

**Bachelor Thesis** 

## Connect by Similarities: Together we make a difference

A multi-method case-study exploring the organizational culture of an MNC.



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## Abstract

Today's international and connected environment has amplified the frequency of project business as a means to realize large transnational and global investments in world infrastructure. However, to realize an international infrastructure project, large collaboration among the right actors must be formed. A common and pressing issue is communication barriers and misunderstandings, hampering a single company's capabilities to take full advantage of the opportunities auctioned or mutually created. Therefore, the purpose of this thesis is to explore the potential impact the organizational culture within a particular MNC had in regards to effective project formation and how to overcome these communication barriers.

This thesis has been conducted with NKT, which provides turnkey cable solutions worldwide to connect various places and infrastructures. They are, therefore, active within a project business setting where they, together with other actors, collaborate intensively to deliver the solutions to their customers, i e nations. In 2021, they have set the work culture high on the agenda to connect a better world, a safer and more inclusive work environment, and advance more value to their stakeholders. We believe NKT provides an extraordinary opportunity to research in-depth how the organizational culture can be effectively utilized in project business since this is a unique scenario and NKT shows a high degree of cultural awareness. Thanks to our cooperation, we could conduct a multi-method case study to investigate the phenomenon thoroughly.

The theoretical framework displays project business through collaboration, communication, and organizational culture using a constructionist perspective. The chapter concludes with a theoretical synthesis portraying the cohesion between these concepts. The methodology chapter illustrates how we performed this study, followed by the empirical chapter showing the rich material we have gathered. The analysis chapter links the findings to our theoretical framework, followed by the concluding chapter answering our research question and stating implications, recommendations, and suggestions for future research. The outcome of this thesis showcases the strength and importance of a harmonious organizational culture, coupled with open and highly systematic communication and documentation as a solid foundation for more collaborations using the network approach, which in turn increases trust, reputation, and capabilities to act on opportunities within project business. Significant implications are the importance of common vocabulary and interest, the significance of contexts and co-creation of meaning for communication, and the perfect alignment to mega-trends, in this case, sustainability.



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**Keywords:** *Project business, organizational culture, constructionism, communication, collaboration, sustainability* 

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## 1 Introduction

This chapter will present an overarching description of internationalization and project business, emphasizing networks and organizational culture. Moreover, the problem discussion will highlight the research gaps in organizational culture, communication, and practical issues. This chapter will conclude with our research question and the purpose of this thesis.

### 1.1 Background

Internationalization is a contemporary phenomenon that characterizes modern society, enabling opportunities for grander, collaborative achievements. Together with technological discoveries, the industrial revolution has made the world more connected (Hamilton & Webster, 2015; Steingart, 2008; Castells, 2010). Although interactions and trade between nations have existed for millennia, the facilitated opportunities spurred by globalization have enabled closer relationships regardless of distance, creating more awareness of each other around the globe. As a result, internationalization involves creating linkage or interconnections between nations (Hamilton & Webster, 2015).

In times of increased exploitation of natural resources and the climate crisis, the relationships and trust among the world nations must be maintained high (Miller, n.d; Steiner, n.d.). An example of world collaboration is the Paris agreement, which aims to decarbonize the economy (UNFCCC, n.d.). To fulfill this agreement, critical infrastructure projects are needed (Ec.europa.EU, 2017). These are large projects that usually involve many parties and sometimes countries to complete. Project business, turnkey, and PCI (Project of common interests) are different approaches needed by companies to realize large-scale projects, especially if these infrastructure projects are cross-border (Ec.europa.EU, 2017).

The frequency of project business as a model for international business is expected to increase, even though it has been one of the more dominant modes of choice. The standard definition of project business entails the temporary constellation of the purchaser, seller, and other actors to solve a complex and unique problem, as is often the case with infrastructure projects (Owusu, Sandhu & Kock, 2007). The main objectives for the buying countries are not only increased growth but investing in the future and the greater good. These complex issues are socio-economic, mostly revolving around decarbonization (Artto & Kujala, 2008). Because of the current massive trend for a more sustainable world spurring overall development, project opportunities are often found. Sometimes these are initiated and auctioned from the buyer, but often various projects are proposed and tendered by the seller companies. The seller companies must, in other words, be on a constant look-out and remain proactive for either acting on existing bids or self-initiated suggestions, as well



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as maintain readiness for the execution of the projects (Owusu et al., 2007; Ford et al., 2011).

However, to realize these critical infrastructure projects, the selling companies must collaborate with governments, competitors, and subcontractors. With its staggering complexity, project business requires intense information-sharing and negotiations within the process, and also long-term relationships when the project is finished (Owusu et al., 2007). Therefore, to ensure a high level of information-sharing and knowledge transfer within the sector, the communication between different actors, between the seller, buyer and subcontractors must be maintained high and be high prioritized (Owusu et al., 2007). These actors originate from different parts of the world, which poses a challenge when communicating externally (Chevrier, 2003). They speak different languages and possess varying levels of English proficiency, but they also process information differently with different perceptions (Hall, 1981).

When initiating and conducting project business, networks are frequently used to form the necessary collaborations and opportunities for future projects. Networks are defined as interactions and collaboration between different actors that form relationships that connect and link together within the international business environment. To achieve the project's intended goal, either the customer or the project solution company has to outsource and spread the activities included in a large project between different firms and nations. Therefore, it requires coordination, collaboration, and communication of external and internal links and their activities, thus creating a network. (Hollensen 2020; Hamilton & Webster, 2015; Owusu & Welch, 2006; Vaaland & Owusu, 2011). For multinational companies (MNCs) the various business lines often possess unique networks tailored for their projects. There is enormous potential to be exploited if the business lines can communicate with one another to strategically use the other's network and contacts by forming a more well-functioning constellation, thus gaining an advantage in project selection. However, a significant degree of high internal communication is required (Hollensen, 2020; Melander & Pazirandeh, 2019).

In recent decades, numerous researchers have researched organizational culture (Leung et al., 2005). In principle, organizational culture acts as a shared environment where different individuals share common beliefs, values, and goals, aside from their own national identities (Schein, 2017; Hofstede, 1980; Hofstede et al., 2010; Hollensen, 2020; Bolman & Deal, 2017; Deal & Kennedy, 1982). Different organizational cultures possess their particularities and characteristics as a result of the unique combinations of internal roles. Nevertheless, organizational culture is often defined as "the learned way in which an organization understands, decides, and communicates" (Hollensen, 2020:237) and could be utilized as a way to unite different nationalities into a shared environment (Schein, 2017; Hofstede, 1980; Hofstede et al., 2010;



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Hollensen, 2020; Bolman & Deal, 2017; Deal & Kennedy, 1982). In addition, organizational cultures revolve around the purpose of a company, which could, for instance, contribute to an effective solution like a more sustainable world (Schein, 2017; Hofstede, 1980; Hofstede et al., 2010; Hollensen, 2020; Bolman & Deal, 2017; Deal & Kennedy, 1982).

### 1.2 Problem Discussion

#### **1.2.1** The scientific research gap

Geert Hofstede's work has traditionally been the core of cultural research since his release of Culture's consequences (1980), with his six dimensions of culture being widely established worldwide. However, there are strong critiques regarding Hofstede's view and definition of culture. Recent cultural researchers criticize Hofstede's model for being too simplistic and disconnected from the complex realities that characterize modern cultures. Culture is so much more than a limited amount of values and ought to be researched in its proper context and level. While Hofstede represents a positivistic and static view, the increasingly popular constructionist view takes into account the complex, dynamic and unique nuances that arise for every long-term interaction and community, something that is not to be discovered but created (Taras & Steel, 2009; Earley, 2009; Brannen, 2009; Douglas & Craig, 2009; Moore, 2009; Liu & Dale, 2009; Schein, 2017; Leung et al., 2005). When collaborating with other people representing other cultures, it is crucial to be open-minded and focus on the similarities, not the differences, to bridge the potential gaps and create a solid culture, with flourishing trust and knowledge exchange as a natural outcome (Earley, 2009; Brannen, 2009). In summary, there is a clear divide within modern cultural research based on the definition of culture, and further research is needed to obtain an understanding of today's fast-changing nature that is more immersed in reality, especially in organizations (Leung et al., 2005; Nakata, 2009).

A previous study has been made looking at the influence of culture on project business management. The study examined cultural differences between actors and found that culture plays a role on a management level when conducting project business (Sandhu et al., 2009). Furthermore, the previously mentioned research identified propositions for further investigation on cultural dimensions by using Hofstede's dimension to project management by PMBOK (2000; Sandhu et al., 2009). Therefore, further research more immersed in reality is needed on what aspects of organizational culture might lead to increased communication and increased collaboration for firms conducting project business (Sandhu et al., 2009; Hollensen, 2020).



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#### 1.2.2 The practical problem

The demand for sustainable solutions has increased from governments and citizens to companies nowadays. Agreements between countries such as the Paris agreement have been drafted and signed (Miller, n.d; Steiner, n.d.). The interconnection of countries and continents would stabilize the power grid, give more people access to clean green power and increase the economic growth of emerging markets and the world (Ec.europa.eu, 2017). A barrier that hinders internationalization is collaboration between nations and cultures. Since globalization involves linking and interconnecting countries, there is value in knowing what cultural factors influence and hinder companies from realizing these projects as effectively as possible. (Hamilton & Webster, 2015).

As more frequent and systematic collaboration and cooperation occur between the actors, the potential for misunderstandings and misalignments of perception and values also increases. These misunderstandings can manifest as pure language barriers or insufficiencies and how tasks are assigned, conducted, adjusted according to flexibility and situations, among others. (Chevrier, 2003; Owusu & Welch, 2007). When operating in a very complex and potentially dangerous working environment, misunderstandings and doubts are highly undesirable. Especially when conducting project business, since the situation is unique and thus requires excellent trust and cooperation. The high stakes of involvement from the actors justify the importance of a reliable and replicable strategy to unite individuals from different nations and customs and produce the best result (PMBOK, 2000).

Lastly, the probability of acquiring project orders and staying afloat as an MNC is proportional to the capability to form the collaborations required (Holter & Kopka, 2001). In other words, a more extensive network can boost the capabilities to act on auctioned offers and propose their solutions. By utilizing the comprehensive network formed as a sum of all the business lines, the capabilities can be significantly enhanced. However, hampered communication poses a barrier to fully realize the potential (Davis & Miller, 1996). Therefore, we believe it is of great interest for MNCs to explore feasible ways to remove barriers and facilitate communication within the whole corporation. One suggested solution is a more integrated and vibrant organizational culture, affecting communication and collaboration harmoniously.

### **1.3 Research Question**

How does an MNC use organizational culture and communication to facilitate their capabilities to act on opportunities within project business?



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### 1.4 Purpose

Our purpose is to explore what impact organizational culture and communication has for one MNC when conducting large scale project business and how its organizational culture from a constructionist perspective can influence the collaboration within large scale projects, with an aim to find cultural aspects or promoters that can facilitate and help manage the international collaborations between companies.

### 1.5 Delimitations

The respondents are from Sweden, Denmark, and Germany and therefore might not generalize to other nations, although our respondents have experiences from various parts of the world. Furthermore, although many models analyze culture, we will examine our findings based only on our models presented in chapter 2.

## 1.6 Outline





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## 2 Theoretical framework

This chapter presents and elaborates on the theoretical concepts that will be our foundation for the upcoming analysis in chapter 5. This chapter will commence with a brief description of project business, followed by the themes of collaboration, communication, and culture to which the concepts belong. These three themes are selected to obtain a theoretical answer to our research question. Finally, a theoretical synthesis will clarify how these concepts will be interlinked.

### 2.1 Project business

Project business is the relationship between the purchaser, marketer, and sometimes other market actors needed for the project (Owusu and Welch, 2006; Ford et al., 2011). These collaborations in a network can lead to many inter-organizational projects where the involved actors collaborate to deliver the project. Projects can be defined in various ways, but most projects are temporary constellations created to solve a problem or a need with a tailormade solution (Owusu, 2002). It is important to remember that each project is designed for its specific purpose, and therefore a project is both unique and temporary. Instead, the importance of a firm's expansion capabilities lies in the social relationship that occurs when collaborating. By utilizing the relationships from collaborating, international solution companies can repeat successful projects with the purchaser. This relationship between a marketer and the customer can continue indefinitely, meaning that the degree, investments, and time of the collaborations can vary depending on what needs arise during different projects. This continuous relationship can include various products needed for a project, such as product development, cooperative activities, marketing, and financing. Another important aspect is the value companies can get in the form of spare parts, repairs, technology transfer, and informational exchange, therefore increasing the internal capabilities of designing and executing projects by sharing information and collaborating. (Owusu, 2002; Ford et al., 2011).

