MASTEROPPGAVE

Emnekode: BE309E Kandidat: Andreas Nordvik

OVERCOMING CULTURAL FRICTIONS AND BUILDING RELATIONS TO EASE INTERNATIONAL OPERATIONS

A case study of Norwegian companies operating in the Brazilian oil and gas market

Dato: 22.05/18 Totalt antall sider: 70



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Acknowledgments

This master thesis has been completed as a part of the two-year Master's program Master of Science in Business at Nord University. The thesis is written within the main profile International Business and Marketing.

The thesis was written in Rio de Janeiro and counts for 30 ECTS. The thesis' topic was chosen due to a high degree of self-interest about Brazil politically, economically and culturally. I got the idea while studying the BRICS countries from my Bachelor's degree. During my stay writing the thesis in Brazil, I have acquired new knowledge regarding the thesis' topic and Norway's participation in the Brazilian oil and gas industry.

First, I sincerely would like to exploit this opportunity to express my biggest gratitude towards my supervisor Dr. June Borge Doornich who have provided me with excellent and impeccable support and supervision throughout the whole semester. At one point it felt like my supervisor had more control of my thesis than I had. By giving me complementary and constructive feedback, you have inspired and motivated me to do my utmost.

Second, I would like to thank Stein-Gunnar Bondevik and your great team at Innovation Norway in Rio de Janeiro for giving me the unique opportunity to have my own desk at your offices, and supporting my thesis by giving me feedback and access to your network in Rio de Janeiro. This five month stay at your offices has undoubtedly been instructive and has lifted my thesis to new heights.

I also want to use this opportunity to thank Tarek Wahed, Claudia Costa and Luiza Wahed for their caring hospitality and making Rio de Janeiro feel like my home city. Your presence has helped me through stressing moments and motivated me to the fullest. It has been a pleasant stay in your house in Botafogo. Muito obrigado!

Andreas Nordvik	
Bodø, May 2018	

Introductory chapter

My philosophical point of view is based on how I interpret reality, ontology, and the learning of knowledge, epistemology. Weber (1968) introduced the methodology that deals with understanding. According to him, the meaning behind human actions is to be found in the act of itself, and you should therefore focus on and interpret people's actions. Interpretivism is based on Weber's method and Jacobsen (2005) refers to this as interpretation-based research. Qualitative methods are largely based on interpretivism. The question of which method will be used comes after the choice of paradigm. A paradigm is defined as a set of basic rules and principles that guide the researcher in choosing the method (Jacobsen 2005; Guba & Lincoln, 1994). In qualitative research there are several paradigms that vary in assumptions and implications. Thus, it is important for the research design to define which paradigms the work is based on as this will help explain and justify decisions in the design (Maxwell, 2003).

Some phenomena can be seen as actual things, or social phenomena (Maxwell, 2013; Hacking, 1999). The phenomenology is an intersubjective research approach where you want to understand a phenomenon and seek deep information through a process that assesses the researcher and the participants' perception of the phenomenon. The reality, or ontology, is viewed as the individual's interpretation of his or her own experiences. Epistemological means that knowledge is driven by the interpretation of the individual's experiences. The purpose of research is to understand a phenomenon, and it is practical to use data collection methods that study and interpret individual experiences, such as interviews, observations and documents (Easterby-Smith et al., 2015). Based on this, I am inspired by interpretivism and the phenomenological paradigm. This affects the choice of my research design, data collection and analysis on this paper that emphasizes how Norwegian managers overcome cultural frictions and invest in relational and cognitive capital to ease the international operations in the Brazilian oil and gas market.

Research strategy

In order for the researcher to answer the research question, he or she will need a concrete plan of how to do it which is a research strategy (Saunders et al., 2016). The research strategy is distinguished between qualitative and quantitative methods, which define the type of data the researcher desires to obtain. The choice of the method is dependent on the problem or phenomenon ought to be studied, and the different methods will be used to answer different types of questions (Easterby-Smith et al., 2015; Johannesen et al., 2010). Qualitative methods

emphasize the interpretation of collected data, and is mainly data in form of words that are obtained and the researcher attempts to make few restrictions on the collection of data (Jacobsen, 2005). The purpose of quantitative methods is to explore the extent of a phenomenon, and the data consists mainly of numbers. This requires a more closed approach, and the researcher will more closely guide the types of information obtained.

The paper's research question is relatively open and there are novel and detailed data that requires be collected. This paper desires to obtain opinions and detailed descriptions of how managers invest in social capital (relational and cognitive capital) in order to handle cultural frictions, and how a critical market incident influence these relations. Thus, a qualitative approach has been chosen which makes the research more open for new first-hand and unforeseen information compared to a quantitative approach. Further, a specific choice of qualitative design has been made. There exist several qualitative designs, e.g. grounded theory, ethnography, case study and phenomenology (Easterby-Smith et al., 2015). A phenomenological approach to the qualitative method involves the exploration of human experiences and interpreting a phenomenon. By utilizing the grounded theory method the researcher aims to develop new theory that is abstract in relation to the collected data. In this paper, I have chosen to utilize the case method. Case studies are well suited for the development of a new theory or when a deep insight are desirable in a specific unit. This strategy allows me to obtain data which is not predefined and which can subsequently form hypotheses that may be verified through other research designs (Easterby-Smith et al., 2015). According to the best-known exponent of case method, case studies can cover studies of units of analysis at different levels (Yin, 2013). This study has chosen to study the phenomenon from six different Norwegian companies (units of analysis). This has given me the unique opportunity to gain deeper insight into how managers from different Norwegian companies in Brazil perceive and respond to cultural challenges. Interviewing managers from different Norwegian companies has made a foundation of comparison and helped to provide me with broader insights into the phenomenon studied.

Case study

A case study is a study that investigates a current phenomenon in depth and in its real context (Yin, 2015). According to Saunders et al. (2012), this involves investigating a problem in a real setting. This is particularly an up-to-date strategy if the purpose of a study is to achieve a deep understanding of the empirical context. Case studies can be used with advantage if there are uncertainties regarding the boundaries between the environment and the empirical context (Yin, 2015). This research strategy is widely used in exploratory design as this strategy is suitable for answering questions with "why" and "how" to achieve a deep understanding of a phenomenon. As mentioned earlier, I chose an explorative design where I wanted a deeper understanding of how managers overcome cultural frictions and invest in relational and cognitive capital.

Yin (2017) distinguishes between four different types of case studies based on two dimensions. These dimensions are simple versus multiple cases, and holistic versus integrated case. This study is a multiple case study as I am getting data from six different Norwegian companies investigating how Norwegian managers overcome cultural frictions and invest in relational and cognitive capital to ease the market access in the Brazilian oil and gas market. Simultaneously, the data collection is delimited to deal with only the managers or employees from the management in the respective companies. In a holistic study, the organization is studied in its entirety, while integrated studies study subunits within the organization (Yin, 2017). Thus, this study is a multiple integrated case study.

A case study is time-consuming and intensive, which limited my sample size. It would not be possible for me to gather rich and detailed data from a wide range within my time horizon. The selection size therefore reduces the generalization of the study (Saunders et al., 2012). According to Marshall and Rossman (2011), case studies can help me to highlight relationships between the case and existing theory, thus demonstrating a broader theoretical significance beyond the current case.

Research approach

Deductive and inductive are two of the main approaches to research (Jacobsen, 2005). By the deductive approach, the researcher moves in the direction from theory to empiricism. Here, hypotheses are constructed based on how empiry looks based on the existing theory which is ought to be tested (Jacobsen, 2005). In the case of the inductive approach, the main objective is to collect data from reality and use this to form theories. In this case, the researcher goes from empirical theory to theory. There should be very few restrictions regarding the collection of data, and the investigator should go open-minded into empiricism. According to Saunders et al. (2016) a third approach which combines both the deductive and inductive approach is the abductive approach. In the case of the abductive approach, the researcher uses theory to analyze empirical findings that can further give rise to new findings (Saunders et al., 2016).

Further, it is crucial to choose the right research design. Research design can be defined as the general plan which demonstrates the progress of how the research question should be answered (Saunders et al., 2016; Jacobsen, 2005). Saunders et al. (2016) distinguish between causal designs, descriptive designs and explorative designs. Causal designs are used when the investigation's main objective is to study the cause-effect relationship. Descriptive designs are used when the researcher possesses a great knowledge of the phenomenon and the main objective of this design is to give a specific description of a situation or a phenomenon. The explorative designs are often suited when the researcher aims to acquire a greater understanding of a problem or a phenomenon, and is often used to answer open questions. There has not been any extensive research on cultural frictions during international operations, and my prior knowledge regarding the subject is limited. The objective of this paper is to acquire a greater insight and an adequate understanding of the respective area of research. To make this possible, an explorative design is required according to Saunders et al. (2016). This gives me the possibility to be flexible and to change the paper's "path" if necessary, which can be desirable since my prior knowledge is limited (Easterby-Smith et al., 2015).

Interviews

The literature distinguishes between unstructured, semi-structured and structured interviews, which can vary in the degree of openness (Easterby-Smith et al., 2015; Johannesen 2010). This paper is based on the semi-structured approach to interviews, a form of interview which

lies in-between a structured and unstructured interview style. The utilization of semi-structured interviews provide flexibility during the conduction of the interviews which are primarily constructed on the interest of the respondents regarding the topics, and depending on the extent of the respondent's engagement follow-up questions can be asked (Doornich, 2017; Alvesson, 2011). In-depth interviews were conducted with the respondents from the six case companies in the spring of 2018 in Rio de Janeiro. The respondents were managers who were carefully selected based on their experience within the field which could lead to deeper insight and greater knowledge regarding the phenomenon studied. Due to the paper's explorative approach to the research question with limited prior knowledge regarding the topic, it was natural to hold a certain extent of openness in the questions. All interviews were in English to ensure that no important messages got lost in translation.

According to Yin (2014), interviews are the most important source of evidence in case studies. I chose to use the semi-structured interview guide, where I arranged the three topics (cultural frictions, relational and cognitive capital, and critical market incident) that were going to be made questions of. This was done to ensure a good flow in the interview and focus on the topics I wanted information about. However, there is room for further extensions along the interview as this may give me rich and new information. By conducting semi-structured interviews it was easier for me to compare the answers and carry out the analysis. It was also less time consuming than structured interviews as I have a quite limited time to conduct this assignment. It was important for me as a researcher to establish a good dialogue with the respondents (Savin-Baden & Major, 2013). The fact that the researcher and the respondents achieve good contact is crucial to what the respondents want to share of information.

