of trust and cohesion within the teams, and at the same time inhibit the occurrence and growth of groupthink. Lastly, it has been provided several arguments for how national culture affects cross-cultural knowledge transfer in this thesis, and it is therefore important for multinational companies to realise

that it is a factor to take into account when discussing and practising cross-cultural knowledge transfer. As each country has its own national culture, it is important for the company to familiarize itself with the culture of the specific country at hand and analyse how this culture might affect any communication and cooperation between a team in this country and a team in another country, before starting any such cooperation.

8.5.1 Recommendations

Powel might consider taking some actions to raise the maturity level of their teams, and might benefit from being more conscious about team roles, team culture and team maturity in general. Based on the SPGR data from Conconfirmit, they might also benefit from raising the maturity levels of their teams and be more conscious about team maturity, culture and maturity in general, but considering that this data is 2,5 years old they might already have raised their maturity level and started focusing on these subjects. Powel might raise the team maturity by creating room for criticism and creativity within the teams. Conconfirmit should also do this, if not already done. Criticism should be implemented as a natural part of the teams' behaviour, so they can activate it when needed. In Powel, this ought to be done prior to the teams encountering any problems or difficulties, as they will need the criticism function to address the problem or difficulty in the best possible manner. If this is not done, the teams might face troubles addressing the problems and difficulties and might ignore it all together until it might destroy the teams by creating polarisations, sub-groups, satellites or other destructive patterns. Powel should also attend to their teams' cultures, and is recommended to take actions optimize it in regards to their knowledge transfer processes. In the same way as creating room for criticism and creativity within the teams in Powel and Conconfirmit might help raise the maturity levels of the teams, a raise in the trust in the teams might facilitate the creation of room for criticism and creativity within the groups. It is argued that trust is an important part of teamwork, and it is recommended that Powel and Conconfirmit should take actions to establish trust early on when creating or acquiring new teams. This recommendation is included here, because it is believed that both Powel and Conconfirmit will continue to grow and is likely to start-up or acquire yet another office abroad within a short time-span.

9 CONCLUSION

The purpose of this thesis was to investigate how teams in multinational companies communicate and cooperate across national borders. The most interesting variable in this research was the knowledge transfer between the teams; how good and effective it is. It was envisioned that this knowledge transfer is affected by the teams' maturity level, the team culture and the national culture.

The thesis was designed as an embedded multiple-case study, where the findings in Powel were compared to the findings in Conformat. This is reasonable, as Powel has recently established a new office in Poland and will have to deal with knowledge transfer between this office and the headquarters in Norway, whilst Conformat has experience from previous and current cross-cultural knowledge transfer between their headquarters in Norway and their office in Russia. The goal of the research question was to first establish the maturity level of the teams, both in Powel and Conformat. The analysis discovered a number of implications that the teams operate on a somewhat lower maturity level, and that this is not optimal for the knowledge transfer. Further, the research question required addressing the team cultures in Powel and Conformat. The analysis revealed that the team cultures, in all four teams studied, are not optimal for having the best possible knowledge transfer. Then, the national cultures of Norway, Poland and Russia were analysed, before all the three variables were linked to the knowledge transfer situations in the two case companies.

The main goal of this assignment is to contribute to the existing team-theory, by establishing how team maturity and culture affect knowledge transfer between teams in multinational companies, located in different countries. It was discovered that the team maturity needs to be high, so that it will facilitate knowledge transfer between the teams, instead of inhibiting it. It was further revealed that the team culture does indeed affect the knowledge transfer, both directly and by affecting the maturity levels of the teams, so that the multinational companies therefore should seek to establish a team culture optimal for their knowledge transfer processes. Lastly, it was provided evidence that the national cultures of the teams

also affect the knowledge transfer, and that multinational companies consequently should always address this type of knowledge transfer in the context of the national cultures.

A secondary goal of the findings from this assignment is to be able to provide Powel with an increased understanding of all its teams, as the teams in this study might be considered representative for several other teams in the company, for instance the development teams in Norway. Further, this analysis wanted to provide Powel with valuable information on their situation today and recommendations for how to proceed further in the development of the new office in Poland. Moreover, this information and recommendations might not only benefit Powel in developing their new office in Poland, but also benefit both Powel and Conformat when continuing the communication and cooperation with their teams in different locations abroad and when opening new offices in new locations. This information and recommendations should also be interesting for other multinational companies with teams communicating and cooperating across national borders.

I see an obvious need for further research on the teams in Powel, as they develop in the future. It will be interesting to evaluate how the possible actions Powel might take affect the team maturity, the team culture and the knowledge transfer. Further, it would be interesting to study the knowledge transfer between teams that have a theoretically bigger difference in national culture, for example Canada and Vietnam. Lastly, as many variables possibly affecting the knowledge transfer between teams are omitted in this study, further research is needed on how these variables affect the knowledge transfer. I anticipate and expect that further research on this field will be conducted within the overall project of operational management in which this thesis is a part of.