As mentioned before, projects refer to the concept that each project sale is limited to completing the project. There are also three characteristics most scholars have agreed upon regarding project business which are discontinuity, uniqueness, and complexity (D-U-C). Since the uniqueness is different for each project, a project business company must consider the complex factors of internal and external organizational characteristics and technical characteristics. Therefore, organizations conducting projects need to have the capabilities of putting together the complexity while managing organizational and technical complexity as well as putting together and managing the complexity of the project organizational characteristics (Owusu, 2002; Owusu and Welch, 2006; Melander & Pazirandeh, 2019).



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### 2.2 Collaboration

Because of the uniqueness and intense interactions between the actors when conducting project business, collaboration is crucial. The network approach provides an excellent understanding of the collaboration (Melander & Pazirandeh, 2019; Hollensen 2020; Owusu & Welch, 2007).

#### 2.2.1 A network approach

More recent studies suggest the network approach as a way to expand into foreign markets. The first step of the network approach in terms of project business is to analyze the international market. In contrast, it does not look at common obstacles such as psychic distance, market knowledge. Instead, this suggested approach analyzes the firm based on its network relations towards the company and the global market. (Johanson & Mattsson, 1995; Blankenburg, 1995). Furthermore, this view proposes to look at internationalization and expansion from a perspective where the focus is towards the impact of its social relationships and the embeddedness of the organizations (Kock, 1991; Easton & Araujo, 1996; Håkansson & Snehota, 1995).

The network approach proposed by Owusu and Welch (2007) suggests that this method can be used by collaboration and joining and collaborating with different organizational networks. By doing so, the company can overcome more known barriers such as market complexity, inadequate knowledge, risk and market novelty, or other similar experienced problems when trying to enter a foreign market (Owusu et al., 2007). Other known problems were mentioned in the previous chapter. The process of interconnecting and its way to reduce barriers increases trust between countries and regions. (Hamilton & Webster, 2015). By joining a network or collaborating with firms, creating a network can also benefit companies in terms of knowledge transfer and information exchange. When conducting project business, this approach can also strengthen its position on the global market by acquiring referrals from different network layers (Hinttu et al., 2003). By using the network's activities, corporations conducting projects can utilize the relationships within the network as a bridge to enter new foreign markets. The authors also describe how these connections with different actors increase the opportunity and motivation during an expansion or internationalization by connecting and building relationships within the networks. These connections can later act as a bridge or reduce the barriers when entering a foreign market (Owusu & Welch, 2006). Many researchers highlight the importance of social relationships and even point out how crucial the social part is for international firms. (Björkman & Kock 1995, Hinttu et al., 2003; Owusu & Welch, 2006). Some authors even argue that the social part of the relationship-building in a network is equally or more important the higher amount of operations and resources the organization has (Holmlund & Kock 1998).



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As for the relationship of the business, it is defined as a business relationship where the marketer sells interrelated products or systems and includes things such as services, know-how, delivery, and the testing of functionality of the project. Therefore, completing a project does not end with delivering said project value (Owusu, 2002). Hollensen (2020) describes business networks as a dynamic relationship between actors who act independently. The business networks evolve from interactions between these actors that exchange goods and services. The actors are linked by their relationship, a relationship that is glued together by its personal, technical, legal, and economic ties (Hollensen, 2020). Another way of viewing the network is by the flow of value between independent actors, and this flow links them together. For businesses, this flow of value that integrates actors could be goods, information, money, and anything that the customer perceives as the desired value (Ellis, 2011). A network can be viewed as the relationship between individual entities created by the interactions and exchanges these actors have with each other. Therefore, a complex network is a relationship that expands and includes all interactions and activities an entity does and has done as well as through all layers of that specific area (Ford et al., 2011). This network consists of actors, nodes, and links between the previous two (Castells, 2010).

### 2.3 Communication

"Who says what, through what channels, to whom, and what will be the results" Aristotle

There are many different views and definitions of communication. Scholars throughout time have studied communication in various fields ranging from mathematics to philosophy. Shannon and Weaver (1964) studied communication in mathematics and proposed a model of communication using math named the linear model of communication which is illustrated in figure 1. The assumption for this mode can be summed up as the transmission of a message or information flowing from one source to a receiver. The linear model displays a message encoded by the sender and decoded by the receiver. Moreover, different degrees of noise interfere with transmitting information between sender and receiver (Shannon & Weaver, 1964).





Noise

However, the most common criticism of the linear communication model is that the flow of communication only flows in one direction, making the model too simplistic (Barnlund, 2017; Barnlund, 1970). Because of the limited view the previous model has, scholars had to develop another model to understand what happens during communication exchange. Figure 2 describes the alternative model as a dynamic interaction. Various contexts influence the outcome that forms the co-creation of meaning together with the encoded and decoded message. This model was perceived as more realistic (Barnlund, 1970). Various mediums are used for communication, with the most obvious one being face to face. However, modern technology such as email, telephone, and video calls are more prevalent and widely used today (Hollensen, 2020).



Figure 2 - The dynamic model of communication interpretation of Barnlund's Transactional Model of Communication (Barnlund, 1970; Thompson et al., 2003).

#### 2.3.1 Communication within organizations

Throughout modern research history, there are three different perspectives on communication within organizations. The classical management perspective was popularized by Weber and Fayol among others, and dominated the earlier



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20th century (Weber, 2009). Classical management views communication as the necessary medium to ensure efficiency through structure and hierarchical leadership (Jablin & Putnam, 2001; Weber, 2009; Fayol, 1949). Communication between different individuals is standardized and follows a predictable process to maintain the well-oiled machine, the established analogy of the organization (Weber, 2009). The classic management perspective relies on a solid hierarchical authority where every actor is aware of his or her placement and responsibilities (Jablin & Putnam, 2001; Weber, 2009; Copley & Taylor, 1923).

However, the human resources perspective emphasizes the danger of treating organizations and their members as just cogs in the wheel. In reality, employees are complex, human, and have their own needs. Therefore, organizations are made of human beings with needs and important contributions to include (Jablin & Putnam, 2001). Maslow's pyramid is widely used within this perspective to understand the different needs motivating particular communicative actions from individuals, starting from basic physiological needs and safety to more appreciation and fulfillment (Conley, 2017; Mayo, 1924). Communication, in other words, is more complex, dynamic, and situational (Thompson et al., 2003; Ouchi, 1981). From this perspective, people must be invested and empowered to maximize communicative efficiency (Jablin & Putnam, 2001; Brady, 1989).

perspective views communication through complex, The system interdependent nodes that work together to respond to a changing environment (Kast & Rosenzweig, 1972). An excellent analogy is to view an organization as an organism, such as a plant built up by plant cells (Buckley, 1967; Kast & Rosenzweig, 1972). As we all know, the plant needs things from the outside world, such as sunlight, water, and other vital minerals to live. These elements can be viewed as input coming from the outside. The plant then processes the input and returns sugar and oxygen to its surroundings, i.e., the output. For a plant, this process is called photosynthesis. The same principle behind the plant and plant cells is applicable for organizations and individuals, respectively. From the system perspective, organizational systems need three things to survive. First: inputs that go into the organization from the outside for the organization to do its work. The second thing is through-puts or processes, and the third thing is output and is what the organization returns to its surroundings. Therefore an organization can also be viewed as an ecosystem. A well-functioning communication, in summary, allows the free flow of these three things for maximum efficiency (Miller & Barbour, 2015; von Bertalanffy, 1968; Katz et al., 1966; Miller, 2014). In addition, communicative interactions are how organizations organize their activity and make sense of unpredictability (Eisenberg et al., 2009).



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One study that investigated how good companies collaborated and how well the communication was within the project business found that one of the critical things for collaboration and communication when conducting project business is to have something in common to talk about. "If someone made high technical studies in Lille and someone else high technical studies in Stuttgart, they are closer than a French philosopher and a French technician." (Chevrier, 2003:147) The previous study shows the importance of sharing something of value between the actors, such as the same interest or knowledge, that the actors can talk about for the communication and collaboration to run smoothly (Chevrier, 2003).

### 2.4 Organizational culture

The general definitions of culture in international business are many, ambiguous and multifaceted, due to its complexity and inclusiveness. In the classic Organizational culture and leadership, Schein (2017) defines the term as "the accumulated shared learning of that group as it solves its problems of external adaptation and internal integration; which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, feel, and behave in relation to those problems" (Schein, 2017:21). Simply put, the organizational culture is the way members do things in the organization (Hollensen, 2020; Deal & Kennedy, 1982) and "the learned way in which an organization understands, decides, and communicates" (Hollensen, 2020:237). This definition is not in particular different from the national culture but displayed in a specific context where the unspoken rules intend to fulfill the organization's vision. Moreover, it is vital to distinguish between national and organizational culture since they are not the same phenomenon (Hofstede, 1980; Hofstede et al., 2010). Instead of shared values, shared practices are defining organizational culture.

There are three different organizational culture levels, from the visible to the hidden (Schein, 2017; Bolman & Deal, 2017; Hollensen, 2020). The artifacts are the visible element but can be perceived as foreign and difficult to decipher as an outside observer while making perfect sense among the members. The second level is the espoused beliefs and values, the organization's aspirations tied to its mission. These beliefs and values are conscious and articulated, guiding the unspoken rules of the organization. Finally, the most hidden level is the basic underlying assumptions, as complex as the invisible mass of the iceberg and taken for granted beliefs that shape the entire collective (Schein, 2017; Bolman & Deal, 2017; Hollensen, 2020).

Moreover, the artifacts are often divided into four categories. First, the symbols are visual representations, stories, and myths highly valued within the organization, viewed very incoherent from the outside world. Second, the heroes and heroines represent the role models or influential people (often the founder) that the individuals intend to emulate. Third, the rituals function as a



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social kit for the individuals to connect to the more profound culture. Lastly, the ceremonies exhibit the celebrations highly recognized within the organization (Bolman & Deal, 2017). Since only the artifact level is visible and not the other layers, the organization can sometimes be perceived as behaving irrationally in occasional moments. Indeed, there are profound gains to discover when familiarizing more frequently with a particular organization. According to Schein (2017), the best way for an outside observer to decipher the culture is to visit and observe, identify the peculiar artifacts, question the members regarding these, identify the practices and finally maintain an open mind for the inconsistencies that determine day-to-day behavior.

Geert Hofstede's work remains the foundation of cultural research, with many adopters modifying his findings (Hofstede, 1980; Hofstede et al., 2010; Trompenaars & Hampden-Turner, 2011; Triandis, 1995; House et al., 2014). Based on the most extensive research together with IBM, gathering over 100 000 surveys worldwide, he coined the six dimensions of national culture, different values that the cultures had innate. These are power distance, individualism, masculinity, uncertainty avoidance, long-term orientation, and indulgence (Hofstede, 1980; Hofstede et al., 2010). Moreover, Hofstede conducted another project aimed explicitly at understanding organizational culture. Based on their findings using quantitative methods, Hofstede and IRIC discovered another six dimensions of organizational culture:

- 1. Process-oriented vs. results-oriented
- 2. Employee vs. job
- 3. Parochial vs professional
- 4. Open system vs. closed system
- 5. Loose vs. tight control
- 6. Normative vs. pragmatic

However, despite the tremendous popularity of Hofstede, several researchers have recently criticized his approach. Taras, Steel (2009), and Earley (2009) argue that the approach was too simplistic, too value-based rather than other factors, disconnected from actual reality, and focused more on differences than similarities. Brannen (2009) and Douglas & Craig (2009) argue that the context in which the culture is portrayed plays a significant role in its success. In other words, rather than distill culture to a few binary dimensions, one should grasp the uniqueness and dynamic complexity of each cultural circumstance (Brannen, 2009; Douglas & Craig, 2009; Moore, 2009; Liu & Dale, 2009). Several alternative models have been proposed in an attempt to measure the particularities accurately.