Simultaneously, it was important to maintain a certain structure in the interviews to assure that the respondents covered all central areas in order to be able to answer the research questions. This was completed with the support of the interview guide with different topics. As a result of the paper's abductive approach, the interview guide's topic and questions were initially designed by the paper's theoretical background. The interview guide consisted of overall questions assisted with sub-questions. The objective of the interview guide was to acquire a structured tool to highlight how Norwegian managers deal with the cultural frictions and investing in relational and cognitive capital in the Brazilian oil and gas market.

Method criticism

Independently how decent the methods utilized in any research project are, it is critical to evaluate the research's reliability and validity thoroughly. It is noteworthy to mention that the selected method may influence the research project's quality (Jacobsen, 2005), and it is important to consider whether the given conclusions are valid and reliable.

Validity

The research project's validity must also be viewed with a critical look. Validity is usually distinguished between internal validity and external validity (Easterby-Smith et al., 2015; Jacobsen, 2005; Johannesen et al., 2010). The internal validity depends on whether the chosen method actually investigates what it is intended to and whether the findings represent reality. The internal validity may be threatened by the fact that the interviewees have provided incorrect information. Thus there has been a focus on assessing whether the interview object has had the ability and willingness to provide incorrect information. In this paper, all the interviews have been conducted without any other person present than the interview object, which ultimately may have helped to reduce incorrect information given by the interview object (Jacobsen, 2005). In addition, the internal validity may be influenced by how the interviews are structured and how questions are formulated (Saunders et al., 2016). As already stated, the purpose of this study is to provide new insights and I have had prior limited knowledge of the topic. During the interviews, there was a solid focus on asking open questions in order to let the interview object focus on what he or she found most relevant.

External validity concerns that the empirical findings may be generalized, more specifically if descriptions and interpretations can be transferred to areas outside the study object (Easterby-Smith et al., 2015). The purpose of this study is also to enter into a new phenomenon. Thus seven qualitative interviews have been conducted which may limit the possibility of generalization to other contexts. Despite limited generalizability, it can be assumed that similar findings can be identified in other similar setting and thus the findings may also be of relevance in other organizations, industries or contexts.

Reliability

To assess whether the research project is reliable, it must be assessed whether the results are influenced by the findings of the interviews itself (Johannesen, 2005). In order for the investigation to be reliable, other researchers should be able to find similar results if the study is object to be repeated (Easterby-Smith et al., 2015).

In qualitative studies, research or contextual effects will pose a risk to how reliable the results are. Reliability can be impaired if the investigation itself causes the interviewer to appear abnormally which results in an incorrect picture of the situation. In the process of gathering data, there has been a strong focus on reducing the risk of error sources by doing thorough preparations and practicing interviews. This has been done with the utilization of an interview guide with central topics and questions to answering the paper's research questions. In cases of unclear answers from the interview objects, my interpretation of the answers has been repeated to the respondents for the purpose of avoiding misunderstandings. During and prior the interviews, it was clearly stated that any useful quote used in the paper would be anonymized. Several of the interview objects gave me the impression that they could easily speak freely without fear that some quotes could be traced back to them. Thus anonymization may have strengthened the papers overall reliability.

Another point is the effects associated with the context in which the data was collected, which can in turn affect the interview object to create an incorrect picture of the situation (Easterby-Smith et al., 2015). In order to reduce the contextual impact and enhance the paper's reliability, the interviews were conducted in the company's own offices to give the most natural, comfortable and known context as possible for the interview objects.

Confirmability

Confirmability concerns if the researcher is giving direct and repeated confirmation of what the respondents think about the phenomena studied. The aim is to gain an empirical basis from the respondents for the researcher's findings and interpretations (Easterby-Smith et al., 2015; Mehmetoglu, 2004). In my analysis, I have included a number of quotes from the interviews with my respondents. Thus, this gives the reader an insight into why and how I have come to my my findings and conclusions.

Ethical reflection

There are several things one should consider when you are going to conducting a project like this. With in-depth interviews you can get a lot of sensitive information from individuals. The information and the individuals must therefore be treated ethically correct. When conducting research, one must always have a fundamental respect for human value, freedom and self-determination. One must take into account and protect people from whom information and data are retrieved. One should be aware not to exert unnecessary strain on those who have been willing to participate in the project (Johannesen et al., 2010).

All the seven interviews were conducted with informed consent. Prior to the interviews, all respondents were informed about their rights, ranging from the fact that they could choose to leave the interview and that they could get access to the transcription and the analysis of their interview if needed. In addition, the respondents were told that they and the company would be anonymous in order to help get as precise data as possible.

The respondents' confidentiality has been taken well care of by storing audio recordings and data from interviews in a protected place, and I have only had access to these files. All the data material is anonymized or destroyed upon completion of the assignment.

During the interviews, I never experienced that there was any bias in relation to the authority between the respondents and myself as a researcher. We experienced it as a relation characterized by mutual interest and benefit of the task (Dowling, 2010). I chose to primarily hold the interviews on the respondents' workplace and secondarily at my office at Innovation Norway, given that my theme is not too sensitive, and as this would not affect their responses in any negative manner.

Evaluation

I have conducted seven individual semi-structured interviews with five Norwegian and two Brazilian respondents that have different connections to the Brazilian oil and gas market. After some of the first interviews, I discovered that the respondents thought some of the questions were similar resulting in some extent of repetition. Therefore, I adapted and edited the interview guide and removed some questions that could resemble each other or could be perceived as irrelevant. Overall, I think the interviews were all completed successfully, and I got the impression that the respondents were interested and got excited about this given topic. This resulted that I received a lot of interesting information and great discussion.

The study is based on data from Norwegian companies operating on the Brazilian shelf. It will therefore be a limitation of the study that it is only addressing the Norwegian companies in the Brazilian oil and gas market. Another limitation is that the data foundation is based on data from few respondents and may thus provide a somewhat weak basis for conclusion. This could have been strengthened by having more time and conducting a larger number of interviews as well as including more Brazilian managers with other backgrounds and links in the market. However, the respondents are managers or employees from the management with great experience in the market, and I therefore believe that the data provided from them gives

an interesting and great insight into the phenomenon studied and the Brazilian oil and gas market.

One weakness of my study is that I seek answers to questions that may be perceived as sensitive to some of my interview objects, especially from the two Brazilians. These are the questions related to the critical market incident of Petrobras where corruption was revealed. Thus I can assume that some of the respondents may not have answered honestly and may have held back important information. However, by conducting qualitative interviews with some semi-structured questions, I also reduced the source of errors which I could have had with only open questions in the interview guide. It is nevertheless important to point out that some of the respondents can have certain perspectives and interests to present the Brazilian oil and gas market in a certain way.

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SCIENTIFIC ARTICLE: Overcoming cultural frictions and building relations to ease international operations: A case study of Norwegian companies operating in the Brazilian oil and gas market Andreas Nordvik

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ABSTRACT

This study explores how managers overcome cultural frictions by investing in relational and cognitive capital during international operations. Its two research questions are: (1) how cultural frictions are eased through investment in relational and cognitive capital, and (2) how critical market incidents create dynamics in already invested relations and cognition. Using an explorative and interpretative approach, this study investigates the phenomenon from narratives told by managers in Norwegian case companies that operates in the Brazilian oil and gas market. The findings demonstrate that managers with personality traits of absorptive capacity ease cultural frictions in the market with embedded relations and cognitive resonance. Managers with a high degree of absorptive capacity understand that the Brazilian market is constructed on the cultural dimensions collectivism and long-term orientation. Critical market incidents may have different impacts on the managers' already established relations in the market. Managers with strong relations in the market maintain their embedded relations during the critical market incidents, and other mangers with medium-strong relations may exploit the opportunity to seek new and stronger relations than previous. In addition, it appears that the critical incident of the downturn in oil price resulted in downsizing the companies causing that already invested relational capital gets lost. Invested relational capital gets lost due to the fact that employees that have great relations in the market have to resign. It is not abundant to merely lean on the corporate relations. Personal relations is one of the keys to operate successfully in the market.

Keywords: Relational capital; Cognitive capital; Absorptive capacity; International operations; Cultural frictions; Brazil; Critical market incident

1. Introduction

1.1 Background

Entering and operating in a foreign market demands a review of factors within the financial, operational and strategic part of the corporation. The thesis will shift focus towards the human processes of the international operations in a foreign market, which can easily be underestimated. Studies have emphasized that one of the major challenges managers face when they operate in a market geographically far away are the cultural frictions both nationally and organizationally (Hofstede 1984; House et al. 2004; Bentsen 2011; Macduff 2006). Market researchers and professionals have long understood the importance of developing and sustaining relationships, and the idea is that one gets more out of collaborating than competing (Gummeson, 1996; Morgan & Hunt, 1994; Samiee & Walters, 2003).

In addition, the business literature emphasizes and demonstrate why relationships are important to operate in the market (see Morgan & Hunt, 1994; Baker, 1992), but what happens with these already invested relations when there is a critical incident in the market that constrains business activities? Ultimately, how do the managers invest in relations and cognitive capital to ease the cultural frictions? These are the lacks I have identified in the business literature, and I aim to fill this gap by providing new and useful first-hand information. Another identified lack is that there has not been any extensive research regarding critical frictions during international operations.

The aim of this paper is to investigate how managers invest in relational and cognitive capital to ease cultural frictions during international operations, and to explore what dynamics occur in the invested relational and cognitive capital when there is a critical incident in the market. More precisely, I will explore the following research questions; (1) how cultural frictions are eased through investment in relational and cognitive capital, and (2) how critical market incidents create dynamics in already invested relations and cognition.

Brazil and Norway have great cultural frictions which challenge the Norwegians' interpretation of business when operating in Brazil. Brazil is an "unpredictable" and a quite dynamic and emerging market to operate in. As the Norwegian managers adapt to and conquer the cultural frictions, they need to simultaneously create and sustain business relationships in the Brazilian market. To deal with these cultural frictions, investing in social

capital becomes a must, where this paper focuses on the relational and cognitive dimensions. As there are great frictions in culture between the two nations, possessing a certain degree of absorptive capacity and cognitive resonance are crucial. Absorptive capacity is the capability to acquire new market information, interpret it and use it efficiently in commercial ends (Cohen & Levinthal, 1990; Eriksson & Chetty, 2017; Szulanski, 1996; Zahra & George; 2002; Dyer & Singh; 1998).

The business culture in Brazil is primarily built on personal relations which is a critical success factor in international operations in the country's oil and gas market. Norway is a quite individualistic society, and Brazil is a more collectivistic one which means that building strong relations is critical in Brazil (Hofstede et al, 2010; Alkhafaji, 1995), where much of the business takes place outside of a regulated framework (Migueles & Zanini, 2017). Creating such relationships becomes particularly important when investing in markets where business often occurs outside of official and transparent structures, where relations and whom you know often get managers' access to the market and a competitive market position.