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APPENDIX 1: INFORMATION LETTER REGARDING SPGR-SURVEY, SENT TO POWEL

I am a graduate student at the Department of Industrial Economics and Technology Management at NTNU, and I am lucky enough to have the opportunity to conduct my thesis for Powel. The main purpose of this thesis is to study how the transfer of knowledge between teams in Trondheim and Poland works and which factors influence this transmission in both positive and negative manner. This means I need help from you. The quality of my thesis and my recommendations to Powel will be good only if the foundation and data is good. It is therefore important that everyone allocate some time to respond to this survey.

I am using an analysis method called SPGR (Systematizing Person-Group Relations), where you will be asked to reflect upon how your team interact with other teams, and to consider the typical behaviour of your colleagues and yourself within the team. The data will be collected via a web interface that you will gain access to through an e-mail with a personalized link. You will receive this e-mail directly from Professor Endre Sjøvold at NTNU, and responses are sent back to the mail-address at the University. The data is decoupled from names and e-mails, and therefore anonymised before I get access to the results. The answers will be processed and analysed by Prof. Sjøvold, and I will only get access to the overall analysis results. I will also contact various team-members for some interviews regarding the collaboration between offices in Trondheim and Poland. I will coordinate the timing of this with Elisabeth Tangvik Almaas.

Lastly, It will not be produced any reports which makes it possible to identify the respective participants. The study is reported at Norwegian Social Science Data Services (NSD).

Thank you in advance, please contact me if you have any questions.

Sincerely, Kamilla Nerland
kamillanerland@gmail.com

APPENDIX 2: INVITATION TO SPGR-SURVEY, SENT TO POWEL

Attached is the link that leads you directly to the SPGR questionnaire that you were informed about in an earlier e-mail.

You are asked to consider the typical behaviour of your colleagues and yourself in the group. As earlier informed; the data will be decoupled from the names, and anonymised – the data collection is also reported to NSD. Moreover, it will *not* be produced any reports in which it is possible to identify the respective participants.

Your answers are very important to me and my thesis, which again should help you in Powel to optimize the cross-team collaboration. It takes approximately 10-15 minutes to complete the questionnaire. I appreciate it if you complete this survey within four days. For more information, please visit www.SPGR.no.

Thank you in advance.

Sincerely,
Kamilla Nerland

APPENDIX 3: INTERVIEW GUIDE USED AT POWEL TRONDHEIM

Intervjudato, tid og sted:
Faktisk lengde på intervju:

Informasjon om intervjuobjektet:

Navn:
Utdanning:
Nåværende stilling:
Primære arbeidsoppgaver:
Antall år i nåværende stilling:
Tidligere erfaring i Powel:

Introduksjon

2 min

- Har du lest informasjonen som ble sendt ut i forkant?
- Eventuelle spørsmål?

Generelt

Kan du fortelle om de sosiale forholdene på arbeidsplassen?

- Mellom landene?

Team

Fortell litt om teamet og hvordan dere arbeider (møter? Planer?)

- Primære arbeidsoppgaver i henhold til utviklingen av Polen-kontoret?
 - Er alle arbeidsoppgavene/områdene kjent blant medlemmene?
 - Vet dere hva de andre gjør?
- Samarbeid
 - Mellom medlemmene
- Roller? (leder, megler osv.)
- Kulturen

Kunnskapsoverføring

Fortell litt om hvordan kunnskapsoverføringer skjer i Powel generelt.

- Hyppighet
- Rutiner
- Type kunnskap
- Åpen/lukket kunnskapsoverføring?
- Situasjoner
- Misforståelser
- Eksempler!

Hvordan har kommunikasjonen/kunnskapsoverføringen med Polen-kontoret vært?

- Enveis/toveis?
- Kun med leder eller med alle i teamet?
- (Sosiale) Barrierer?
 - Kultur
 - Språk

Hvilke kanaler brukes for overføring av kunnskap?

- Når dere er på samme sted
- Når dere er i hvert deres land
- (Eksempel: e-post, intranet, telefon, konferanser, kurs, møter osv.)

Er det noen hindringer for kunnskapsdeling i Powel?

- Hvorfor?
- Eksempler!
- Løsninger?

Hva er den største utfordringen for Powel når det gjelder kunnskapsdeling?

- I Norge
- Til/fra Polen
- Eksempel

Hva er det viktigste elementet for å få til god og effektiv kunnskapsdeling i Powel?

Nasjonal kultur

Hvordan påvirker den nasjonale kulturen interaksjonen mellom de to teamene?

- Eksempler!
- Hvorfor tror du det er slik?

Har det oppstått problemer i arbeidet som følge av kultur-forskjeller?

Avslutning

3 min

- Andre innspill: Er det noe du har lyst til å legge til?
- Oppsummering
- Kommentarer til intervjuet?
- Takke for tid og samarbeid. Ha en fin dag!