#### 2.4.1 Models of organizational culture

The OCAI, the competing values framework, as shown in figure 3, presents four different categories of organizational culture and is often used to assess



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the current characteristics and guide a culture change (Cameron & Quinn, 2006). It is portrayed as a  $2x^2$  matrix coupled with two dimensions, representing the X- and Y-axis. The X-axis puts internal focus and integration on the left and external focus and differentiation on the right. In contrast, the Y-axis puts flexibility and discretion on top and stability and control on the bottom. A hierarchy culture (bottom left) values processes, rules, and bureaucracy, while its opposite adhocracy (top right) embraces maximum unpredictability and innovation. Similarly, a market culture (bottom right) values competition and delivery while its opposite clan culture (top left) revolves around a more family-oriented and team-based "we" approach (Cameron & Quinn, 2006). Almost always, organizations show varying degrees of all four but more inclined towards certain cultures. Yazici (2011) examined the effects on project business that these four categories imposed. The results showed that the clan-culture, in particular, was beneficial for project completion and overall business performance, mainly because of the "increased employee empowerment, participation and involvement of the teams, more cross-functional teamwork, more horizontal communication, caring climate, and more recognition for employees" (Yazici, 2011:27). On the other hand, the other categories: hierarchical, market, and adhocracy, did not significantly relate to project- and external business performance (Yazici, 2011).

					,
nd Integration	Value Drivers: Theory of	COLLABORATIVE Facilitator Mentor Team builder	Orientation: Leader Type: Value Drivers: Theory of	ADHOCRACY CREATIVE Innovator Entrepreneur Visionary Innovative outputs Transformation Agility Innovativeness, vision, and new resources produce effectiveness.	External Focus a
Internal Focus and Integration	Orientation: Leader Type: Value Drivers: Theory of	Coordinator Monitor Organizer	Leader Type: Value Drivers: Theory of	COMPETING Hard driver Competitor Producer	External Focus and Differentiation

Stability and Control

Figure 3 - The four categories of organizational culture (Cameron & Quinn, 2006:51)

In contrast, Brannen (2009) suggests a negotiated culture model taking the situational context into account, as shown in figure 4. The underlying principles state that culture is imperfectly shared, and the individuals originate



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from different cultural backgrounds. Organizational events and issues together with the structural context drive the negotiations forward. The negotiated culture is the result of the dynamic interactions of these individuals. It might not necessarily be a hybrid culture, but a completely different result.



Figure 4 - Brannen's model of negotiated culture (In Nakata, 2009:94)

After a longitudinal case study of an American-German MNC, Moore (2009) states that organizations are "nexuses of sub-groups that interact and are affected by others within the organization and outside of it, which share areas of cultural overlap" (Nakata, 2009:206). Her model, alternative from Cameron & Quinn and Brannen, as shown in Figure 5, aims to display the complexity of culture while still being replicable. In this model, multinational corporations are a sum of different cohorts or subcultures affected by outside groups. These cohorts are visualized as arrows entering a circle that is the MNC: This model is particularly applicable when various business lines are decentralized to a large degree (Moore, 2009).



Figure 5 - How cohorts of groups affect the MNC (In Nakata, 2009:206)

Lastly, Liu and Dale (2009) promote individual mental models to study crosscultural interactions with more sensitivity to cultural interchange. The mental model here is defined as a "psychological representation of a domain or situation that allows an individual to understand, to explain and to predict future states" (Nakata, 2009:224). They are situation-specific building blocks, constructing shared mental models when a particular group manifests the same beliefs and orientations. Shared mental models are effective for cross-cultural business situations, suitable for multicultural teams and the organizational identity, and enhance improved performance (Liu & Dale, 2009)

#### 2.4.2 Cultural change

Cultural changes are essential for enduring and long-term organizational performance improvements (Cameron & Quinn, 2005). Schein (2017) illustrates three stages relevant for organizations that aim to change or enhance their culture. The first stage creates the motivation for the change, discontinuing the old tried and true and introducing new learning instead. In this stage, it is crucial that the learning anxiety remains small, combined with psychological safety. The second stage deals with the learning of new concepts as well as new meaning for old concepts. The third stage internalizes and incorporates the new habits, meanings and beliefs. The founders' beliefs will play a significant role in how culture will evolve, but the macro-environment, internal technology, and the organization's experiences are also significant. When conducting culture change, it is essential not to become explicit with the term culture change but instead promote the desired and new beliefs. These new beliefs and behavior are only enforced if they provide tangible results in the near future (Schein, 2017).



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In contrast, Hofstede (1980) and Hofstede et al. (2010) emphasize the importance of maintaining the equilibrium between culture, control, structure, and strategy. To enable successful balance while changing the culture, the organization must identify the relevant sub-cultures and characteristics. The organization must test whether the new culture is fit for the future, identify the potential supporters and resistors, and measure the progress during the cultural work. Comprehensive measures are required to ensure future stability. Examples of comprehensive measures are structural, process, and personnel changes (Hofstede, 1980; Hofstede et al., 2010).

Lastly, Alvesson (2014) view cultural change as a complex project. It requires creativity, insights with a significant dose of luck, long-term perspective, and realistic objectives. Managers should still examine the current culture and develop it through large-scale change programs or long-term organic improvements (Alvesson, 2014). In addition, according to Leung et al. (2005), socioeconomic-political variables greatly influence cultural change as well.

#### 2.4.3 What is a strong culture?

It is within the best interest of MNCs to attract new customers, successfully perform and deliver for their existing customers, and ensure a vibrant, wellfunctioning workforce. Moreover, most scholars recognize organizational culture to have "a powerful effect on the performance and long-term effectiveness of organizations" (Cameron & Quinn, 2005:5). Therefore, it is encouraged to create a more unified organizational culture as the resulting dominance and coherence is a proven recipe for success (Peter & Waterman, 1995; Hofstede, 1980; Hofstede et al., 2010; Hollensen, 2020). A strong culture diminishes the need for additional guidance and policies since the individuals involved already have embodied them (Peter & Waterman, 1995; Hofstede, 1980). Peter & Waterman and Hofstede define a strong culture as homogeneous, conforming to the same shared values, goals, and beliefs and collaborating in the same way (Peter & Waterman, 1995; Hofstede, 1980; Hofstede et al., 2010). However, individuals can have diverse backgrounds and qualities as long as they collaborate efficiently and focus on similarities (Earley, 2009). Furthermore, a more dynamic and constructivist model of strong culture created by Brannen (2009) considers a range of commitment. The most committed members are "hyper-normal," with the opposite end being "marginally normal," leaving most members as "culturally normal," i.e., average commitment. Three studies have explored and consequently discovered the effects of a strong culture when conducting project business (Palmer, 2002; Karlsen, 2011; vom Brocke et al., 2014). In addition, Karlsen (2011) discovered that a supportive culture was beneficial for reducing the uncertainty that could arise.



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However, there are problems when simplifying and treating culture just like an instrumental tool for manager action. According to Alvesson (2014), it portrays a false picture of organizational culture, which could be good or bad. Alvesson (2014) suggests two alternative perspectives of incorporating culture to enhance performance. The first views management as symbolic actions and shared understanding as a managerial accomplishment, balancing culture and organizational goals. The second one views organizational culture as a constraint on management rationality and, therefore, important for understanding culture.

Moreover, there are four different views on the relationship between organizational culture and company performance (Alvesson, 2014). The most common view is that a cohesive culture leads to good performance, but there is also the opposite, that good performance breeds a harmonious culture. The third view presents a particular type of culture as the most optimal and should be encouraged all around. On the other hand, the last view emphasizes the importance of adaptive cultures that can respond to environmental changes. Lastly, although a well-functioning culture increases safety and commitment, eliminates the need for structural controls, and facilitates inner socialization, it is not easy to state that the culture provides a clear and straightforward effect on performance. Fortunately, promoting shared beliefs and shared understandings, using corporate culture as managerial design and symbolic action is generally viewed as the best working strategy for optimal performance by companies (Alvesson, 2014).

### 2.5 Theoretical synthesis

The research presented in this chapter suggests that culture and communication are highly relevant and involved for organizations and MNCs. Culture is summarized as the framework of pervasive collective beliefs within an organization that evolves dynamically through recurrent interactions with individuals, which form the behavioral pattern that underlies all facets of social behavior and interaction by sharing the same beliefs. Communication is summarized as the internal- and external broadcast and exchange of information, ideas, and knowledge through any medium such as face-to-face, phone, email, intranet, monthly newsletter, etc. Together, both culture and communication translate in practical terms to collaboration in project business, the sequence of decisions taken by individuals within the same network or between the selling- and buying network, all working towards a common organizational goal and an established business relationship. A more harmonious culture and noise-free communication enable high-performance collaboration, which all together corresponds to and increases high capabilities and alertness. With higher capabilities, the MNC can make better use of opportunities within the international project business (abbreviated as PB below with two of them



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linked, illustrating the possible influence on each other). An illustration of the theoretical synthesis is shown in figure 6, which will serve as a conceptual synthesis framework based on our theoretical framework.



Figure 6 - Theoretical synthesis (Own creation)



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## 3 Methodology

In this chapter, the appropriate and selected methods for this thesis will be presented. Initially, this chapter starts with the choice of approach and design, followed by data collection, respondents, analysis, and operationalization used. This chapter is concluded by a discussion on the quality of research and ethical considerations and authors' contribution.

### 3.1 Abductive approach

The first choice researchers need to address before conducting a study is whether to follow a deductive, inductive, or compromise abductive method. According to Saunders et al. (2016), the deductive process consists of an articulated hypothesis based on a stable theoretical base to be examined for data-gathering. If the hypothesis is false, the process must restart. In other words, a new theory has to be built and operationalized until it harmonizes with the empirical data. However, the deductive approach is the fastest due to the limited amount of tests required to prove the theory (Saunders et al., 2016). In contrast, the inductive approach starts with gathering empirical data and from there construct viable theories. While the approach proves to be very useful in new research scenarios, inductive studies require an abundance of time and numerous tests (Saunders et al., 2016).

However, a pure deductive vs. inductive approach is de facto rare, and the abductive approach is often used (Saunders et al., 2016). An abductive approach alternates between inductive and deductive and "matches what many business and management researchers actually do" (Saunders et al., 2016:148). The process starts with a surprising fact, which demands a plausible theory explaining how it occurred. Then the plausible theory is tested and adjusted according to the empirical data gathered throughout the study. The alternation can occur at any stage in the research process.

We have chosen the abductive approach because we believe it was the best way to achieve our research purpose. Since we obtained access to rich secondary data before our research process was officially started and was updated daily with new and surprising info, we were exposed to many surprising facts and thus had to adjust our approach following these findings. Furthermore, according to Yin (2018), redesign of study is crucial if one discovers important and eye-opening findings when conducting research, which describes our situation and necessary adjustments.

### 3.2 Qualitative research

The next choice is choosing a quantitative or a qualitative approach. Saunders et al. (2016) define quantitative research as using quantifiable, numeric, and



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otherwise measured data to demonstrate correlations and causality. With the aid of surveys, structured interviews, or experiments, objective data can be obtained in a non-ambiguous and positivist way (Saunders et al., 2016). In contrast, qualitative research aims to comprehend the non-measurable, including the stories, the describing answers, and the underlying meaning and relationships. Qualitative is more interpretive than quantitative since the researcher needs to make sense of the data gathering. The methods such as interviews and observation also appear more naturalistic, in the proper context, and strive to connect with the interviewees/observed. Because of its interpretive nature, the data collection and analysis are non-standardized (Saunders et al., 2016).

As elaborated in the previous chapter, the more dynamic and constructivist view of culture, especially within project business, has received more attention in recent years, and the development is still emergent. While Hofstede and other positivist researchers mainly relied on quantitative research for theory building, the novel and dynamic perspective requires a more naturalistic approach due to its ambiguous nature. Therefore, to satisfy the need for a more dynamic perspective on project business, we have chosen the qualitative approach. In addition, the broad and nuanced info we receive will unlock some hidden insights into the core values of the particular organizational culture we will study.

### 3.3 Research design

It is essential to have a good and viable research design to provide a meaningful contribution (Yin, 2018; Stake, 1995; Saunders et al., 2016). Saunders et al. (2016) define research design as the general plan for answering the research question. It is the framework in which we intend to utilize the appropriate data gathering and analysis to answer our research question the best way.