Conducting the thesis as a qualitative study, I hope to explore new areas leading to a foundation of future research, more severely to become relevant for managers in the oil and gas sector, but also in the energy, forestry and fishery management. The thesis will possibly be of relevance for other nations operating or planning to operate in Brazil. I also courage to contribute to the business literature by giving fresh insights how managers can sustain relationships even though the market experience a critical incident during international operations, including why it is crucial to maintain the relationships in order to preserve them when the market has normalized again.

1.2 Study context

The relationship between Brazil and Norway have developed drastically and has become increasingly important and closer ever since the first ship of Norwegian "bacalhau" arrived in Brazil in 1843 and returned to Norway with Brazilian coffee. Today, there are extensive links between the two respective nations in a number of areas, politically, culturally and, not least, economically. Brazil and Norway are quite different and are far apart from each other geographically and culturally. The nations still have much in common and considerable cooperation, including in the oil and gas and maritime sector, energy, forestry and fishery management.

Brazil is clearly Norway's most important trading partner in South America, becoming an increasingly important country for Norwegian business. Brazil is the world's largest offshore market, with approximately 179 Norwegian companies operating in the country, whereas 106 companies in the maritime, offshore, oil and gas sector (Innovation Norway Rio, 2017). As the largest country in South America, both in area and population, Brazil is the natural candidate as the continent's largest economy. The eight largest foreign direct investor in Brazil is namely Norway. Already, there are more than hundreds of Norwegian citizens established in Brazil. More will come as there is a great ongoing activity of Norwegian companies on the Brazilian shelf. This leads to cultural frictions between Norwegian and Brazilian managers, and the aspects of culture will be studied in a managerial and commercial context. Cultural frictions are barriers to overcome, and once it is the next step is to create relationships.

There is a huge ongoing activity on the Brazilian shelf of Norwegian companies. Brazil is the eighth largest economy in the world, and is also considered as the largest offshore oil and gas market for Norway (Innovation Norway Rio, 2017). As the continental is one of the main markets for Norwegian business, there exist vast opportunities for Norwegian companies in Brazil. More companies from Norway will establish themselves in the respective country, and the existing Norwegian companies will aim to strengthen their position further.

1.3 Purpose

A framework with an aim to help Norwegian companies to achieve its goals will be developed as a guideline for Norwegian managers operating in Brazil, but also be of relevance for existing companies on the continental land. In order to develop such a framework, I have approached existing theories of high relevance and will apply them in a new manner.

Due to a high degree of self-interest, the thesis topic emphasizes cultural frictions and the importance of building relationships to ease the international operations for Norwegian managers in Brazil, and the thesis is assisted by Innovation Norway Rio de Janeiro.

2. Theoretical framework

2.1 Cultural frictions

This thesis emphasizes two different nations with two different cultures, thus it is critical to elaborate the concept of culture. Culture is a complex word to define, and there are multiple definitions of it. Hofstede (1984) defines culture as "the collective programming of the mind which distinguishes the members of one human group from another". While personality decides the identity of an individual, culture decides the identity of a group of individuals. Other players in the research field of culture are Trompenaars and Hampden-Turner who define culture as "the way in which a group of people solves problems and reconciles dilemmas" (Trompenaars & Hampden-Turner, 2011). Both Hofstede and Trompenaars have their different approach towards cultural dimensions. The thesis will further focus on four of Hofstede's dimensions of national culture, as they are important for managers to have in mind when building business relationships and operating in a foreign market.

2.1.1 Hofstede's dimensions of national culture

Geert Hofstede has found six dimensions which describe the major cultural frictions between nations and regions. I will only elaborate four of them as they are the most relevant dimensions for the thesis.

Power distance

The dimension of power distance describes the extent to which the people in the society generally accept a hierarchical or unequal distribution of power among individuals and institutions (Alkhafaji, 1995). There exists a distinction between low and high power distance. Low power distances expect and accepts power relations that are more consultative and democratic, and are far from hierarchical. In this continuum, the people expect to be close to decision makings and have the right to be critical of decisions taken by the management. The contrary continuum of high power distance reflects the opposite where there is a high degree of hierarchy.

In societies with a high level of power distance, a stable concentration of power is expected that gives the order, clear and unequivocal distribution of roles and rigid structures. In low-power communities you can expect a more flexible distribution of power such as limiting

abuse of power and gives rise to entrepreneurship ingenuity and stimulates wider participation in education (House et al., 2004). High power distance is associated with masculine dominance in society. According to the GLOBE project, the power distance is the cultural dimension that gives the clearest indications and thus shows the clearest frictions in cultures in the surveys (House et al., 2004). Further, in societies with relatively high power distance, like Brazil, respect is based on title and position. In societies with low power distance, like Norway, respect is divided according to what the individual performs and contributes with. According to the GLOBE project, the following factors influence power in a society; dominant religion or philosophy, democratic traditions and governance, the extent and strength of the middle class and the proportion of immigrants in the population. In relation to religion, there are indications that Catholic societies have greater power distance than Protestants. This is usually related to the clear power structures within the Catholic Church, which differs from a clearly flatter structure in the Protestant Church. This came as a reaction to the domination and power of the Roman Catholic Church that ruled access to salvation through breeding (House et al., 2004).

Individualism

Hofstede identified the dimension of individualism which is contrasted with collectivism, which determines whether people are expected to speak their own cause and choose their own belonging and position. Alternatively, it can expect that people should be a member of a lifelong community or organization. The society expects individuals to take care of themselves and their immediate families. (Ibid:73).

It is noted that the degree of individualism naturally varies in both inside a country and between countries. From Hofstede's table of different countries' degree of individualism versus collectivism, one can see that almost all the rich countries have high scores of individualism, while almost all poor countries have a low score. Thus, there is a coincidence between the country's prosperity and degree of individualism in culture (Hofstede et al., 2010).

In the workplace, one sees that in an individualistic culture the employee is concerned with self-interest, they always have to act as individuals with their own needs. In collectivistic culture, an employee is usually added if he or she belongs to the group as a whole and acts in accordance with the group's interest. Employment in a collectivistic culture often follows

family relationships, initially to the employer but also relatives of other employees of the organization can be hired. The advantage is that the individual already knows the family, which reduces the risk. Additionally, family members match each other to avoid bad reputation on the family. An employee who performs poorly will not be eliminated since you do not fire your "own child". In an individualistic culture, however, the family relationships are not seen as something that is desirable due to the fear of conflicts of interest among other things. The relationship between employer and employee appears to be a barter trade. It is legitimate if the employee performs poorly to eliminate his or her contract or if the employee finds better conditions with another employer and thus resigns his or her work. According to Hofstede (2010) this is socially accepted in an individualistic culture.

Another difference between these cultures is how to look at, for example, a customer relationship. In the individualistic cultures, everyone should be treated equally, one should not make a difference to customers as it is perceived as unethical and bad practice. While in the collectivistic culture it is natural to treat your own group better than other groups. It is naturally rooted in the group that one's own friends are treated better than others and thus both natural, ethical and good business practice (Hofstede et al., 2010). In comparison, Brazil belongs to the collectivistic culture and Norway to the individualistic.

Masculinity

Masculinity represents a preference for achievements of objectives, materialistic gain, competitive orientation and determination. The continuum is femininity which implies a preference for cooperation, humility and caring for the weaker individuals and quality of life rather than materialism (Hofstede, 1980). In a society dominated by femininity, working conditions and personal relationships are more important than safety at permanent jobs, payroll and that the job is interesting. In addition, equality and solidarity are considered more important than competition and achievements. In a masculine society, leaders are expected to be decision-orientated, confident, aggressive, in contrast to using intuition, emotion and attempt to achieve common unity in decision making. A feminine society has clear distinctions between work and leisure.

Masculinity in a country is unrelated to whether the country is rich or poor, there are both rich and poor masculine countries, while there are also poor and rich feminine countries.

According to Hofstede's survey, Brazil is a masculine country (Hofstede et al. 2010). In

masculine cultures, the men are ongoing and dominant while women should be caregivers. A dominant woman is seen as unfeminine. Gender roles are clearly distinct. In feminine cultures, gender roles are not so stable and solid and there is more similarity between sexes (Strand, 2007). Norway is a typical feminine culture.

An important difference in the working life between feminine and masculine cultures can be how conflicts are solved. In a masculine society, conflicts are solved when the strongest wins, as opposed to resolving conflicts through negotiations and compromise in a feminine society. Another critical difference is how individuals view the work. In a feminine society, one works to live while one lives to work in a masculine society. One wants primarily small organizations and rewards based on the smoothness of feminine cultures, while in masculine you prefer large organizations and rewards for righteousness. Both men and women can make a career in a feminine culture and a greater proportion of having positions at a higher level, which is not common in a masculine culture. You want more free time rather than money in a feminine culture, while preferring more money than leisure in a masculine culture (Hofstede et al., 2010)

Long-term orientation

The last dimension was later identified by Hofstede and implies that the individual has the ability to change traditions according to the circumstances, and tend to think and plan on a long-term basis. The individual saves for the future, the achievements come through endurance. Societies with short-term orientation have greater respect for traditions, and focus on achieving results quickly (Hofstede et al, 2010).

Critique of Hofstede's theory

In organizational and management literature there is much criticism of Hofstede's theory about national cultural differences. This criticism is relatively diverse. Firstly, several researchers have pointed out that Hofstede's theory could support a national cultural determinism. In this context, McSweeny (2002) is critical of how Hofstede assumes that culture can systematically create differences in the behavior of individuals from different nations. He further questions that data from a single multinational organization can demonstrate a complete picture of an entire nation's culture, pointing out that this is methodologically problematic (McSweeney, 2002). Although Hofstede's statistical data has

been updated several times, it may also be thought that the theory of Hofstede takes too little account of changes in society. The fact that the theory is based solely on the players that are guided by culture may also be problematic in the sense that Hofstede sees the organization' members as passive recipients for impulses from the environment (Thompson & McHugh, 2002).