APPENDIX 4: INTERVIEWGUIDE USED AT POWEL GDANSK

Date, place and time:

Length of interview:

Information on the interviewee:

Name:

Education:

Current position:

Main work-tasks:

Introduction

2 min

- Have you read the information sent to you in advance of this meeting?
- Questions?

Generally

Can you tell me a little bit about the social conditions in your office?

- Between the countries also

Team

Tell me a little bit about the team and how you work

- Main tasks
- The purpose of the team?
 - Is it known among all the members?
- Cooperation
- Roles
- Culture

Knowledge transfer

Tell me a little bit about how knowledge transfer is conducted in Powel in general

- Frequency
- Routines
- Types of knowledge
- Open/closed knowledge transfer?
- Situations
- Misunderstandings
- Examples

How has the communication with the team in Trondheim been?

- One-way vs. two-way?
- Everybody in the team or only the team leader?

- Barriers?
 - Culture
 - Language

Which channels are used for knowledge transfer?

- When in the same office
- When at different locations
- (Examples: mail, intranet, phone, conferences, meetings, courses etc.)

Are there any obstacles in the way for knowledge transfer in Powel?

- Why?
- Examples!
- Do you have any suggestions for solutions?

What is the greatest challenge for Powel regarding knowledge sharing/transfer?

- Within Poland
- To/from Poland and Norway
- Examples

What do you believe is the most important element to create good and effective knowledge transfer in Powel?

National Culture

How does the national culture affect the interaction between the Poland-team and the Norwegian teams?

- Examples!
- Why do you think it is so?

Have there been any problems in the work due to cultural differences?

Ending

3 min

- Other inputs: is there anything you would like to add?
- Summary
- Comments on the interview?
- Thank you for your time. Have a nice day!

APPENDIX 5: INTERVIEW GUIDE USED AT CONFIRMIT OSLO

Intervjudato, tid og sted:
Faktisk lengde på intervju:

Informasjon om intervjuobjektet:

Navn:
Utdanning:
Nåværende stilling:
Primære arbeidsoppgaver:
Antall år i nåværende stilling:
Tidligere erfaring i Conconfirmit:

Introduksjon

2 min

- Eventuelle spørsmål?

Generelt

Kan du fortelle om de sosiale forholdene på arbeidsplassen?

- Mellom landene?

Team

Fortell litt om teamene i Norge og Russland som samarbeider og kommuniserer.

- Primære arbeidsoppgaver
- Hvordan fungerer samarbeidet?

I disse teamene, oppstår det klare uformelle roller? (kontroll-roller, omsorgsrolle, opposisjonsrolle osv.)

Fortell litt om team kulturen i teamene (synergi-kultur, tilbaketrekning, kontroll-kultur, avhengighetskultur).

Kunnskapsoverføring

Fortell litt om hvordan kunnskapsoverføringer skjer i Conconfirmit generelt.

- Hyppighet
- Rutiner
- Type kunnskap
- Åpen/lukket kunnskapsoverføring?
- Situasjoner
- Misforståelser
- Eksempler!

Hvordan har kommunikasjonen/kunnskapsoverføringen med Russland-kontoret vært?

- Ved oppstart
- Nå
- Enveis/toveis?
- Kun med leder eller med alle i teamet?
- (Sosiale) Barrierer?
 - Kultur
 - Språk

Hvilke kanaler brukes for overføring av kunnskap?

- Når dere er på samme sted
- Når dere er i hvert deres land
- (Eksempel: e-post, intranet, telefon, konferanser, kurs, møter osv.)

Er det noen hindringer for kunnskapsdeling i Conconfirmit?

- Hvorfor?
- Eksempler!
- Løsninger?

Hva er den største utfordringen for Conconfirmit når det gjelder kunnskapsdeling?

- I Norge
- Til/fra Russland
- Eksempel

Hva er det viktigste elementet for å få til god og effektiv kunnskapsdeling i Conconfirmit?

Nasjonal kultur

Hvordan påvirker den nasjonale kulturen interaksjonen mellom team i Norge og Russland? (språk, bakgrunn, misforståelser, sosiale normer)

- Eksempler!
- Hvorfor tror du det er slik?

Har det oppstått problemer i arbeidet som følge av kultur-forskjeller?

Erfaringer

Hvilke erfaringer har du og Conconfirmit gjort deg/seg når det gjelder kommunikasjon og kunnskapsoverføring til team i andre land?

- Ved oppstart
- Ved daglig arbeid
- Best practice?

Opplevde Conconfirmit noen problemer relatert til kommunikasjon og kunnskapsoverføring ved oppstart av samarbeid med Russlandskontoret?

Opplever Confrimit noen problemer nå, relatert til kommunikasjon og kunnskapsoverføring med Russlandskontoret?

Anbefalinger?

Avslutning

3 min

- Andre innspill: Er det noe du har lyst til å legge til?
- Oppsummering
- Kommentarer til intervjuet?
- Takke for tid og samarbeid. Ha en fin dag!