#### 3.3.1 Case study

Although there are numerous definitions of case study (Roller & Lavrakas, 2015), the most popular one, according to Yin (2018), describes a method that investigates a current phenomenon in depth and within the everyday surroundings, especially when the boundaries between the phenomenon and its context are blurred. Moreover, the depth of study, the holistic view, and the particular are more characteristic to case study research rather than breadth of study, isolated factors, and the general, respectively (Denscombe, 1998; Stake, 1995). However, Yin (2018) argues that case study theories can be analytically generalized. The main benefit of a case study is the triangulation of data that naturally occurs and is suitable when there is little control over events (Denscombe, 1998). Yin (2018) argues that the case study is applicable when there are more variables of interest than just plain data points, and we,



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therefore, need a more holistic approach. The case study tackles issues beyond the scope of other methods (Roller & Lavrakas, 2015). Lastly, according to Lervik (2011), the case study approach is very suitable when studying a single MNC, which is our aim. To grasp and explain how MNCs can use organizational culture for better product business capabilities, we believe that a case study with the holistic and natural setting and depth of research for one particular setting is most beneficial.

#### 3.3.2 Purposive sampling and cases

To get an accurate representation of a given phenomenon within a reasonable time and economic limits, it is necessary to utilize either probability or non-probability sampling (Saunders et al., 2016). Probability sampling is selected randomly or from an explicit set of criteria and is mainly used for statistical generalizations. In contrast, non-probability sampling is well-suited for qualitative research because such an explicit set of criteria is not possible for most instances. Therefore, alternative methods are used coupled with a subjective judgment. In addition, non-probability sampling allows for flexibility and freedom to choose the most representative samples (Saunders et al., 2016), which is why we have chosen the latter alternative.

In a case study, defining and bounding the case, the unit of analysis, is of absolute importance (Yin, 2018; Denscombe, 1998; Saunders et al., 2016), although it is not easy and should accompany with flexibility (Yin, 2018; Fletcher & Plakoyiannaki, 2011). The criteria must be based on known attributes and explicitly used (Denscombe, 1998). According to Yin (2018), a single case study allows for capturing the circumstances in an everyday situation, while multiple cases allow for broader analytical generalization. Likewise, a holistic perspective treats the case as a whole, while the embedded perspective displays the number of subunits within the case.

Because we have collaborated with a single MNC and thus have access to an enormous amount of data, we believe a single case, the company itself, is sufficient for our scope of research. A single case allows for an extensive depth and richness of data gathering on a particular scenario, and one case is enough to analytically generalize the findings as well (Fletcher & Plakoyiannaki, 2011). We also believe an embedded perspective is advantageous for us since we define the different projects the MNC have or had in operation as functional subunits.

#### 3.3.3 The company NKT and choice of respondents

NKT is a multinational company with headquarters in Denmark, Germany, and Sweden that provides turnkey high voltage cable solutions worldwide to connect various places and infrastructures (NKT, 210426). They are, therefore, active within a project business setting where they, together with other actors, collaborate intensively to deliver the solutions to their customers, i e nations



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or large scale energy enterprises. In 2021, they have set the work culture high on the agenda to connect a better world, a safer and more inclusive work environment, and advance more value to their stakeholders. We believe NKT provides an extraordinary opportunity to research in-depth how the organizational culture can be effectively utilized in project business since this is a unique scenario and NKT shows a high degree of cultural awareness. We contacted them three months before our research process started, and they showed exceptional enthusiasm in our ideas, committed to accommodating us with a large number of suitable respondents. We are grateful for this collaboration as we believe it could positively impact the depth of findings, especially when researching a topic as broad, ambiguous, and abstract as culture. The criteria for our respondents are:

- Managers from various levels of the organization.
  - This is to examine from multiple angles to gain different perspectives on the same topic. The requirement is in accordance with case study research which investigates a particular phenomenon in-depth (Yin, 2018) and can therefore be applied here.
- Must have experience working on site.
  - This is to understand the working culture better.
- Must have experience working abroad.
  - This is to internalize the differences and similarities of national culture and compare the organizational culture to them.

Based on the following criteria, we emailed invitations with interview questions in advance to our main contact person at NKT: Johann Mr. Gudbrandsson. Mr. Gudbrandsson forwarded to all relevant respondents for us, around 32 people. The following eight people (in which the last two are external employees of NKT) were available for interview:

**Nils-Bertil Thorén:** Mr. Thorén is an on-shore installation manager from Sweden. He works at the South West Link, a connection from Närke to Skåne (Sweden). He has also been involved in the projects Dolwin 2, EWIP, and PEX cable projects. He has worked in the US, UK, Germany, and parts of Africa.

**Johann Gudbrandsson:** Mr. Gudbrandsson is an on-shore installation manager situated in Sweden and has worked with the Nordlink and Nordbalt projects. He has worked in Denmark, Germany, and the Netherlands.

**Anonymous Respondent X:** Respondent X is a project manager situated outside of Sweden. Respondent X has worked in Italy, Germany, Sweden, Denmark, UK, Bahrain, the Netherlands, Spain, and Canada.

**Henrik Andersson:** Mr. Andersson is an on-shore installation manager from Sweden currently situated in Denmark, working on Viking. He has worked in



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Denmark, Germany, China, the Caribbean Islands, the US, the main part of Europe, and Canada.

**Filip Elfmark:** Mr. Elfmark is the project planner for the Troll West Electrification Project in the North Sea, Norway. Mr. Elfmark is situated in Sweden.

**Jan Lindhe:** Mr. Lindhe is a former on-shore installation manager from Sweden but is officially retired. However, he supports the workers in the enormous infrastructure project Südlink. His enormous portfolio of projects and countries will be elaborated on in the next chapter.

**Katharina Onken:** Ms. Onken is one of the main project installation managers for Südlink. Her main company is called Ms. Onken Off-Shore, and she works as an external for NKT. She is from Germany but has worked in Canada, the US, Mexico, Saudi Arabia, and China

**Jürgen Foerster:** Mr. Foerster works with project management and is currently working on the Südlink project. He is an external NKT-employee and originates from the company Noack & Co Gmbh. He is also from Germany but has worked in Ethiopia, Botswana, South Africa, China, Hong Kong, Vietnam, the Philippines, and Australia.

### 3.4 Data Collection

#### 3.4.1 Primary data - interviews & observation

Primary data is defined by Bryman & Bell (2013) as first-hand data directly collected by researchers. For the case study, four different primary data-gathering methods are available: interviews, group interviews, observation, and participant observation (Yin, 2018). The interviews can be further divided into in-depth- or unstructured interviews, resembling an everyday conversation, and semi-structured interviews as more structural, more useful for qualitative analysis with connection to theory (Roller & Lavrakas, 2015).

Because multi-method is encouraged in a case study (Denscombe, 1998), we will use this in this thesis. Furthermore, the multi-method approach allows us to "study the holistic nature of relatively complex entities or cases by tackling the research objective from all relevant methodological perspectives" (Roller & Lavrakas, 2015:290). Yin (2018) also argues for the broader and more robust evidence as a result of multi-method. The multi-method serves as an excellent ground for triangulation, an essential element for the total quality framework, particularly in the verification aspect. We have chosen interviews primarily through Microsoft Teams since face-to-face interviews were impossible due to the Covid-19 pandemic. The interview questions can be found in Appendix A.



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In addition, we have also observed live webinars hosted by the top management of NKT and other webinars hosted by regional key persons from NKT to experience first-hand how the culture and communication manifest and thus getting richer and valid data. According to Roller & Lavrakas (2015:190), virtual observation is very efficient to conduct and "acknowledges the virtual world as an important cultural dimension." We also had the ambition to attend their HQ in Karlskrona physically, but unfortunately, because of Covid-19, we had to cancel it.

#### 3.4.2 Secondary data - documents & archival records

Yin (2018) presents documents and archival records as relevant secondary data to complement our primary findings. The archival records are most valuable as they are not disclosed outside of the organization but can be harder to access as a researcher. In addition, secondary data is invaluable for triangulation, ensuring the quality of the study (Yin, 2018; Denscombe, 1998). Fortunately, we have received full cooperation and transparency from NKT regarding the secondary data, a sound basis for an abductive approach. We can also observe internal communication, a precious asset for studying the level of communication in an MNC.

#### 3.4.3 Structure of interview

There are three different formats: structured, semi-structured, and in-depth interviews (Saunders et al., 2016; Roller & Lavrakas, 2015; Kvale, 2007; Denscombe, 1998). Structured interviews are rigorous, with the sole intention to receive an answer for each predetermined question without any follow-up. The opposite is in-depth interviews where instead of predetermined questions, there are themes in which both interviewer and interviewee can center around while allowing a spontaneous and free discussion regarding these themes. The middle-ground is found within semi-structured interviews. Predetermined questions are used, but follow-up questions are allowed. The goal is to allow for in-depth answers and let the natural conversation and rapport building be the priority, very suitable for exploratory studies. While structured interviews are ideal for qualitative research (Bryman & Bell, 2013; Saunders et al., 2016)

Since the purpose was to understand MNCs' cultural impact and communication, we considered semi-structured interviews to be the most appropriate. This form allowed us to plan 18 questions (Appendix A) and follow-up questions to encourage the conversation and conduct the interviews more freely. It was vital that our interviewees could answer our questions naturally without any restrictions to gain maximum data and insights. The interviews lasted approximately one hour each except for Mr. Elfmark, who lasted 30 minutes due to time constraints. All interviews were transcribed except those who did not wish to be recorded.



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### 3.5 Operationalization

Jacob and Ferguson (2015) state that the theoretical concepts must be operationalized to measure the interview answers for further analysis effectively. Kvale (2007) also states that semistructured interviews should have a clear outline with motivating connections to the questions being used. The table below explains the reasoning behind the questions located in Appendix A.

Concepts	Question	Reasoning
Background	1-5	Questions to set the stage and get to know our respondents. From our research on the company, health and safety are important for them. Therefore question 2 is meant to build initial rapport. The last questions will describe our respondent even more in terms of their project business experience, their international experience, and their experience with external companies and subcontractors
Collaboration	6-8	Questions regarding their collaboration, how they collaborate internally and externally, as well as how the sequence of decisions looks like when they make decisions
Communication	9-11	Questions aiming to explore how they communicate internally and externally, as well as an assessment for each
Culture	12-17	Questions were allowing us to receive information about their culture. We also obtain info on how they share the culture between themselves and from above, as well as the effects on everyday work
Concluding Question	18	Questions allowing the interviewee to add further info that could be relevant

### 3.6 Method of Data Analysis

When analyzing the primary material and recognizing findings, various analytical techniques are utilized (Saunders et al., 2016). If possible, transcriptions provide the best preparation for analysis, as well as research diaries for observation. The different methods to be used are thematic, template, grounded theory, and discourse (Saunders et al., 2016). Yin (2018) proposes that the researcher should "play" with the material using pattern matching, explanation building, time-series analysis, logic models, or cross-case synthesis.

We intend to follow the thematic way since it is the foundational method and emphasizes familiarizing with the material and making connections to our theory. The thematic approach includes coding the gathered material to search for themes and recognize relationships, providing a solid base for evaluation

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(Saunders et al., 2016). To secure the maximum quality of analysis, we have used the CAQDAS software NVivo for the analysis.

### 3.7 Quality of research

#### 3.7.1 Validity

Saunders et al. (2016) define validity as how accurate and appropriately used the measures for assessing a phenomenon are. This, in turn, determines how the conclusions reflect the reality that was studied (Yin, 2018). There could be many factors negatively influencing the validity, such as ambiguity about casual direction (Saunders et al., 2016). The Total Quality Framework, consisting of credibility, analyzability, transparency, and usefulness, helps confirm the quality of research (Roller & Lavrakas, 2015).

Triangulation is an excellent way to ensure high validity since the same data is examined from different angles (Yin, 2018). Because case study in itself encourages triangulation, we made sure to use it, as elaborated previously. Moreover, we followed up with our respondents after the interviews have been conducted to approve our interpretations. Lastly, we have followed a journalistic approach when creating our interview questions to avoid socially desirable bias.