Figure 1: Comparison of five of Hofstede's dimensions of culture between Brazil and Norway. Source: The Hofstede Centre, 2017

2.1.2 Intercultural relationship building

In relationship marketing, you are looking for an understanding of how to develop and maintain long-term relationships. Market researchers and professionals have long understood the importance of developing and sustaining relationships, and the idea is that one gets more out of collaborating than competing. Morgan and Hunt (1994) suggest that relationship marketing is all marketing activities aimed at establishing, developing and sustaining successful relational exchanges. The interest for buyer-seller in the business market has increased significantly over the past decade (Samiee & Walters, 2003). This interest reflects an increased acceptance of the relevance of social networks and personal relationships in exchange transactions (Dwyer et al, 1987). The marketing literature is usually shared in two parts: transaction and relationship marketing (Gummeson, 1996). To understand the concept of relationship marketing, you must distinguish between the specific transaction, which has a specific start, short duration and sharp end, with the relational exchange that has traces of previous deals, and has a longer duration and reflects an ongoing process (Dwyer et al, 1987). McNeil's (1980) distinction between "discrete transaction" and "relational exchange" is here of importance. While the first-mentioned only involves the transaction of ownership between the parties, and is usually a one-time case driven by market forces, the latter is characterized by a context where interaction between the parties from past, present and future is of fundamental importance to understand the content of exchange events. While transaction marketing emphasizes the product and price, relational marketing focuses on long-term relationships between supplier and customer. Relational marketing is more appropriate for more advanced product development and if the product's quality will vary and it requires a greater understanding of the product. There will probably exist elements of both in a trade (Samiee & Walters, 2003).

McNeil's theory of relationship contracts deals with the relationship between commercial actors as a contract (McNeil, 1980). In a traditional view of contracts, the individuals have been irrelevant, and the focus has been on the promises of buying and selling a product. In the perspective of McNeil, the relationship becomes the core of the contract, not the promise given by the actors. The contract is regarded as the relationship between two parties with the intention of performing future transactions. In the oil and gas sector, it is difficult to plan

transactions far ahead in time as there are relatively big fluctuations in the market (Pettersen & Aarset, 2006).

The contracts will be characterized by both promised based and non-promise based elements. The non-promise elements can be relational norms and trust, but also the customs and values that exist in the society. The contract must therefore be viewed in its socio-cultural context where the actors are influenced by relational and social norm. This is strongly linked with the theory of cognitive capital which is the ability to possess absorptive capacity. Relational norms, such as trust, are established and developed through communication between the parties. This latter is linked with the relational capital, in the view of frequent communication and interaction, which will be presented thoroughly in this paper. These norms allow adaptions and changes to the contract, and you can enter into a contract for future sales and purchases without setting the price in advance. This is central in the oil and gas industry, where the price is determined by supply and demand. In a relationship in the oil and gas industry, long-term business relationships can be characterized by trust and cooperation, while regulating the price by the market.

In order to succeed with cross-cultural business relations, it is essential for managers to acquire knowledge of partners' views of what characterizes a satisfying relationship, and to see whether both views are coincidental so expectations are similar (Voldnes et al, 2012). Absorptive capacity is thus inherent for the company, which will be elaborated later. Several quantitative studies have been conducted in a search to find out which variables and causal relationships are creating good relationships. Confidence, commitment, power, conflict, relationship duration, information exchange and communication are among the most common variables discussed in the relationship marketing literature (Samiee & Walters, 2003). Confidence between partners is a key dimension in any business agreement. The importance of trust and the growing globalization of the economy emphasizes the need for a better understanding of how trust is developed and how national cultural differences affect this trust process (Nes et al., 2007). Nes (2007) claims that national cultural distance affects the relation between trust and relationships. This is due to the fact that trust is of greater importance in collectivist cultures, and motivates to a greater extent for cooperation than in individualistic cultures There exist several studies showing that national cultural distance adversely affects the opportunities for trust (Nes et al, 2007).

2.1.3 Cross-cultural negotiation

"Time talks. It speaks more plainly than words. The message conveys comes through loud and clear... It can shout the truth where words lie." – Edward Hall

A situation of negotiation becomes more complex when multiple parties negotiate with a view to reach a common solution. In the case of multi-party negotiations, the classic negotiation method, the Harvard method, will be particularly appropriate to keep in mind. The key concepts that is necessary to have insight into in a cross-cultural negotiation is the human dimension. Although it is nice to distinguish between people, negotiations are about interactions between individuals. Individuals are influenced by and affect others quite differently. What confidence the individual has, cultural frictions, if it speaks the same language (common codes, like professional groups desire for instance) that it has the same or different understanding of what the actual theme is (Hall, 1990). This is crucial in the interaction when we interact in a negotiation situation. Such conditions should also be kept in mind, especially in cross-cultural negotiations.

When managers from different cultures negotiate, conflicts may arise. Understanding the cultural frictions between time and space are critical factors to succeed in cross-cultural negotiation. The following subsections will focus on these aspects as they are part of the silent language of international business.

Time orientation

Time is quintessentially qualitative and substantive and the basis for preferences (Macduff, 2006). The anthropologist Edward Hall categorized the orientation of time as polychronic and monochronic. Orientation of polychronic time can be found especially in cultures of South-America, Mediterranean and Africa (Hall, 2000). Cultures that operates in a monochronic time perspective experience and practice linearly. They believe time is something that can be used, thrown away and lost. The focus lies on their commitment towards the job and striving to get the best possible result. They are used for short-term relationships with people they are doing business for or with. Both schedules and deadlines are highly valued, and they emphasize the importance of punctuality. Monochronic time perspectives are often seen in communities with low-context communication, resulting in a high level of information needs.

Polychronic time orientation is the opposite of the monochronic. This orientation is characterized by the fact that multiple things can be done at the same time and with a great

deal of involvement of people. The importance of taking care of human relationships is greater valued than keeping deadlines. Human relationships are highly prioritized and the tendency to build lifelong relationships is strong. In business environment with polychronic time orientation, establishing solid relationships with others are more valued than the job itself. These cultures that practice the polychronical time perspective are often seen in societies with high context communication (Hall, 1990).

Space orientation

An important prerequisite for the development and dimensioning of intercultural business relationships is to have knowledge of human senses. Space orientation, or preferably proxemics, is a second conception Hall discovered in his theory of intercultural communication and concerns the understanding of personal space. Depending on the culture, the proxemics varies (Hall, 1990). Proxemics considers human relationships and how individuals unconsciously position themselves to each other. The term is based on the study of human's use of space within different cultural contexts, and was developed in the book *The hidden dimensions* from 1966. Due to limitations of this particular assignment, the term will not be elaborated further, but it is noteworthy to mention that different cultures perceive proxemics differently, which can cause frictions in business situations.

Communication and language

Doing business in a country like Brazil, where the minority speaks English, brings challenges for a Norwegian manager. Thus, it is important to understand the concepts of communication and language. Communication is not only verbal and straightforward, there exist several forms of communicating information, both deliberately and unconsciously. The context of communication can both be linguistic and non-linguistic i.e. the environment in the broad sense (Dahl, 2001). The context does not play the same role in all forms of communication. Hall distinguishes between high-context and low-context communication (Hall, 1977). High-context communication is less verbal and explicit, and it's not just about what was said but also by whom and how it was said. There are many contextual elements that contribute to understanding in communication. This can be confusing for individuals who do not understand the unwritten rules of the culture. Dahl (2001) explains the high-context culture by the example of two twins talking to each other and almost completing each other's sentences. In a low-context culture, however, little is taken for granted and the focus lays on explaining all the details properly. Clear and flawless information including communication efficiency

are preferred. Dahl draws lines to one who works with programming, and the importance that all information is available and coded correctly. Further, Hall (1997) claims that the context affects the way we communicate. It is reasonable to imagine that for a Norwegian it is easier to communicate with other low-context countries. The context may be critical when communicating with someone from another country, like Brazil. Especially in South-America, participants need to know more about each other before they can do transactions (Dahl, 2001). For this reason, a Norwegian business man makes sense to take the time to establish a friendship if he or she is to negotiate in Brazil.

"In short, intercultural communication occurs between individuals of different cultural backgrounds. There are people who meet that carry their cultures with them as an invincible baggage" (Dahl, 2001, p. 19)

Gudykunst and Kim (1984) argue that the aim of the of intercultural communication is to reduce uncertainty and anxiety, and where such uncertainty reduction should help to predict the outcome of a situation of communication. Within this tradition, it is common to create tables and forms of cultural frictions, with the idea that these can be cataloged objectively. The cultural frictions are barriers to overcome. Dahl (2001) points out that it is not expedient to establish that a person belongs to a culture, as we often are members of several cultures simultaneously. Nevertheless, Dahl acknowledges that everyone has their own cultural reference model that affects how we interpret situations. All individuals have cultural filters that are part of the personality, and unlike "cultural glasses", they cannot be taken on and off. When intercultural communication is possible, this is linked to people's ability to understand and learn from each other (Ibid: 66).

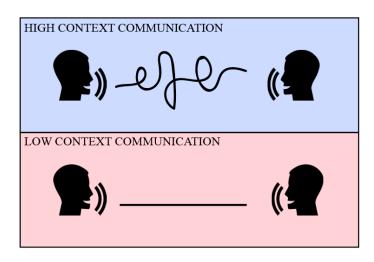


Figure 2: Model of intercultural communication

2.2 Social capital

Social capital has various definitions, and is broadly defined by researchers as "a characteristic of communities, and describe it in terms of trust and norms that enable collective action (van Rijn et al., 2012; Bourdieu, 1986; Coleman, 1988; Putnam, 1993). Social capital comprises resources made available in the form of managers' connections in a network, their relationship with connections, and the relations shared cognitive frame of reference (Doornich, 2017; Nahapiet & Ghoshal, 1998). Social capital often gets divided into three dimensions, that is the (1) structural; characteristics of the network, (2) relational; interpersonal relationships between connections, and (3) cognitive; shared values and assumptions generated by the connections in the network (Ortiz et al., 2016; Nahapiet & Ghoshal, 1998). Researchers emphasize the relational dimension with the structural dimension (e.g. Koka & Prescott, 2002; Moran, 2005), while others focus on the relationship between the relational and cognitive dimensions (e.g. Eriksson & Chetty, 2003). This paper will further focus and address the relation between two of the three dimensions of social capital, which is the relational and absorptive capacity within the cognitive dimension.

2.2.1 Relational capital

In the last two decades researchers have put an increasingly effort to the study of relational capital. The study of how managers investing in relational capital to overcome cultural frictions regarding international operations is relatively a new phenomenon, and is subject to

be studied in this paper. Relational capital is one of the three primary components of social capital, and is the value inherent in a company's relationships with customers, vendors and other important constituencies (Edvinsson et al, 1997). According to Prashant Kale and Harbir Singh, relational capital refers to the "level of mutual trust, respect and friendship that arises out of close interaction at the individual level between alliance partners" (Kale & Singh, 2000: 218). These relations can be distinguished either as embedded relations (see Moran, 2005) or arm length relations. Relations of arm length are generated to conduct transactions of commodities with low personal involvements, no obligations or further commitment to one another (Doornich, 2017). Embedded relationships involve consecutive transactions and interaction between relationships, where those relations matter to such an extent that they are defined as a commodity (Ibid: 5). Collins and Hitt (2006) emphasize relational capital in the importance that it is habitually built on the interpersonal dynamics of the representatives of partner firms, and that relational capital could possibly enhance the company's knowledge transfer process, thus the absorptive capacity.