#### 3.7.2 Reliability

Bryman & Bell (2013) defines reliability as how replicable and consistent our research is, and thus is very important to ensure future replications. The Total Quality Framework is also highly applicable when examining reliability (Roller & Lavrakas, 2015). Potential threats are participant error and bias and researcher error and bias (Saunders et al., 2016). Denscombe (2010) recommends an extensive and transparent description of our methods used, which we have presented in this chapter. In addition, we have made sure to utilize NVivo to the greatest extent to ensure replicability.

### 3.8 Method Criticism

According to Bryman & Bell (2013), the main critiques for qualitative research are the subjective bias, the difficulties for replication, issues with generalization, and not transparent enough. The more interpretive nature of qualitative research is at odds with a more replicable strategy, especially for case studies. Moreover, some additional drawbacks for a case study are whether it is rigorous enough and produces only soft data (Yin, 2018; Denscombe, 1998). However, analytical generalization is still considered a valid approach for legitimizing the study (Yin, 2018). In the previous chapter, the culture needed to be examined more interpretively, and thus the study needed to capture the intangible meanings behind the data, which qualitative research is designed for.



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While a close collaboration and exploration of a single MNC like NKT can generate some valuable insights, there are indeed some challenges that need to be addressed (Lervik, 2011). We must balance the company's proximity to avoid bias and be aware of our ethos, whether our respondents perceive us as neutral or consultants hired from HQ. Reoccurring feedback with supervisors and peers is invaluable to gain an outside perspective that can rebalance our position (Lervik, 2011). Therefore, we have consistently asked for feedback, especially from peers. To ensure a proper ethos, we have emphasized confidentiality, as elaborated further in the following sub-chapter.

Lastly, all interviews, except for Respondent X, Ms. Onken and Mr. Foerster, were conducted in Swedish to facilitate the conversations. Although the risk for translation errors remains, we have translated the data from Swedish to English without any significant information losses according to our judgment.

### 3.9 Ethical considerations

According to Roller & Lavrakas (2015:324), "ethical considerations are important in all research endeavors that involve human subjects, but they take on heightened significance in qualitative research designs where researchers often work closely, and frequently face-to-face, with research participants, such as in case-centered research." Saunders et al. (2016) present the following principles that must be considered before data gathering:

- The researcher must show high integrity and remain objective
- The researcher must respect the respondents
- Any harm to participants is strictly prohibited
- The privacy of the respondents must be respected, and they also have the right to be anonymous
- The participants must voluntarily participate and have the right to withdraw

Based on these principles, we have explicitly informed our respondents regarding confidentiality and consent. All of them were asked to be recorded before the interview and the option to remain anonymous. In addition, our respondents have approved our usage of the interviews afterward to prevent violation of confidentiality.

### 3.10 Author's contributions

Two authors have constructed this thesis. We have maintained close contact with each other throughout the process to ensure mutual responsibility. Although we have divided the reading between each other to maximize efficiency, in the beginning, we have co-written all the chapters and always made sure to comment on each other's parts, with consensus being an essential principle. With this, both of us take full responsibility for the whole thesis.

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## 4 **Empirical findings**

In this chapter, a short description of NKT and the most notable projects will be presented initially. After that, this chapter will continue with the empirical findings from our respondents and our observation and secondary data. The chapter will be structured in the three themes used for this thesis: collaboration, communication, and culture. In each theme, every interviewee will present their answers. This chapter will conclude with a summary of the relevant findings we received from our virtual observations.

### 4.1 About NKT

NKT is a multinational company with headquarters in Denmark and Sweden that provide turnkey cable solutions worldwide to connect various places and infrastructures. Therefore, they are active within a project business setting where they, together with other actors, collaborate intensively to deliver the solutions to their customers, such as nations. The current revenue of NKT is EUR 414m, and NKT Group has a revenue of EUR 430m (NKT A/S, 210519). Following the green transformation megatrends, NKT has increased its activity with many success stories in which some of them will be mentioned in the next subchapter. Furthermore, following the green transformation trend, all cables are produced in plants running on 100% green electricity and are on their way towards net zero. (NKT A/S, 210519). In January 2017, ABB HV cables in Karlskrona, Sweden, were acquired by NKT. The two main production sites for HV cables are Karlskrona, Sweden, and Cologne, Germany. Furthermore, NKT has many other locations, such as their HQ in Denmark.

Additionally, NKT has recently promoted its new purpose and culture. By extensive interviews and collaborative workshops conducted all over the company, they discovered the four shared beliefs of the new culture, which aims to represent the whole company, well-rooted in the day-to-day work experience, with success as a natural outcome. is distilled down to four shared beliefs together with their purpose: Connect a greener world. These shared beliefs are Advance, Connect, Deliver and Care, abbreviated AC/DC, which shall not be confused with the famous rock band. By stating Advance, NKT aims to challenge themselves and maintain the forefront by ruthless innovation. By stating Connect, NKT strives to collaborate with a wide variety and diversity of actors, corporations, and subcontractors. By stating Deliver, NKT is always determined to deliver and take ownership on their behalf of the contracts signed. Finally, by stating Care, NKT values safety and well-being as the organization's highest priority, with one characteristic being "hire to retire" to ensure good job security. Note here that the shared cultural beliefs AC/DC is not written in stone but open for interpretations and the creations of



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sub-cultures. We have observed a semi-regular nomination to award a specific person with association with one of these beliefs based on the person's recent achievement. We have also seen short videos of top management expressing and sharing their interpretations of the shared beliefs and purpose, including CEO Alexander Kara, who delivered the interpretations in such a charismatic way that one cannot help the desire of wanting to be included and support the purpose. In the same way, our respondents will share their interpretations and reflections on the culture later in this chapter.

### 4.2 Notable projects

The two largest projects NKT is involved in are all situated within and close to Germany. The country has set an ambitious goal for 2050, Energiewende, with 80% energy usage stemming from renewable sources (TennetT-a, 210519). The two corridor projects and PCI:s Nordlink and Südlink will be significant contributors to fulfill this goal, establishing new and modern cable solutions to meet the growing demand for renewable green energy.

#### Nordlink

The 2 billion euro project Nordlink connects Tonstad, Norway, to Wilster, Germany via offshore cables within the North Sea. The Norwegian and German power grids will be connected for the first time (Statnett, 210519). Aside from effortlessly exporting Norwegian stable hydro- and wind power to Germany, with solar power in return, further advantages of Nordlink include increased security and predictable supply situation, expanded market for power producers, and increased usage of renewable energy. In other words, Nordlink is "a cornerstone project for an interconnected Europe" (NKT, 210519a). The Norwegian governmental Statnett and the German grid company TennetT and the German investment bank KfW are responsible for the project. NKT is the main installer for this project, together with Nexans and ABB-Hitachi (Businessportal Norwegen, 210519). The total length is 570 km, with a total capacity of 1400 MW once operational. As of May 2021, the cable is fully installed. and trial operations are still ongoing.

#### Südlink

Südlink is the largest of the three corridor projects with a total length of 1340 km, being the world's longest HVDC underground Powerlink (NKT, 210519b). The 2 GW SüdLink HVDC project connects Nordlink from Northern Germany to Bavaria and Baden-Württemberg in the south. Südlink is crucial for realizing the German energy goal 2050 and fulfilling the green transformation. In addition, stable Norwegian hydropower will be accessible for Southern Germany, with a prosperous population. TennetT and TransnetBW are the principals, investing 10 billion euro in total (TennetT-b, 210519). In 2020, NKT was awarded the primary responsibility for constructing the most significant part of the project, covering approximately



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750 km (TransnetBW, 210519). The construction and installation planning has started, and the Powerlink is expected to finish in 2026.

#### **Troll West Electrification Project**

NKT became very recently awarded a turnkey contract to produce and install an HV subsea cable running from Kollsnes to the Troll fields in the Northern Sea in Norway (NKT, 210519c), holding about 40% of Norwegian total gas reserves. The electricity will come from Norwegian hydropower (Equinor-a, 210524) and reduce CO2 emissions equivalent to one percent of the total CO2 emission released in Norway (Equinor-b, 210524). Showing that sustainable solutions such as electrification of platforms can significantly reduce the environmental impact on energy production, solutions like these are usually carried out as a large project because of all the complex products and activities involved. Equinor explains sustainability and their criteria of business partners and suppliers in the following way:

"We look for business partners with similar values and ethical standards to ours, and we work with our suppliers to ensure integrity throughout our value chain" (Equinor-c, 210524).

#### Viking Link

The Viking Link Project is an HVDC (High voltage Direct Current) cable and is an electrical interconnector connecting Denmark and Great Britain. The interconnector will connect both countries' high voltage electricity transmission systems, thus allowing the flow of green energy in either direction (Nationalgrid & Energinet, 2017). In 2019 NKT was awarded a contract in the Viking Link interconnector project of EUR 90m by Energinet and National Grid, who are the owners of Viking Link. NKT will deliver 150km of 525 kV MI HVDC onshore power cable. The Power cable will be manufactured in Karlskrona, Sweden and the manufacturing started in 2020. The integration of transmission grids by interconnectors is an important part of transmitting a green energy future (NKT, 210524).

### 4.3 Collaboration

#### 4.3.1 NKT-respondents

#### Nils-Bertil Thorén

Mr. Thorén explains that HSE, the guidelines for health, safety, and environment, is number one. As a result, one cannot be on-site without a site induction (thorough introduction of the workplace). He further emphasizes that all teams must have access to the plan and have read and understood it. Before any collaboration during operation, they carry out their various operations preceded by a risk-assessed method statement evaluated. Every day



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before work, you have to do a toolbox talk with everyone involved as it may facilitate security since that is the number one most important factor. He also explains that it is good to reach out to the project emergency response in consultation with an HSE person to deal with it on-site. The positive aspect is that you can make several reports and lessons learned if necessary. Accidents and serious near misses must be reported immediately. NKT frequently uses checklists, lessons learned, flow charts, work packs, and special folders to ensure predictable success. However, the common difficulty is not the number of lessons learned but that they are under-utilized when launching a new project, according to Mr. Thorén.

To find collaborations, the tender department contacts the installation department to get information about sub-contractors. They can also contact people with experience with potential subcontractors who have been helpful in the past. NKT has good contact with customers and contractors, and Mr. Thorén has lots of numbers remembered. . the project organization, some wetting must also approve the collaboration before they can include a subcontractor because they want everyone to come home after the end of the working day. If a country's or organization's safety requirements are lower than NKT's requirements, then NKTs HSE is applied and communicated with their operational descriptions. If they are operating and their collaborators and subcontractors do not have the same safety mindset, then it is NKT's they will adopt. But if some other actors have stricter requirements than NKT's, then NKT will adjust to theirs. Good collaboration and a safe work environment is essential for long-term relationships. When asked about the decisions he was allowed to make, it depended largely on the problem. If a tool broke, it could be solved quickly, but larger problems had to be reported in all systems. He states that it is better to do something than wait because it is expensive to wait during projects.

#### Johann Gudbrandsson

When asking Mr. Gudbrandsson at NKT how one could find organizations or subcontractors to collaborate with, he explains that one has to probe the market. He states that they are living in a "niche world," underscoring the nonabundance of actors. They check to see what is available and then write scopes of work to sign a contract. For example, one can bring in three different companies, asking what they can do and what they cannot do. Further, it is necessary to check their credibility and support, such as a bank guarantee, so NKT does not get hurt. There is a complexity of finding new suppliers for larger projects, setting up an account, and making a frame order deal. The part that gets difficult is that sometimes a supplier's delivery time can be too long for the requirements needed for large projects.


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One gets a specific relationship with certain people during the projects. He then adds that he received some Christmas greetings from previous business contacts. He also sent out holiday greetings to his collaboration network. Mr. Gudbrandsson also highlights the importance of HSE throughout a project and that an HSE plan is created before the project to set up clear guidelines that on-site serve as a foundation of how to maintain a safe installation site during the installation phase for the involved actors. Therefore, during collaboration with different sub-contractors at installation sites, everyone has to work together for everyone to be safe, and that NKT personnel must remind not only each other but also sub-contractors of health and safety. He then continues about the responsibility all NKT employees have to report near misses and lessons learned and that it is everyone's responsibility to address every hazard. There are constant improvements that NKT is making on-site regarding HSE and getting even better. They have to see the situations from different perspectives to prevent accidents for everyone involved, both internal and external such as the sub-contractors. Therefore, it is crucial to report near misses because they can make a difference and avoid an accident on our sites. Lessons learned are invaluable to learn from past experiences. From recent experience working on the Nordlink project, different actors were involved during the installation phase that one collaborated with. These actors ranged from the customer, government agencies such as the water agency of Germany, sub-contractors, and many more actors are involved in large-scale projects. Since NKT collaborates with large agencies, it is vital to plan and keep within the agreed contract because decisions from local agencies can take up to six months to get permission and sometimes be shorter and sometimes longer. Therefore, NKT has to consider the customer, the contractors involved, and local and governmental agencies of various sorts. During this collaboration, they encountered some language barriers between different actors.