2.2.2 Cognitive capital and absorptive capacity

Cognitive capital is another dimension of social capital along with the relational and structural dimension (Nahapiet & Ghoshal, 1998). This dimension emphasizes the capability to develop and acquire new knowledge, and the way this knowledge is exchanged and transferred between market relations. One of the most cited researchers, Nahapiet and Ghoshal (1998), suggest that the expansion and sharing of knowledge are two-fold; (1) by shared language and (2) by sharing collective narratives. This respective dimension of social capital concerns, for instance, how employees manage to acquire and use new knowledge in an organizational perspective. Contrarily to the focus relational capital has on the interpersonal relationship, the foundation of cognitive capital is built on intersubjectivity (Doornich, 2017). Cognitive capital concerns the constellations of cognitive dissonance (Berger & Luckmann, 1966; Pondy & Mitroff, 1979) and cognitive resonance, and both may enhance, prevent, and limit managers' access to acquire knowledge and the interpretation and response to contextual knowledge. In short, cognitive capital involves expertise of individuals, supremacy of the shared language within in the practice, including experience with applying this expertise (Nahapiet & Ghoshal, 1998; Orr, 1996; Brown & Duguid, 1991; Wasko et al., 2005). Digging deeper into the cognitive dimension, "absorptive capacity" is explored. This concept is relevant for this study as the Norwegian managers enter and operate in a foreign and distant market with big cultural frictions. Absorptive capacity is defined as a firm's ability to

acknowledge the significance of latest external information, integrate it and take use of it to commercial ends, and the term can be viewed as the extent of a firm's preceding related knowledge (Cohen and Levinthal, 1990). Absorptive capacity can with other words be defined as a measurement of the firm's ability to learn and transform the newly acquired knowledge into something innovative (Naqshbandi & Kamel, 2017; Eriksson & Chetty, 2017). Zahra and George (2002) defined the term absorptive capacity further as "a set of organizational routines and processes by which firms acquire, assimilate, transform, and exploit knowledge to produce a dynamic organizational capability" (Zahra & George, 2002, p. 186). Absorptive capacity can in this interpretation work as an instrument for the firm in order to recognize new knowledge and exploit the following opportunities (Garrido et al., 2017; Fernhaber & Patel, 2012; He & Wei, 2013).

Why are relational capital and absorptive capacity important for international operations? Accordingly, there is a positive relationship between relational capital and absorptive capacity the international growth of firms. By internally developing relational capital and absorptive capacity in the firm including in its external relationships may result in competitive advantage in the form of an increase of the firm's knowledge base and international growth (Yil-Renko et al., 2002). This study by Yil-Renko et al. (2002) is supporting the argument that the entrepreneurs and employee's personal networks are crucial in providing information about market trends, competition as well as latest technology innovations. Other empirical evidence shows the importance of investing in relational capital for international operation strategies for the company in order to acquire relevant knowledge related to their external operating environment, including (Leirvik, 2006; Yli-Renko et al., 2000). Investing in relational capital can act as a factor in the generation of competitive advantage in the form that relational capital denotes a unique, quality that is hard for competitors to imitate, and characteristic for a particular entity only (Zukowska & Jedrzejewski, 2017, p. 64). According to Collins and Hitt's (2006) results, competitive advantage can similarly be generated by companies who successfully manage to develop a superior capability in the essence of sharing its current tacit knowledge across internal departments or acquiring tacit knowledge externally. The value of relational capital is determined by the number and strength of the company relationships internally (Gottschalk, 2003).

Zukowska and Jedrzejwesky's (2017) study of relational capital in the context of internationalization demonstrated that by generating relational capital in the internationalization process could impact the relationships between companies and the

environment in the distant areas from the company's location in a positive manner at the same time as it could ease the menace of carrying out business in culturally distanced markets. In addition, another study by Costa et al. (2016) showed that relational capital is one among three (the company's orientation level, and decision-makers' foreign language knowledge) crucial factors in the decision-making process of a company's international operations.

Eriksson and Chetty's (2003) study emphasizes the firm's knowledge about its partners in a dyadic business relationship including the partners' network relation. Their findings revealed that lack of foreign market knowledge in the ongoing business is caused both by the firm's absorptive capacity made in dyadic relationships with foreign customers and the customer's network. It coexists, however, a difference between the absorptive capacity in the network and in the dyadic relationship. Their results suggested that the absorptive capacity in dyadic relationships decreased the firm's lack of foreign market knowledge, contrarily to the absorptive capacity in customer network which increased it. Sedoglavich (2008) argues that absorptive capacity is not explained by the internationalization process but vice versa. On the other hand, the findings of Garrido et al., (2017) demonstrate that the effort to improve the company's absorptive capacity and acting abroad can be beneficial in the way that it can lead to success and consequently reduce the company's failures. Through international operations, the company can acquire new foreign market knowledge and resources by having improved the innovativeness related to absorptive capacity (Garrido et al., 2017, p. 570). By combining international operations and absorptive capacity companies have the possibility to not only to further improve and qualify their investments, but also develop a positive cycle effect and stay innovative with high consumption of knowledge (Garrido et al., 2017; Kafouros et al., 2008).

This paper's approach emphasizes Brazil's cultural characteristics which are essential to comprehend in order to build relations to ease the international operations. As this study has an elaboration of Hofstede's theory of national cultural differences, which suggest there exist cultural frictions between Brazil and Norway, this study comprehend the importance for companies and managers to invest in both relational capital absorptive capacity to experience a superior competitive advantage and ease of the international operations in Brazil. Investing in relational capital and developing trust and integrity are critical requirements in order to successfully acquire external knowledge in industries which are knowledge-intensive (Ortiz et al., 2016). By focusing on the absorptive capacity, Norwegian managers have the possibility to get a great knowledge regarding the market and the culture in Brazil, which is fundamental

to understand in order to ease the cultural frictions and operate successfully. Cohen and Levinthal's study (1990, p. 137) indicates that a company is more likely to be proactive in "exploiting opportunities present in the environment, independent of current performance" if the level of absorptive capacity within the company is high. As already noted, building the relational capital and harness it is of high importance (Yli-Renko et al., 2000). During the international operations, it is essential to have a certain level of absorptive capacity. It appears that knowledge increases significantly together with increased commitment in a country, and the higher degree of commitment the broader the relationships the company obtains (Leirvik, 2006). With other words, the relational capital increases the longer the company stays in a particular country.

3. Preliminary summary

To sum up, the thesis' aim is to discover the importance of overcoming the cultural frictions and building and sustaining business relations to operate in the Brazilian oil and gas market. This paper investigates how Norwegian managers invest in relational and cognitive capital, and how critical market incidents, like the Petrobras scandal and the downturn in oil price, influence these relations created and how they are sustained in the dynamic market. The theoretical framework has a significant focus on the cultural frictions, relational and cognitive capital within social capital. Later, the consequences of a critical market incident will be highlighted. As cultural frictions can be critical barriers to overcome, it is crucial for Norwegian business managers to adapt to the Brazilian culture in order to successfully build long-term relationships and achieve its goals. This can be eased if the managers and the companies possess a certain degree of absorptive capacity, in order to acquire and assimilate new knowledge about the Brazilian market and culture. Relational capital and absorptive capacity are relevant for the international operations as they can acquire knowledge related to the company's internal and external operating environment. In a broader sense, the intention of the thesis is also to contribute to future research, including discovering new areas in the business literature and more severely be of value to new and existing Norwegian companies on the Brazilian shelf. Figure 1 summarizes the important concepts of this paper's theory.

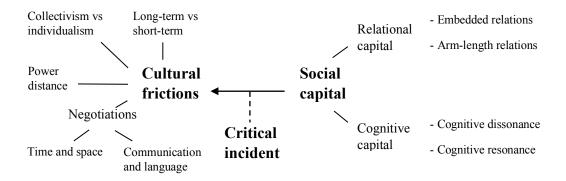


Figure 1: Theoretical framework

4. Methodology

The main purpose of this paper is to analyze how Norwegian managers overcome cultural frictions and building relations to ease their international operations the Brazilian oil and gas industry. In order to analyze this, the paper's methodological approach is interpretative and explorative. Thus this approach makes it possible for this paper to reveal interpretations and meaning of the phenomenon in a managerial point of view including specifying explanations from the viewpoint of subjective experiences (Easterby-Smith et al., 2015; Welch et al., 2011). An quantitative study would not get as deep information regarding the phenomenon, thus this is a qualitative study. Qualitative methods are research methods which emphasizes understanding and analysis of relationships in a process of the individual rather than the listing of phenomena or characteristics of a group or individuals (Easterby-Smith et al., 2015).

4.1 Data collection

The paper investigates how Norwegian managers overcome the cultural frictions and building relations to ease their international operations in Brazil, specifically the oil and gas market. In order to investigate this, the paper seeks to have a closer look on the elements related to the cultural frictions and the building of relationships, and how the Norwegian managers deal with the international operations regarding cognition of the Brazilian market. Seven Norwegian companies were prudently selected as the study object. The reason why these respective companies were chosen is due to the fact that they are considered as medium-large scale enterprises who also are well established on the Brazilian shelf and have acquired a great experience in the country. It was also a selection criterion that the managers had a

minimum of five years' experience in the field to be able to give in-depth details. In addition, due to the fact that four years ago there happened two critical market incident simultaneously, so the managers' experience of the situation could be expressed. This study focuses on the Petrobras scandal and the downturn in oil price from 2014 which I label as two critical market incidents.

The most used method to collect qualitative data is by conducting interviews (Johannesen et al., 2010), which will result in the paper's primary data. Additionally to the data from the interviews, secondary data such as investments reports, companies' websites, including internal documents have been implemented. Table 1 represents a summary of the interview guide. See Appendix 1 for the full interview guide.