Regarding collaboration between business lines, the team of jointers (i.e., installation personnel that installs the cable and do the joints) can be from different NKT locations and different business lines. NKT installation personal also collaborates with different environmental agencies on-site, and NKT collaborates with different consultants to ensure that they uphold a high environmental standard. These contractors ensure and check that every involved actor has their permits and controls oil spills and other leakings. NKT projects contribute to the green energy transformation, and that Nordlink is a part of a more extensive system that helps connect a greener world. Many improvements have happened at NKT regarding environmentally friendly solutions, such as excellent waste handling at production sites and installation sites. Therefore, it is essential for any organization or sub-contractor who wants to collaborate with NKT during any stage of a project that they are certified and guarantee that they also take care of their waste in a sustainable



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environmentally way. The product is complex, the handling of the product is complex, the installation of the product is complex. Therefore, it requires that everyone cooperates and upholds the high standard of HSE and sustainability throughout the project. Not only does NKT, but everyone involved has to follow the same example of sustainability and HSE. If the actors NKT collaborates with have higher standards, NKT will follow those standards. Another approach of collaboration/cooperation is used for companies who are more solutions-oriented and willing to solve projects named Back to Back contracts. This contract splits the responsibility between the collaborating firms 50/50. For example, if a contractor is not following the environmental requirements on an NKT site where NKT is responsible, NKT gets fined, but by having a Back to Back contract, these fines would have been split between NKT and the sub-contractor 50/50.

Mr. Gudbrandsson argues that sometimes this can be advantageous during the collaboration and during initiation of the collaboration, By advancing the uncertainty question forward by showing the willingness of the other firm to collaborate with NKT. Because it shows that the firm or contractor wanting to collaborate is willing to connect with them by becoming as involved and serious as we are regarding delivering on time and according to contract and caring about the environment, HSE and sustainability through all phases.

#### **Respondent X**

Respondent X begins the interview by explaining that the working environment HSE is number one on their list. When asked about a previous experience, when it took time to advance a problem, he replied that back in 2012 in the UK, it took time to get approval for a new spare part because of the financial bureaucracy. Since NKT would have been fined if they were not finished on time, the time was of the essence. He further continues explaining how he made a lesson learned after the near-miss event. Today this issue is fixed and much more straightforward. He explains that to advance the same issue today, he sends an email to his contact informing that the jointers need a tool, and then the contact sends it. It is about going through the appropriate communication channels. He further explains that he is used to planning to ensure that everything is agreed upon beforehand when dealing with subcontractors found by external parties, such as if the local power grid has supplied the sub-contractors.

Respondent X is new to the current position as manager and further explains that he is from the Danish part of the company. The service installation part is not like the Swedish one, where they frequently work with different people, and there are many sub-contractors. Usually, the project manager and site manager are the ones initiating the collaboration. They have the relevant information. When arriving at the site, there is always someone connected to



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work. Find the right one. If something is needed from a sub-contractor during installation, Respondent X can always create the connection but needs to ascend the chain of command if high financial involvement. The financial part is another responsibility, but one can consistently deliver the connections made to the right person that can take care of the financial decisions. Some international connections are still keeping in touch from previous collaborations, some from the UK and Italy, even though the project ended a good business relationship.

The overall collaboration within NKT is explained by Respondent X that the team spirit is not as spread as he would have preferred between the different locations, and collaboration varies depending on the business location. Respondent X argues that Cologne (Germany) is themselves, and Karlskrona (Sweden) is themselves. Denmark is in the middle, and the Danish people go to their assigned location but do not always have the best feelings. The Danish installation is more of a support function to either the Swedish location or German location. The Danish location is much smaller, with only 200 people compared to the other two locations. The Danish site used to have 4500 people back in 1997 but was moved to Cologne. There used to be this thing called the Jointer Week, a week where the jointers from different business lines and countries came together and shared knowledge and information. Respondent X believes that this week increased team spirit and increased the collaboration between business sites. Furthermore, he argues that gatherings like these are a perfect place to share knowledge and information since there are some differences in how different countries work. Cooperation and collaborations are essential to share lessons learned between everyone, especially internally, especially lessons learned regarding HSE and sustainability. Respondent X argues that to increase collaboration between sites, more connection is needed. By connecting more, the overall delivery will benefit, and those interactions would show that one cares about each other, and the team spirit would be better by making everyone feel included no matter what NKT location or nationality one belongs to.

#### **Henrik Andersson**

Mr. Andersson explains that HSE is very important and controls how they work. It is a requirement from the customer and the company. Based on these rules, their contractors follow them. Collaborations are different in different countries. There are various problems. In China, for example, the most significant problems were not physical work but language as they barely knew English. It was very top-down hierarchically in China, and what rank and title they had were essential. The US has its share, such as that there would be delegation on how it would be done. In other words, the workers did no more than what was written on paper. Safety was the most crucial thing, but...



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"... (I) discovered that if you did not have the mindset, it could be dangerous. Some nations have a little shaky view of safety. England is complicated in its way because of much paperwork. Safe job analysis, among other things, is not a good thing. Together with other countries, Swedes have a way of seeing dangers and understanding dangers differently from the USA, England, where there is much bureaucracy. Everyone is different."

He further tells us how the initial approach to collaborations is made, how to act, and what to do when first arriving in a new country. Because occasionally, there are things companies have not thought about or recognized from the beginning. If it occurs, one has to find the correct locations, the relevant information and find the companies one will collaborate with to deliver the installation. Mr. Andersson explains that it is a bit different today than the ABB HV cable era and further explains that when working for ABB; they had local ABB offices one visited when arriving in the countries, one found the relevant information in mailboxes as well as to collect a potential job, or one could receive it by visiting the office. He emphasizes that local knowledge when coming to a new country is essential.

Lastly, Mr. Andersson argues the importance of having as many framework agreements as possible to the extent possible when collaborating with subcontractors internationally. Mr. Andersson explains that several of the contractors used in one project can also be used in another project. Internal and external collaborations are different and differ all the time. Recommendations are useful for long-term relationships. He explains that one way of internal collaboration is by different reporting variants, such as lessons learned that one brings back to share in all directions, both up and down. Mr. Andersson expresses how potent internal communication, connections, and collaboration between two departments can be. The tender department is in touch with those who have been to different countries, thus creating a bank of relevant information. Mr. Andersson indicates the extensive business network that exists between employees by the way he answers the question about how one finds sub-contractors. A constantly growing network because of the exchange of information

"Had different variants of reporting such as lessons learned that you bring back both up and down. [...] If you throw out that you want a certain contract, you get a lot of offers. I get calls from tender on and off. We also have collaboration between other departments such as technology. We always include one from them in the projects."



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#### **Filip Elfmark**

Mr. Elfmark has a position as a project planner and project member of the Troll West Electrification Project, which NKT officially signed two weeks ago. There will also be a project kick-off for this project. The position as a project planner includes establishing a plan and updating a plan after the outcome to identify potential risks during the project. The project planner role also includes running scenarios such as what will happen if a specific activity gets delayed, then answer what it affects and then demonstrate this both to management and the management of the project. Mr. Elfmark explains HSE and the working environment in the following way:

"I would say I think of both the work environment where you should not injure yourself at work physically. I also think of a psychosocial work environment where you should not work yourself to death as well and that it's important to find a balance between work and leisure to function it is incredibly important that too. For many of us, you need to work overtime relatively often "

A previous position Mr. Elfmark held was the role of technical preparator.It includes establishes a routing with operations all the steps that the cable should go through. Furthermore, preparing project-specific information for operators. In the end, the ones who will look at it are operators in the production, so they know how to manufacture the cable. Therefore it is important that what one communicates is unambiguous and that the message of information one convey is clear to make sure everyone understands it correctly. Mr. Elfmark has had contact with Germany, they had a collaboration when NKT Karlskrona merged with NKT. They had a workshop in Malmö with some Germans, trying to get to know each other, find out how each of the sites works, and elaborate that the different sites have different opportunities. The installation department probably has other problems than the rest involved in the projects. And tells us to remember that the job is also a commitment as well.

The decision process depends depending on position and role. For example, as a technical preparator, he could decide which drum supplier was considered most suitable. He could practically decide which machine line was most suitable for a particular cable. Usually, it can be complicated when working in an organization like this, and the decision paths are quite long, unfortunately. If it does not create any value:

"I kind of actively choose not to get involved in all the stuff to focus on the right things quite simply."

#### Jan Lindhe

Mr. Lindhe tells us a bit about his role in NKT. He supports NKT with various advice and suggestions. However, he is a pensioner, and we were soon to find



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out why. During his 45 years within the power cable industry, he has worked in Baghdad, Iraq for 7 years, most of Europe, Asia, and India. He has worked mainly with subsea cables thus mainly been offshore. He has also helped the land cable project Nordlink and is currently involved in Südostlink, and supporting Südlink. He worked for ABB HV cables, then NKT bought the HV cable division from ABB five years ago. Now they have a Danish-German owner running it. We asked him about this merger, considering he was there before the merger between ABB HV cable and NKT. He did not think it made that much of a difference since ABB had it divided anyways, and how they just were part of their system, although they followed their regulations and worked in their spirit. Further explaining that:

"Germany and Denmark have a completely different hierarchy than we have. [...] We have quite a lot of room for maneuver as individual employees in Swedish companies to make own decisions."

Regarding HSE, he tells us that it has been major improvements during the years; according to Mr. Lindhe, finding other companies and subcontractors is easy by using an extensive contact network and colleagues within NKT. Explaining that HSE and quality have become a larger part of evaluating entrepreneurs and contractors and that basically, a more expensive entrepreneur can be picked if the entrepreneur knows and fulfills a higher standard of HSE and quality. Regarding HSE in other countries with different cultures, he explains:

"Well, you have to balance. The main thing is you don't hurt anyone, and that no person gets hurt that's the main thing."

The experience takes time in this business, and if someone just started their employment or came from another business, then the person has no idea about reading between the lines. It is something one cannot read yourself to know. He indicates a certain lingo and understanding between actors who have been in the business for some time.

Mr. Lindhe explains that his bosses have never thrown him out in the cold and always backed up his decisions. It is important to have the support of your superior if one has to make a decision. Regarding an improvement from lengthy and costly decisions, he thinks that an organization should outsource the authority as far as one can in the organization, and of course, one has to put it on people that can be trusted who are going to take that authority, but that's the only way to get good results and make everyone feel like they're part of the business implying that the decision depends on the context as well as the extent of outsourcing the authority of decision. Furthermore, he believes that bonuses depending on results will make employees feel more part of the business. He tells us that they usually celebrate on sites when archiving a goal and that unofficial team building occurs where the members



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sometimes go out and eat on Friday evening. Usually, the conversation is about the project because that is the common factor in a big workplace. If an NKT from the office visits the installation site, they usually join on Friday evening for a bite. He further considers mentoring and exchange systems to jump a little between departments and between the factories. The exchange system should be for everyone since one can learn a lot about collaborating and improvements on all levels, such as production. Because one does not understand what you're not normally working on, he thinks that more feedback is good and that programs like this would increase the feedback. He further expresses that more integration between the businesses is needed for increased contact networks, collaboration, and cultural understanding, thus making the organization more effective and productive. There are already some programs, but these could have worked even better to find out different routines and choose the best ones.

#### 4.3.2 External respondents

#### Katharina Onken

Ms. Onken begins by explaining that she is an external NKT employee. Since November last year, she has been part of the NKT member group and is the responsible project installation Manager of one of the German corridor projects called Südlink. After the introduction, she informs us that they have just had an HSE introduction yesterday about the project and genuinely office work. Ms. Onken further explained that the focus is definitely on the HSE part here. She concluded that HSE is one of the most important aspects at NKT.

Ms. Onken has experience from different parts of the world, such as Asia, Canada, and the USA, working with the energy sector and different companies. She has experience collaborating with major companies such as Huawei. She explained that different aspects exist when collaborating in different parts of the world, such as culture, that one must consider. There also exist different aspects when collaborating both external and internal regarding communication more about this later. However, as an example, when asked how it is collaborating as an external NKT during this project, she explains it like this;

"I don't know whether it is an NKT specific one. But we talk a lot, and we had a lot of meetings already in the past. So the communication is running smooth, let me say."

She tells us that during collaborations, it is important to act directly when faced with a problem and find the right person who might have the answer. Further expressing that if faced with a problem or issue, one has to act and afterward make a lessons learned out of the incident to take mitigation actions if faced



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with the same issue in the future. Ms. Onken highlights the importance of including new team members in the project, that onboarding is good, and that project kick-offs could increase collaboration between actors working in projects. She also informed us that everyone collaborates around lessons learned to prevent potential future incidents.

#### Jürgen Foerster

Mr. Foerster is a German citizen and is an external NKT who started in September last year as a project manager for the Südlink project. Before working with NKT, he worked as a project manager mainly for the metal and production industry worldwide. Mr. Foerster tells us that he has had some HSE meetings with NKT already and that Covid-19 makes him and his colleagues work from home. He has worked outside of Germany for 20-25 years with projects in different countries and collaborating with different nationalities, governments, contractors, and large companies. Some of the different countries are Ethiopia, China, Hong Kong, Australia, the Philippines, Vietnam, South Africa, and a German government project in Botswana. Mr. Foerster has collaborated with large actors within the private sector, such as Deckel Maho Gildemeister, ABB, Siemens, CNC machinery. The other half of his work was also as a development worker in those countries and technical colleges where he gave students some theory and practical lessons and collaborated with different government institutions. Mr. Foerster emphasizes that if a problem occurs, it is important not just to discuss it with some people but instead share it with some people on the project side to see what can be done to solve the problem.

Mr. Foerster explains that collaboration within large projects such as the Südlink project involves many different actors. Therefore, it is not like one person talks to another person in large projects like this one. It includes collaboration between multiple actors, private companies, and governments. Mr. Foerster continues describing collaboration within project business in development work doing turnkey projects. One project he was part of in Africa built technical schools in Botswana that included working with the Botswana government and the German government, which financed 50% of the cost. The project also sponsored new technologically advanced machines and taught staff for several years. Co-operations of governments and actors achieved the project. Collaborating within development projects is different since it includes other actors. In development projects, the collaboration could be with the teacher sometimes and the government. The most important thing in development work is that the other side understands what, and maybe step by step as they improve it improves the quality of the living standard in those countries.



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Mr. Foerster describes that there is a difference between private and development businesses. It is more about money, quality, time, and the calculated green ends in private business. In both cases, with or without problems, it is essential to know who the different stakeholders are and how many they are. With too many stakeholders or the stakeholders or colleagues are not in or from the same business, it can be complicated to understand each other and lead to lengthy discussions.

### 4.4 Communication

#### 4.4.1 NKT-respondents

#### Nils-Bertil Thorén

Mr. Thorén experiences that today there is tons of email going around, but there is still an absence of communication between the jointers and site managers on site. He further elaborates that email and Microsoft Teams are the most common communication channel between the project and the organizations compared to the communication channels he uses while on site. Their intranet is also used, with many meetings announced. On-site, there are lots of phone- and Whatsapp usage. He prefers Whatsapp since it is written confirmation and immediate. With a single message, he can immediately pause the operations on site within a 200 km range when necessary and from there receive confirmation from everyone involved. Whatsapp is an excellent example that one can create a group that can function as a direct message in case of emergency.

#### Johann Gudbrandsson

Mr. Gudbrandsson prefers to call directly if essential and then a confirmation email. However, they get many emails, so they can get lost in all the emails they receive. Besides heavy email usage, they use Microsoft Teams. If there are problem situations, there is a lot of mail and phone calls. If it floats on, there is not so much, only status updates and confirmations. Daily reports, nowadays created with their tablets, are saved, and they have a project review. Mr. Gudbrandsson admits that it can be a little too much reporting sometimes. Externally, they communicate primarily by meetings. If the customer was involved, the communication could be bumpy, but sub-contractors usually had ready-made solutions, and it went smoothly. The communication worked satisfactorily when NKT needed to route cables over several routes, but the sub-contractors thought we only had to do it over two sections. It went fast. Everyone involved saved time. Sometimes you cannot get sequences to come along. It can also depend on the contract you have written. As mentioned earlier, the Back-to-back contracts make involved actors more willing to solve



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projects and communicate more. Back to back means that if NKT fines, they get fined. They can become a little more cooperative, and that's an advantage.

#### **Respondent X**

According to Respondent X, they communicate with Microsoft Teams all the time, as well as by telephone and email. Then afterward, Respondent X can help the jointers. It is essential to be on-site because you learn a lot. The information face to face on-site travels much faster and more straightforward than emails. Before, when working as a project assistant, he was on-site and had no time for email during work hours, which is stressful. Now he can use his work hours to answer emails. When asked about instances where the communication was good, he tells us about his Italian project manager, who was very good at getting stuff done immediately.

"I don't know how he did it, but he solved our issues right away. You had an answer half an hour later. Lots of problems can be solved quickly if just proactive. Go directly to the source! Takes time in big companies, so people must clarify."

#### **Henrik Andersson**

Mr. Andersson said that there is too much time allocated to administration. Otherwise, he uses email, Microsoft Teams, project letters, weekly and monthly meetings. He uses phone calls as well, but a written statement has more weight. However, you can always call if in a hurry. In China, he encountered problems with communication not because of the technical communication channels. Instead, here it was a language barrier since they did not speak English that well. Mr. Andersson states that the lessons learned are difficult to implement and information tends to fall out when asked regarding some general suggestions for improvement.

#### **Filip Elfmark**

According to Mr. Elfmark, communication is essential, and it is also vital that one does not get disturbed too much. He mainly communicates through emails and using Microsoft Teams, especially now during the work environment caused by Covid-19, and explains that digitalization will make communication more effective. Remote working has helped filter out some of the noise, and instead, one finds out what one actually needs to find out and believes that maybe he has become a little more efficient. Mr. Elfmark urges the importance not to let the noise distract one from the mission or the thing one should focus on. The noise is described as everything going on in the background that can distract one from focusing on the right thing, solving a problem, or achieving something. The noise can also be then things that are unnecessary to think about or listen to when conducting different tasks.



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#### Jan Lindhe

Regarding communication, he explains that much time you are out in a workplace and sitting as head site manager, and one can say 50% is just email then maybe reporting 20/25% and the rest is out on site, the use of Microsoft Teams has become common now as well. Sometimes he feels that there is too much email and a lot of reporting that one loses contact with the business. Therefore, one has to have the site managers run around and take the details. Mr. Lindhe further indicates the importance of trust between him and the site managers that report to him and his role in supporting them. Currently, he is leading five managers.

"You have to let them have a full mandate to make their decisions, and if they come to me, I have to support them. Even if it was a wrong decision, I have to tell them as it is but next time, do this instead, but now we will continue with it, forget it happened, okay. That's the way it is."

As for some computer programs, he believes it is important to integrate everything it has to be adapted, and everything must be sewn together. It highlights the importance of complete digitalization that all digital systems need to be integrated and concludes that it is a good saving if everything is synchronized.

#### 4.4.2 External respondents

#### Katharina Onken

Ms. Onken communicates between 8-12 hours a day (depending on project status) and primarily uses email, WhatsApp, Microsoft Teams, and phone, but for official matters, one needs to write via email. Ms. Onken also explains that she prefers a mix of 50-50 being on-site and behind the desk. The choice of communication channel also depends on which culture one is facing, such as the Asians who prefer contact using WhatsApp for everything, whereas Germans are more likely to want to discuss using emails. She believes in general that the communication flow within the project is quite good because...

"...we are having weekly project meetings in which we discuss all of the topics starting from the production of HSE, quality, and installation, and so on so that you get a feeling of how we are the project at all topics, not only your unit."

The project director initiates these meetings, and the meeting gets documented, which is very good, according to Ms. Onken. The Südlink project also has quarterly meetings discussing lessons learned, previous problems, and



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solutions. As a result, they have implemented much past wisdom from previous projects.

#### Jürgen Foerster

Due to covid-19, they primarily work remotely and almost always use Microsoft Teams and emails to communicate. Mr. Foerster states that it has its benefits, but it would be good to meet each other again. He prefers face-toface meetings when working on-site, but email provides a record that can be saved for later. In general, the communication and understanding of each other are better today. He found out many years ago that if one is more open to colleagues, they tend to feel more about now. By sometimes speaking about personal situations, one can get a better opening, and the other side usually opens up a bit, and the understanding of each other becomes better. Drawing from experience, he says that the northern Europeans, including the Germans, are usually not doing that at management levels, or even higher management level instead they start immediately with the project, it is all about timelines, and in people and resources, what we need.

### 4.5 Culture

#### 4.5.1 NKT-respondents

#### Nils-Bertil Thorén

When asked regarding the culture of NKT, Mr. Thorén answered that there are visible cultural differences, almost seems like a different organization for Sweden, Denmark, and Germany. He believes it is important to line up the progress between the different departments, which can be solved with more communication, collaboration, and processes. Nonetheless, he likes AC/DC. For him, it is a guiding star, a goal to strive towards, but not better than how you collaborate towards the mutual goal. The lessons learned documentation are more reliable than goals, says Mr. Thorén. Mr. Thorén finds that they are not shared as much as they could be before a new project starts, but Jointer week was a good concept that they have used. Mr. Thorén encourages people not to be afraid of admitting mistakes and take ownership. Important to solve problems in the early stage.

#### Johann Gudbrandsson

Mr. Gudbrandsson admits as well as Mr. Thorén, that there are cultural differences in the day-to-day work. A lot of Germans want their backs free. Many find it difficult to admit their mistakes. Not so much so with the Danes. Moreover, Mr. Gudbrandsson states that their German site managers were not managers but only supervisors. They did not make their own decisions, and they did not dare to do anything. Mr. Gudbrandsson mentions exchange



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programs as good to see things with new eyes. However, people must be openminded and not isolate in their bubbles. Moreover, Mr. Gudbrandsson advocates the value of using common sense, thinking outside the box, and being yourself. To elaborate on the previous point, Mr. Gudbrandsson says:

"You could see, for example, someone explaining something German to English via Google Translate. A little wrong picture of what it is all about. [...] People do not talk about the same thing. Example from Karlskrona: 'M/S'. For the planner, it means milestone, but for the other person, it means method statements. In the email conversation, they talk about different things. Became completely crazy emails. [...] I had to intervene there."

When we asked Mr. Gudbrandsson how they are implementing the culture, he explains:

"The concept is quite new. We see that they work to ensure that everyone is an environmentally friendly guy, all companies. Then we will report all the fuel we have, etc. More requirements there. Plus, they talk about helping each other a lot more. However, these are big visions, so many will probably drive as usual. You have to mix people to get this. If you mix it, it spreads to certain things. Also depends on the manager, what leadership style he has to get this out to the employees so they can take part. You have to give people time too, change habits."

When we asked Mr. Gudbrandsson if he had observed any changes that the new culture brought, he told us that NKT delivers on time and upholds a good after-sale service which the customers appreciate. For customers, NKT is the natural choice. Mr. Gudbrandsson jokingly states that he contributes to the culture by working from home. If it is a day with many meetings, it's better to work at home, saving fuel and office space. Otherwise, NKT replaces substances and certain materials. They have changed from fossil fuel to alternatives. The subcontractors are certified and guarantee to take care of the waste in an environmental way. NKT then tracks the masses.

"You are controlled by the customer as well. An environment-fellow is usually running around and checks so we are within the permit, different environmental efforts such as save the frogs, etc., and also controls that there is no leaking oil or such thing leaking in certain areas. Getting the transportation down is good. However, we have complex products so difficult. Green energy for households or bad energy during the project. In the end, it gives more back."



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#### **Respondent X**

Respondent X is familiar with the new culture but has not thought about it too much. He says that it is not affecting the company's lower/more operational levels because they tend to stick to what is working instead. The new culture feels, in other words, like an external statement for stakeholders. Respondent X continues by telling about his view on cultural differences, which mostly characterizes by language issues. He also mentions that there is no team spirit between the Swedish, Danish, and German departments, mostly keeping their local knowledge and know-how.