Main topics	Overall questions
Introduction	Presentation about myself and the paper's main purposes.
The interview object's	Questions regarding the respondent's working
background	experience, title, responsible area and background.
Cultural frictions	
Hofstede's dimensions	Questions related to power distance, individualism vs.
	collectivism, and long/short-term orientation.
Intercultural relationship	Questions regarding long-term relational transaction,
building	relationship marketing, characteristics for building
	relationships in Brazil.
Cross-cultural negotiation	Comprehending perception of time and space, as well as
	communication and language.
Social capital	Seeking to explore how managers invest in social capital
	in order to deal with cultural frictions.
Relational capital	Questions considering whether the focus lies on
	embedded relations or arm-length relations.
Cognitive capital and	Examination towards the respondent's cognitive
absorptive capacity	resonance and/ or dissonance. How is new market
	information acquired, interpreted and used effectively?
Critical market incident	Questions considering the effects of a critical market
	incident. How are the already invested relations

sustained? What other consequences occurs (i.e international trade), how to cope with critical market incidents (i.e market exit or not).

Table 1: The interview guide's main topics.

In the interview phase, seven managers (two Brazilians and five Norwegians) were interviewed over a three week period. During this process, all the interviews were conducted face-to-face due to proximity to the interview object can potentially provide enhanced and more valuable information. Saunders et al. (2016) argue that this method is inherent if the conversation includes sensitive topics where the interview object may find it hard to be "open". In some cases, topics related to the employee's working life may be perceived as sensitive. Thus it was crucial to choose a trustworthy method, which could be challenging via phone, Skype or e-mail interviews.

Regarding the range of the units of analysis that have been used in this research process, there are several factors I have taken into account. Often the units are distinguished between informants and respondents, where informants are individuals who mainly possess great knowledge concerning the phenomenon studied, while respondents are individuals directly related to the research unit (Jacobsen, 2005). All of the interview objects have been respondents, due to the fact that respondents have a deeper insight regarding the paper's topic.

4.2 Data analysis

The purpose of this qualitative study is to highlight something new to the business literature. To enable this, the collected data needs to be analyzed thoroughly. Thus the goal of the data analysis is to attempt to explore patterns, deviation or underlying reasons which can contribute to answer the research question (Jacobsen, 2005). During the interviews, audio recordings were utilized, and the interviews were subsequently transcribed in their entirety. This contributed to a large amount of data which later were categorized in groups for further analyzation. The category groups are three dimensional; (1) relational capital with arm-length and embedded relations, (2) cognitive capital with a focus on cognitive dissonance and resonance, and (3) cultural frictions focusing on the perception of time and space, communication, power distance, collectivism and long-term orientation. The respondents have been anonymized, which means it should not be possible to recognize the respondent's

identity. Name or gender do not appear, and all the respondents are managers or personnel within the management.

The collected data were analyzed as it was were collected subsequently as I multi-tasked between the extent literature and empirical observations. When the interviews were transcribed, they were reread in order to categorize the data according to which theme they belonged to. I utilized a thematic analysis in order to analyze the respective interviews, and the analysis was based on the interview guide's main topics. Thematic analysis is considered as a flexible research tool providing a rich and meticulous interpretation of data (DeSantis & Noel Ugarizza, 2000; Braun & Clarke, 2006). I used codes to sort the data into different categories. These codes were based on recurring moments within the three themes and other key factors I considered important in order to answer the research questions. I gathered all information with the same code in their own document to get a better overview of key points that were recurred by the interview objects. See Table 2 for the overview of the respondents.

Regarding the presentation of the analysis, I will primarily provide key findings from the interviews. The central points that recur from the interview objects will be displayed and illustrated with anonymous quotes from the interview objects. The presentation of findings will be divided into three overall themes based on the interview guide. Central findings from each theme will then be summarized in light of the characteristics of the interview objects. In this paper, I label an incident in the market that constrains business activities as a "critical market incident". The Petrobras scandal from 2014 and the downturn of the oil price are examples of critical market incidents.

Company	Position	Nationality	Experience	Company description	
Alpha	Chief	Norwegian	5 years	Advanced maritime technologies and	
	Executive			leading provider of innovative	
	Officer			unmanned solutions	
Bravo	Country	Brazilian	5 years	Promoting Norwegian energy industry	
	Manager				
Charlie	Chief	Norwegian	13 years	Supplier and service provider of oil	
	Executive			and gas compressors	
	Officer				
Delta	Science and	Norwegian	8 years	Supporting and promoting Norwegian	
	Technology			business in Brazil	
	Counselor				
Echo	Senior Vice	Norwegian	12 years	Independent energy research and	
	President			business intelligence company	
Foxtrot	Managing	Norwegian	8 years	International knowledge-based	
	Director			company and supplier of high-	
				technology systems and solutions	
Ghana	Country	Brazilian	5 years	Insurance provider of the Maritime	
	Manager			industry	

Table 2: Overview of the respondents

5. Empirical findings

In the following section, a first-order analysis of the managers' perceived cultural frictions is presented. I will present and assemble narratives about managers' critical experiences and how they expressed their investment in the two (out of three) dimensions of social capital, which are the relational and cognitive dimension along with how cultural frictions have challenged the managers. In the end, the stories regarding how the managers coped with the critical market incidents of the Petrobras scandal and the downturn in oil price will be revealed from their narratives.

5.1 Relational capital

Company Alpha (CA) established themselves in 2005 in Norway, and entered the Brazilian oil and gas market in 2013. As the company is specialized in advanced maritime technologies, the Chief Executive Officer (CEO) seized the opportunity to expand its business overseas to the Brazilian market. Rapidly the CEO comprehended the importance of investing in relational capital, stating that having partners in a country like Brazil is critical for success. Through an American partner, who also had a vast interest in investing in Brazil, they entered together to the respective new market through a joint venture. CA entered the Brazilian market at the right time as the Brazilian oil and gas market experienced a big offshore oil spill which required advanced maritime technologies to clean up, which CA was specialized in. The CEO claimed that during their five years presence in Brazil, they have not encountered any cultural frictions of significance:

"We haven't really encountered any big cultural frictions here in Brazil. We entered the market with an open mind. You cannot expect things to be Norwegian, and you have to forget that Norwegians have the best products and services because we have not." (Chief Executive Officer, Company Alpha).

The CEO further expressed his opinions towards their partners and customers that you cannot demand a Norwegian to learn Portuguese, and vice versa. Naturally, the CEO claimed that it was a great advantage, however, not a critical success factor in order to operate in Brazil. On the other hand, the CEO stated how critical it is to have the capability to communicate well, adding that since the business language in the oil and gas industry is English the Brazilians have to communicate in this language likewise to a certain extent. The CEO concluded that Brazilians and Norwegians are jovial individuals, and usually get along very well on the personal level despite their respective cultures being quite different.

Similarly, the Brazilian Country Manager (CM) for Company Bravo (CB) also stated that Brazilian and Norwegian business people manage to collaborate and build relations easily despite the cultural frictions. The CM had previous experience working for an American company in Brazil, stressing that there was a greater cultural gap. The CM claimed that Americans were arrogant and thought they could do business better than Brazilians due to the fact that the US is a developed country while Brazil is a developing country and has a lot of knowledge to acquire. On the contrary, the CM expressed that Norwegians are not like this:

"They [Norwegians] are humble, they treat Brazilians equal to Norwegians and have a strong desire to learn and grow together. We share the competences and knowledge in order to reach new heights." (Country Manager, Company Bravo).

Language-wise, the CM argued that language is a critical success factor in order to successfully operate in Brazil as the minority of the population are able to communicate in English. The CM had, however, experienced some cultural frictions between the two nations, and recognized that Norwegians' main characteristic is simplicity and direct communication indicating that Norwegians knows what they want. Brazilians are, in contrast, indirect in communication:

"We [Brazilians] are not so good at saying yes or no as Norwegians are. People can try to sell us great technologies, and even though we actually do not like it we still express our interest in the product. This can create false expectations, especially for foreign companies, and obstacles." (Country Manager, Company Bravo).

The Senior Vice President (SVP) for Company Delta added that there were no thing such as "unsuccessful meetings", indicating that the Brazilians' indirect communication lead the Norwegian managers to the thought that a deal was done as the Brazilians expressed their positive feedback and interests.

During the CM's five years working for CB, the biggest friction experienced is that Norwegians are working with more plans ahead, addressing that Brazilians do not work this way and tend to arrange things in the "last minute", meaning they are more short-term oriented towards planning.

In order to deal with these cultural frictions, both the CM from CB and the CEO from CA found it crucial to operate in Brazil with an open minded to learn and accept the cultural frictions.

The CEO of CA made it clear that without a strong embedded relationship with its primary American partner, the entrance into the Brazilian oil and gas market would be arduous. In addition, the CEO made it clear that in Norway the business is based on arm-length relations. By this, the CEO explained that the transactions are more prioritized than long-term relations. As CA established themselves with representatives in Rio de Janeiro in Brazil, the company specialized in maritime technologies gradually invested in relations in the Brazilian market through their American partners' network. The CEO addressed the importance of being

persistent with its partners, meaning to participate in customers' and other partners' events and conferences to maintain a solid relationship and also quest for additional relations through the partners' network.

"I think relationships are more important here than in Norway due to the lack of trust. That is the biggest social difference, lack of trust in the community. It is surprising, because Norwegians tend to automatically trust each other which is quite naïve to do here in Brazil." (Chief Executive Officer, Company Alpha).

Further, the CEO précised that the Norwegians naivety was not significant to being fooled, but to be tricked that, for example, Petrobras express their interest in their products and services and automatically think they will invest in the company. This supports the CM's of CB idea that Brazilians indirect communication may lead to false expectations. The CEO continued elaborating how CA gradually strengthens the relationship by showing to partners in the Brazilian oil and gas market that they are there to stay with them on a long-term basis, which is significant to embedded relations.

The Country Manager (CM) for Company Bravo (CB) claimed that Brazilians are more open in investing in embedded relationships if their potential partner strives to do business with them in a good way, meaning that the potential partner helps the target company to solve their problems and needs together:

"Brazilians like to develop relations with someone they trust. The relationships are based on trust. If they see that you are together with them, and not only want their money, and want to understand their problem and needs, then you will have a good foundation. This also helps to strengthen the relationship." (Country Manager, Company Bravo).

The CM of CB told that Brazilians are social people. It demands investment in time and efforts to create trustworthy relationships. By putting a significant effort by investing in time and resources on building a relationship with partners, the CM emphasized on forming trust-based and close relations in the market. The CM continued explaining that one way to initiate a good business relationship is to attempt to start informal and friendly conversations with potential partners before conceding to formal business negotiations. However, the CM claimed that it can be challenging to initiate business relationships in Brazil nowadays than formerly:

"Due to the several problems we have had with corruption, we have been seen on different as before." (Country Manager, Company Bravo).

The Managing Director (MD) at Company Foxtrot, which is strongly positioned in the oil and gas market and a specialized supplier of high-technology systems and solutions to its customers, reflected the importance of investing in relational capital through building trust to its clients and customers. Building trust is essential and one of the most important critical success factors in order to operate on the Brazilian shelf as the business relationships in Brazil is primarily characterized by initial mistrust. The MD's way of building relationships in Brazil is through meeting the company's clients and customers face to face, informally and formally, claiming that e-mails and phone calls may work well in Norway and other Latin-American countries except Brazil. The MD recognized the situation as follows:

"You need to meet them [customers and clients] many times and make them trust you. This is something you can build up easily, and also easily break down. To build it up you need to show your presence in the region for a long time." (Managing Director, Company Foxtrot).

In addition, the MD told that if there would come a new manager from Norway to work for Company Foxtrot, the new manager could rely on the existing trust built by the company. However, the new manager would have to build up personally the relationships with the partners, customers and clients. It has positive effect when it comes a new manager from Norway to Brazil as it brings new eyes to already established business which can be improved.

There was a clear consensus between all the interview objects that the masculinity and the power distance are Brazil is greater than in Norway, resulting in a more bureaucratic and time-consuming organization. Brazilian companies are highly hierarchical with defined and respectable positions, while Norwegian companies are characterized as more lateral, more proactive and more loose power in the positions. The CEO of Company Charlie stated that if you are a manager in Norway, nobody cares. If you are a manager in Brazil, everybody listens to you and obey whether it is senseless or not. The Brazilian Managing Director of Foxtrot explained the situation as follows:

"The power distance in the Brazilian companies are so high that some employees are scared to be proactive. They do not dare to do other tasks than the person with a higher position than you has given to you. Even if the company has around ten employees, the employees will still

wait on orders from their boss. While in Norway you are more feminine and proactive. You can sort of delegate functions to yourself." (Managing Director, Foxtrot)

5.2 Cognitive capital

The Chief Executive Officer (CEO) at Company Charlie decided to acquire local competency in order to handle with the complex legislation and bureaucratic system on the Brazilian shelf, telling it would be too time-demanding to handle with this system as a Norwegian. In addition The Chief Executive Officer (CEO*) for Company Charlie (CC) perceived the business norms and conduction of business in Brazil to be demanding, aspiring to strive to conduct business similarly as the company was habituated to in Norway. The CEO* described the Brazilian system as problematic and the institutional friction as follows:

"Taxation is a big problem, really complicated. It is making it difficult to make profit.

Because there are taxes and taxes and taxes. To buy something you have pay taxes on everything... It is not anything like the system here in Norway. Just to understand this complex system is a challenge. This prevents Brazil from being successful, being a big exporter. They have all the people, and resources, and then you have the bureaucracy. It feels like the bureaucracy tries to prevent you from doing business here." (Chief Executive Officer*, Company Charlie)

In addition, the CEO* claimed that the entrance to Brazil as one of the biggest mistakes ever taken and extremely costly. Overcoming the cultural frictions were underestimated. To be able to avoid this dissonance, the CEO* claimed it was best to hire local people in Brazil to get the job done. The situation was explained as follows:

"The best way is to learn and know about the cultural frictions in advance. If you go to Brazil like I did in 2005 and thought the stuff are just like in Norway, you will spend 4-5 years failing like I did. To know the culture is important. To do business there doesn't work with a Norwegian, you have to make a Brazilian run the business in Brazil. To do this, you need to have them in Norway to make them understand what we expect." (Chief Executive Officer*, Company Charlie)

Regarding absorptive capacity, the Managing Director (MD) for Company Foxtrot stated that his or her previous experience with international operations from an Asian country was

applicable in Brazil to a certain degree. In addition, the experience the MD gains in Brazil will be valuable to bring back to Norway, explaining the situation as follows:

"You can always bring things you learn from international operations in other countries. What I learn in Brazil I can also bring with me back to Norway to help improve cases there, because no country is fully developed and no country knows exactly what is the right way. You need to find the best from each place and put it together." (Managing Director, Company Foxtrot).

The Senior Vice President (SVT) told that Company Echo (CE) was always out searching for new knowledge, and their main sources of knowledge is through societies such are the Norwegian-Brazilian Chamber of Commerce and Innovation Norway, but also in newspapers they would find great market information. The most important source of knowledge, however, is through meeting customers and clients face to face. When meeting customers and clients, the SVT stressed the importance of knowing Portuguese as critical information may get lost in translation to English.

The knowledge-sharing in Company Ghana (CG) is characterized as high by its company's Brazilian Country Manager. CG is a multinational with over thirty offices on all continents except Africa. The fact that they are a multinational company helps the knowledge-sharing about the cultural frictions from each nationality, and also this helps the company to acquire new foreign market information as they have a presence in multiple countries around the world. A combination of employees on site and their respective correspondents help the company to acquire new knowledge.

Company Ghana assimilated the new knowledge in a beneficial way that makes them well prepared prior meetings with customers and clients they want to do a particular business with, not only about the market, the products and services and the company, but also their culture. The company experienced that this is a good way to bond with the other part due to the fact that they are able to see the other part's problems and circumstances. The Country Manager stressed the significance of knowing about the culture prior meeting the foreign business people, and explained the situation as follows:

"Understanding the cultural frictions are the aspects which you pay respect to the other party. That is an asset for a company – when they know how to treat people from different cultures. If you sort of mistreat them because you didn't know about their culture, you may

have extreme difficulties to build relationships with them! Even gestures, we think we are behaving the right way and eventually we are doing something really bad unintentionally." (Country Manager, Company Ghana).

5.3 Critical market incident

Despite an arduous entrance to the Brazilian oil and gas market for Company Charlie the CEO* of the company argued that the critical market incidents that occurred simultaneously in 2014 had a positive impact for its business activities in Brazil. One of the CEO*'s arguments were that the Petrobras scandal "cleaned" the market and got rid of the "dirty" and unserious players. There became fewer companies operating in the Brazilian oil and gas market, and both the foreign and local companies that survived the critical market incident would acquire more market share and grow stronger. In addition, the scandal opened up for more opportunities as Petrobras opened up by reducing its market share in the Brazilian oil and gas market. The CEO* perceived this as a great opportunity to invest further in the country.

According to the narratives told by the Country Manager for Company Bravo, the impacts of the Petrobras scandal were hard to measure due to the fact that there were two critical market incidents occurring simultaneously. It is important to note that the corruption and the oil price combined may have been the reason why not so many Norwegian companies decided not to go to Brazil. The CM explained the situation related to the consequences of a critical market incident as follows:

"This is not so easy to answer, because we had two things happening at the same time and it was not easy to measure how each one influenced the market itself. We had the downturn, the oil price went down and this happened at the same time as the corruption was revealed. We had a reduction on activity in Brazil due to corruption, but also because of the oil price.

During this period, I could see that many Norwegian companies decided to not to come to Brazil and not do business here." (Country Manager, Company Bravo)

The Science and Technology Counselor (STC) of Company Delta told that during these critical market incidents, with both the oil price going down and the revealing of corruption in Petrobras, many companies disappeared from the market due to re-organizations, being shut down from the Brazilian side, or due to being part of the corruption scandal. In addition, the STC said that Company Delta's investments, among other Norwegian companies in Brazil,

were not really reduced during the critical market incidents. The situation related to that many Norwegian companies stayed during the critical market incident was explained as follows:

"This is being interpreted very well by the Brazilians, they remember who stayed. To leave a market and to enter a market is expensive. I think when you are kind of perceived by the Brazilians as one of the leavers, you will even have a tougher time to come back. They remember that you left. Emotionally, they will have a preference for the companies that had a staying power. I think for those companies that stays during a critical market incident it strengthen the relationships even further with their partners." (Science and Technology Counselor, Company Delta)

The CEO of Company Alpha experienced the critical market incident regarding the Petrobras scandal as positive due to the fact that Company Alpha got rid of a supply partner perceived as unserious. During the period of where the corruption being revealed at Petrobras, Company Alpha exploited the chance to restructure the company and build new trustworthy relations with other reliable partners in the Brazilian oil and gas market. The CEO of Company Alpha explained the condition as follows:

"Our previous relationship with this company from São Paulo changed, we had to invest in a new relationship. I think this is partly due to the market disappeared, which is one thing. The second thing was that they were probably not the right partner for us anyhow. It was a good way to find out whether if it was worth continuing investing in that previous relationship. To build a new relationship with a new partner we had to use our network. Through talking to other companies that we had learned from, meet them on various occasions." (Chief Executive Officer, Company Alpha).

The best way to cope with a critical market incident was explained by the CEO of Company Alpha as essentially having strong relations with partners in the market, adding that if a new critical market incident would occur in the future you would have to stand through the storm and closely collaborate with your partners. Finding the right partners was and is not an easy job:

"It is really challenging to find the right partners. Especially as a technology company as we are. You find a lot of commercial dealers, but we are not so interested in those because we are pushing new technologies here. It is not like selling coke or hot dogs". (Chief Executive Officer, Company Alpha).

The Country Manager of Company Bravo told that even though there were two critical market incidents occurring simultaneously, the Petrobras scandal and the downturn in oil price, there was no place for the Norwegian companies to go primarily due the fact that the oil price and the dollar were low everywhere. In addition, the Brazilian subsea market is the biggest in the world. The way Company Bravo and most other Norwegian companies compensated were to still operate on the Brazilian shelf, but scaling down the business to assure an economic balance. The CM also told that Petrobras showed a strong will to find the corrupt elements, chase and prison the criminals with long prison sentences. As Petrobras has taken serious measures to fight corruption, it is no longer attractive to start a corrupt career in the oil and gas market in Brazil. The CM explained the situation further as follows:

"The problem in the market was that the market was down-scaled pretty much, because Petrobras did not buy anymore – they stopped all their projects. They became passive. Since they represented 80% of the market, it became a problem for the subsea suppliers. It was a very bad time, but as I said the companies had no place to go really, because the oil and gas market was bad. Many people say that they had experienced many years of up-turn. When the price went down you had to react. Some say that it was good because they had been spoiled with good times and profits" (Country Manager, Company Bravo).

On the other hand, the Managing Director of Company Foxtrot told that the Petrobras scandal and the revealed corruption was not directly impacting the company's business activities on the Brazilian shelf relationship-wise as Petrobras is not their client or customer, and none of the company's customers were not involved in the corruption scandal. The MD claimed that their relations in the market continued as normal during and after the scandal in 2014. However, the other critical market incident which was the downturn in the oil price had more severe effects and the MD explained that in this downturn the company's salespeople and key account managers had a crucial job in assuring that their business relationships with their customers in the market were still alive in order to continue doing business with them when the market had normalized again. The MD summed up the situation as follows:

"The important part in a downturn is to keep your customers close, because it cost more to lose a customer than it costs to invest in an already established relationship. If you first lose them, then you need to get them back again and that costs a lot." (Managing Director, Company Foxtrot).

In terms of international trade, the MD of CF experienced the consequences of the Petrobras scandal as huge in the sense that Brazil lost its credibility which had been solidly built up the last decade.

6. Discussion

The purpose of this study is to explore how Norwegian managers overcome cultural frictions and invest in relational and cognitive capital to ease the international operations in the Brazilian oil and gas market.

I addressed the following research questions: (1) how critical frictions are eased through investment in relational and cognitive capital, and (2) how critical market incidents create dynamics in already invested relations and cognition.

The findings of the study, show that by investing in relational capital by showing your persistent presence in the Brazilian oil and gas market, and build close and trustworthy relationships you ease the international operations and get more access to the market. Building embedded relationships are crucial to operate in Brazil as the country is quite collectivistic, whereas Norway is more individualistic. This becomes evident from the interviews as the Brazilian market is characterized by initial mistrust by the respondents.

Second, by having a high degree of absorptive capacity the companies acquire valuable knowledge not only about the foreign market, products and services, but also about culture. By having a low degree of AC including cognitive dissonance, the companies face huge challenges according to the narratives. This becomes evident from the interviews as one of the companies' arduous experience in the Brazilian market entrance due to the lack of knowledge and cognition. On the other hand, the companies that have a high focus on knowledge-sharing seemed to have entered and operate in the market with ease.

Third, the importance of having successfully invested in relational capital resulting in strong embedded relations in the market is of high importance as critical market incidents may have severe effects on a company's business activities. This becomes evident from the interviews as one of the managers elaborated its experience with the Petrobras scandal and the downturn in the oil price, which happened simultaneously, expressing that without its strong embedded relations in the market, the company would suffer bigger losses. Other managers said the critical market incidents had a positive impact, meaning they could naturally get rid of

unserious players in the market and invest in other serious relationships. Some managers told that their relationships were not influenced at all by the critical market incidents, due to strong relations and due to that none of their clients and partners were involved in the Petrobras scandal

Out from this, I can answer the first research question by saying that managers with personality traits of absorptive capacity ease cultural frictions with embedded relations and cognitive resonance in the market. Managers with a high degree of absorptive capacity understand that the Brazilian market is constructed on the cultural dimensions collectivism and long-term orientation. Managers who highly prioritize and put significant efforts in investing in relational and cognitive capital ease the cultural frictions as they primarily acquire strong embedded relations in the market. With a high degree of absorptive capacity, the managers acquire more market knowledge which highlights the essentials in the foreign business culture. Stubborn managers with a closed mentality and cognitive dissonance are unwilling to acquire knowledge about foreign market institutions (Doornich, 2017), which results in conflicts in the international operations and market access. As Norway is a more individualistic and short-term oriented country, managers are used to operate with arm-length relations. In Brazil, the managers are ought to operate with embedded relations in the market with a long-term orientation to achieve their goals.

The importance of investing in relational capital can be further enlightened by the context in which the phenomenon has been studied in. By utilizing a case study with six different Norwegian companies that have international operations in the Brazilian oil and gas market, this paper emphasizes managers who are exposed to a foreign and distant market where business activities are primarily built on embedded and close relations between network connections on the Brazilian shelf. For a foreign manager, it becomes strenuous to acquire a solid market knowledge and position due to the foreign market's characteristics. Therefore it becomes fundamental for the foreign manager to invest in relational and cognitive capital to ease the international operations and get more access the market. This because the market is built on mutual trust and dependency between network connections. Therefore, this study also corresponds to previous studies which demonstrate the importance of embedded relations and strong bonds (Moran, 2005; Nahapiet & Ghosal, 1998; Collins & Hitt, 2014).

Answering the second research question, it becomes evident that critical market incidents may have different impacts on the managers' already established relations in the market. It appears

that managers with strong relations in the market remain unharmed during the critical market incidents, and other mangers with medium-strong relations may exploit the opportunity to seek new and strong relations than previous.

In addition, it appears that the critical incident of the downturn in oil price resulted in a downsizing of the companies causing that already invested relational capital gets lost. Invested relational capital gets lost due to the fact that employees that have great relations in the market have to resign. It is not abundant to merely lean on the corporate relations. Personal relations is the key to operate successfully in the market.

Regarding the cognitive capital, companies that are sufficient in sharing and assimilating market and cultural knowledge maintain their cognitive capital during a critical market incident even though some individuals get resigned. Cognitive capital is embedded in the corporation, and if the companies invest persistently in cognitive capital they will be more prepared for future critical incidents in the market.

The findings from this study correspond to Eriksson and Chetty's (2017) findings that the foreign market knowledge is determined by company's absorptive capacity. This becomes evident from the narratives that companies who have a hunger for knowledge and thus high degree of absorptive capacity learn about foreign markets through collaborations with other companies by sharing valuable market and cultural information.

With these findings, this paper reinforces the extant business literature by agreeing with Yli-Renko's et al. (2002) findings that the personal network of managers and employees play an important role in providing market knowledge. The findings of my study support several other studies based on the relational and cognitive dimension of social capital (Cohen & Levinthal, 1990; Granovetter, 1985; Muniady, 2015) and the findings agree with Nahapiet and Ghosal's (1998) arguments that the relational and cognitive dimensions of social capital are interrelated.

Nonetheless, the findings from this study demonstrate that social capital is dynamic as the managers continuously have to invest in new relations, cognition and knowledge. Stable and strong relations becomes essential during critical market incidents. This becomes evident from the interviews as there is a consensus among all the interviewed managers that to keep their business activities running optimally they have to maintain their established relations and also seek for new potential relations. In addition, it becomes evident that the companies

who invest in cognitions in form of new market knowledge are prone to success as the market is quite dynamic, and being agile to the rapid shifts in the market is essential.

7. Conclusion

This study focused on the importance for Norwegian managers to overcome cultural frictions and how they invest in relational and cognitive capital to ease their international operations in the Brazilian oil and gas market. The investigation of multiple case study companies emphasized six Norwegian and two Brazilian managers' perceptions and experiences with the phenomenon studied.

First, I contribute new insights into how managers invest in the two dimensions of social capital in the international operation. The findings demonstrate the importance of having strong and embedded relations in the Brazilian oil and gas market since much of the business activities are based on close personal relations and network connections. It becomes evident from the narratives told that managers' personal cognitional resonance and a high degree of absorptive capacity are crucial factors to ease the international operations access and operate smoothly in the encounter of a distant foreign culture.

Second, by drawing on relational capital and absorptive capacity literature I make a fresh contribution to study the latter concepts in the view of a critical market incident that constrains business activities which have not been studied before. My findings suggest that critical market incidents may have different impacts on the managers' relations in the market depending on the managers' relational strength. If critical market incidents occur, the managers' capability to draw on strong relations with its partners, customers or clients is a highly valuable asset (Moran, 2005) that can be useful to cope with uncertain and risky contexts.

When a critical incident in the market like corruption occurs, managers with a cognitive resonance may create a cognitive dissonance during their international operations. Cognitive resonance is not a static personal trait, but a dynamic one. Managers can enter and operate in foreign markets with an initial cognitive resonance. However, challenges and critical incidents in the market can test the managers' cognitive resonance. In some cases, it can be too much to handle for the managers. Thus, this can result in a cognitive resonance. Managers

who have entered and internationally operated with an open mind may leave the country with a closed mind.

However, there are some limitations of this study. First, the findings of this study suggest that social capital is a dynamic concept and not static, and further research should address dynamic social capital in the international operations of other companies in the oil and gas industry. Second, the critical market incidents of this study have been scoped to the Petrobras scandal and the downturn in oil price from 2014. Further studies could emphasize the impact of other critical market incidents that constrain business activities in the oil and gas market, or other industries. Third, my analysis of how managers invest in relational and cognitive capital and its impact on managerial performance is based on Norwegian companies operating in Brazil and further studies should emphasize companies from other nations or emerging markets. In addition, a more balanced selection of Brazilian and Norwegian respondents may lead to a different picture of the phenomenon studied. Fourth, due to the managers' availability in this projects' time span, the interview objects were five Norwegians and two Brazilians managers in the oil and gas market. Further studies could focus either on a more balance between the nationalities, or put more focus on the Brazilian respondents.

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Appendix

Appendix 1: Interview guide draft

Topic	Questions		
Introduction	Presentation about myself		
	The paper's main purposes.		
	• Practical information (i.e interview duration, audio recording and anonymity)		
The interview object's	How long have you been employed at X?		
background	• What is your current working title?		
	 What is your responsibility area? 		
	• What is your background (i.e educational and work)?		
Intercultural	What do you think characterize the Norwegian business culture?		
relationship building	• What about the characteristics of the Brazilian culture?		
	 What will you say the these cultures have in common? 		
	Have you experienced cultural frictions in the encounter of the two respective		
	cultures? If yes, how do you deal with them?		
	• In your opinion, what is the best way to handle the cultural frictionss?		
Cross-cultural	• In your opinion, what are some of the most important critical success factors		
negotiation	in order to operate in Brazil?		
	• How will you say that the time perspective is being perceived in Brazil?		
	What challenges regarding communication and language occur when		
	operating in Brazil as a Norwegian company? How to adapt?		
	What other challenges do you face when operating in Brazil?		
Relational capital	How do you develop and maintain relationships in Brazil?		
	• What characterizes relationships in the Brazilian oil and gas market?		
	What will you say are the main differences regarding relationships in Norway		
	and Brazil?		
	How do you strengthen relationships?		
Cognitive capital and	• Do you have experience with international operations from other countries		
absorptive capacity	which has similar market characteristic as Brazil, and is this knowledge		
	applicable for Brazil?		
	 How do your company acquire new foreign market knowledge? (e.g. 		
	meetings, event participations)		
	 How do you use knowledge and information you acquire in the market? 		
	 How do you think external knowledge influence your business outcomes? 		

	 Do you think cultural frictions may impact the knowledge? 			
Critical market	What do you think are the consequences of a critical market incident in terms			
incident	of international trade?			
	 What other consequences do you think occur during a market shock? 			
	How to cope with a market shock?			
	 What happens to your relations with partners after a market shock? 			
Do you have anything you will add?				



INTERNATIONAL BUSINESS REVIEW

AUTHOR INFORMATION PACK

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ISSN: 0969-5931

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The journal provides a forum for academics and professionals to share the latest developments and advances in knowledge and practice of **international business**. It aims to foster the exchange of ideas on a range of important international subjects and to provide stimulus for research and the further development of international perspectives. The international perspective is further enhanced by the geographical spread of the contributors.

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