We asked Respondent X what he imagined by the shared beliefs (Advance, Connect, Deliver, Care). He answered that Advance has lots of meanings and that he is advancing right now. He continues by stating that NKT should care more. Give more appreciation and gratitude to workers if they have done an excellent job. Instead, NKT immediately focuses on the next project. According to Respondent X, NKT does not try enough to have all the members and staff involved, and the distribution of resources for each employee needs a little improvement. In addition, NKT should be more concerned regarding family situations because workers are often on-site for an extended time.

When we asked regarding Deliver, Respondent X immediately and proudly stated that he always delivered. Nevertheless, there are lots of work that seemed like Respondent X could not do, but he still delivered on time. He concludes that NKT needs to improve the connections. According to Respondent X, the business lines are not connecting with each other, the different nationalities. Differences are too large at the moment. He finally adds that he is nonetheless proud of the progress made by NKT.

#### **Henrik Andersson**

Everything has to be renewed, so NKT has a strategy. It does not affect Mr. Andersson's work so much, though. He did not know how top management broadcast the culture but comments that different things grow over time and are not a big deal. They do changes that correspond to the strategy and what comes from the line and project within the work. However, it is not explicit but a part of daily work to advance the product to stay at the forefront. No business can survive if not developing. Lessons learned are instrumental here for continuous improvement. HSE is good, though, according to Mr. Andersson. Regarding Deliver, it is determined by agreement, contract, and scope of work. The rules are the real guidelines, and it is important to do your work. Furthermore, he tells us that there are always mixed cultures of people from different nations. It does not matter for NKT which country everybody is coming from. What is important for NKT is the similarities or "lingo" that



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they express when working together to communicate. This ensures good collaboration both on- and offshore.

#### **Filip Elfmark**

Mr. Elfmark has not traveled that much yet, but he did some traveling scouting suppliers of cable drums for various projects in his previous role. For instance, he interacted with drum suppliers in Germany for the Südostlink project and drum suppliers for Viking in Denmark. Further replies to our question about national culture with:

" People have slightly different ways of looking at things. Overall, I do not think there is such a huge difference."

Mr. Elfmark did not recognize the organizational cultural work that much since he did not believe they were broadcasted that much:

"One does not really have time to check these updates about culture when working."

Further explaining that he has heard about the culture and shared beliefs, but it is not something he has put much time and focus upon, and unfortunately, it is a bit like that in the real world. It is a bit different from theory, and usually, one does not have time for these kinds of things. Even though culture is really important in every way to improve a company and is one of the most necessary things to work on and highlights that:

"It is just that culture itself is so incredibly complex, and it takes so incredibly long time, and it is necessary to have the whole company with you all the way from the top to the bottom. [...] Unfortunately, it does not get high prioritized because usually, one does not have time for these kinds of things because of the daily tasks needed to be completed and have some time off as well."

When further asked about past or present experiences that would fit into the shared beliefs. Mr. Elfmark replied that he has experiences fitting the shared beliefs.

"It's clear you have it throughout all the years, and I guess I am kind of imprinted after all the years I've worked at the company so I have some culture in me already like so it is, and it may be a reason why I do not even know about these shared beliefs what they are straight away, I have no idea what they are actually"

He was explaining Advance in terms of the development of new processes and routines. Connect was explained in another way: Connecting,



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"Yes, that kind of thing happens all the time, but it's nothing I reflect on like that, but in reality, it happens all the time."

Deliver was explained in terms of finishing a project preparation. And Care was explained in the following way:

" The first thing I think about is your colleagues that you should care about each other and be "caring" about each other. You should also keep track of each other, how you feel, and also how the progress goes."

#### Jan Lindhe

Mr. Lindhe explains that he has been in the organization for so long, so he has experienced different organizational cultural changes, and that organizational culture should maybe be built bottom-up but is well aware of the need for support from upper management. National culture is always different, but he has managed to collaborate with different actors throughout the world.

"Follow the local rules. The Swedes are a little bad to take the custom where you come [...] but there are many cultures where there is a connection between making a mistake and getting fired."

He further explains that a strong organizational culture such as HSE makes it possible to influence in a good way and make sure no one gets hurt when doing a job.

#### 4.5.2 External respondents

#### Katharina Onken

Ms. Onken describes that one needs to consider different aspects, which are coming together with culture. Like the atrium parts can be different, so it begins when you say hello, you do not shake hands, for example, if it is forbidden there. Or if you have some from Arabic or United Emirates customers, then one must behave in different ways, with international or national customers. She states that if you are a woman, you especially need to consider these rules. Some customers inform beforehand of cultural considerations like some Asian parts where they do not shake hands, or if they are from areas where they are not allowed to take hands or touch a woman, they could tell you in advance. She highlights that a strong organizational culture helps with this as well as researching beforehand. She has not heard of the wording AC/DC again, mentioning that she is external. Regarding the work environment, NKT is concerned with safety and hence encourages remote working.



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"It would be better for the project environment, having framework conditions and having an office. So they care a lot that we do not work in an office where it's not 100% safe for us."

We asked Ms. Onken what she imagined by the wordings (Advance, Connect, Deliver, Care). For Advance, she says that it could be about advancing a problem forward and explains that she loves to take care of a problem and solve it whenever she sees one. Ms. Onken further tells us well that they have many monthly meetings right now in which they talk about project problems and possible solutions.

"So many sessions are running, where we also can give our opinion and what we think how we could improve it and what we think about the current state."

Moreover, she answers our question about how Connect can be interpreted that it could be about bringing people together and that she likes to bring people together when they have a dispute or when it is helpful to guide them together in a particular circumstance. When we asked regarding her point of view on Deliver, she explains that there are always deadlines in projects and that it is important to deliver the respective documentation and information during a specific period. She concludes that she has never experienced the onboarding program, but she is also an external consultant. However, she does have a mentor, Jan Mr. Lindhe. According to Ms. Onken, Mr. Lindhe is very helpful in getting into the NKT details.

#### Jürgen Foerster

Mr. Foerster explains that many people residing outside of Germany and even some Germans say that the German culture can be perceived as a bit cool and more business-oriented. He then continues:

"if you're working more than 20 years outside Germany, then you can immediately feel the different culture. That many countries, not including Germany, are more warm, and especially if we talk about Africa, Ethiopia or Botswana, you can feel this open culture that you get invited and get in, in contact with the people very, very easily. But in Germany, especially, and also in the northern part of Europe, if you come to the cooler climates country, then of course, it's maybe also more difficult to get involved in their culture. And if we come south to Europe, Italy, Spain, Greek, and so on its starting this open culture."

Mr. Foerster has heard about the organizational cultural work during meetings where they had discussions and received information. He describes that if you have big players and they come together, they have to find out about the



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business culture from those different countries to find hopefully the best way to come together and work in good situations. If you merge some companies, then it all the same, and not the same in some companies. In some companies, they will find out about that. From his experience interacting with various cultures, he says that it is important not to put too much pressure on the other side, and then maybe try and open up the other side with culture and some private things to find common grounds.

### 4.6 Summary of our observations

During the 2020 annual report meeting, it is clear that NKT throughout the daily operations states "zero by choice" regarding health and safety concerning accidents. There should not be any accidents or near-accidents ever. NKT's live-saving principles are displayed in various artifacts. An example of a particular artifact is their mousemats, as shown in figure 1 in Appendix B. It is very important to treat people with respect, address every hazard, showing mutual responsibility for safety, and always work safely. Moreover, we also observed a willingness to collaborate with other business lines and discover the possible solution to fulfilling this wish. During another webinar focusing on one of their smaller sites, Falun, the diversity- and inclusiveness-plan was greatly emphasized with people being their greatest asset. They seemed to be proud that their new culture was founded and advocated without any external support.

Lastly, we observed a webinar in which NKT interviewed two of their many customers, mainly about NKT's organizational culture. Both customers appreciated NKT's daily work acting as a bridge between actors, with sustainability as a differentiating factor. Certifications for sustainability are very important to have for all actors involved. The person representing the first customer like that NKT focuses on safety and sustainability. NKT is using 100% renewable energy, thus providing a clear example for the rest. In addition, he mentioned their good collaboration and transparency, plus that NKT only signs up for what they can deliver. The people representing the second customer thought NKT was too early to tell whether the culture will make a significant impact but hoped for it. When asked regarding potential improvement, the people expressed the want for more webinars and video communication. A co-platform should be very useful.



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## 5 Analysis

This chapter will analyze the empirical findings and connect them with the theoretical framework. The theories and findings will be compared to each other, thus highlighting similarities and differences for discussion. The analysis chapter is structured into the three themes in order: collaboration, communication, and culture.

### 5.1 Collaboration

The network approach provides the best understanding for the occurring collaboration in project business (Melander & Pazirandeh, 2019; Hollensen 2020; Owusu & Welch, 2007). Johansson & Mattson (1995) and Blankenburg (1995) state that instead of relying on traditional obstacles for expansion such as psychic distance or market knowledge, the corporation uses its social networks to gain more world influence. Our empirical findings display the importance of a list of contacts. The contacts were used and reused throughout various projects as an established way to gain more lucrative contracts. NKT analyses the market and then evaluates the incoming quotes to form a new alliance, which agrees with Blankenburg (1995), Johanson, and Mattson (1995). Most of the contacts are used from one project to another, which is in accordance with Owusu and Welch (2007), that the network approach can be used and reused with different networks to further expand the corporation. It is, therefore, clear that their established contacts are invaluable when internationalizing via the network approach. NKT uses the network approach extensively and uses their contacts and influence to gain more collaboration.

Moreover, many researchers emphasize the sheer importance of social relationships as the foundation for successfully implementing the network approach (Björkman & Kock 1995, Hinttu et al., 2003; Owusu & Welch, 2006). The respondents realize this and are proud of their long-term business relationships. It is clear that NKT's success has mainly sprung from this cultivated focus on their partners and customers, as these generate new opportunities for the business sector. According to Ellis (2011), one can view the network as a flow of value, for instance, information and money, between independent actors. The NKT respondents mention lessons learned as invaluable to share past experiences with future projects. This knowledge transfer mediated by documentation such as toolbox talk and lessons learned defines the business relationships, which the respondents agree to. Therefore, a good level of knowledge transfer must remain high to learn from each other and within the organization quickly. Indeed, the Südlink project has adopted many lessons learned from previous projects to propel progress forward on tried experiences. Since business networks evolve from exchanges between actors (Hollensen, 2020), it is encouraged that NKT should motivate for more sharing of lessons learned and past experiences, as it is already an established



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strategy. Fortunately, according to the customers, NKT is reliable, transparent, and always delivers, illustrating a widely adopted internalization of lessons learned.

The respondents had the freedom to decide on the spot if the specific size of the issue, context, and urgency allowed for it but needed to ascend the chain of command if a more influential decision had to occur. The contracts and framework agreements function as guidelines for each project, determining how the day-to-day collaboration looks like. For instance, Südlink utilizes a central service provider protocol for the clear assignment of each responsibility within the massive project. The established and trusted usage of agreements is in accordance with Hollensen (2020), who describes business relationships as dynamic, performed by independent actors glued together by personal, technical, legal, and economic ties. These ties determine how the relationship will act out for mutual interest and thus a cornerstone for projects. Concretely, the ties manifest as the hierarchy of decisions preplanned by the quotes and contracts. The framework agreements also allow for interpretation and some flexibility for decisions supported by the empirical findings. Thus, it seems like the trust is high, given the presupposition that flexible arrangements impose an underlying implicit agreement that both parties will perform at their best. The situational context determines the role and priority of the relationship as well.

Furthermore, the respondents mention the assigned roles, levels, and flow charts as a natural result of the business relationship in practice and the importance of abiding by them. However, the respondents state that waiting for a higher decision entails real issues such as higher costs or overall deficiency. Also, too many decision-makers cause a malfunctioning process and result. Therefore, it is vital to locate the right person for the particular solution, using open dialogue and internal and external network knowledge. Ford et al. (2011) highlight the network being the relationships through all layers of the specific area. Thus, it is paramount that a thorough and agreed plan on how to collaborate and decide, with as few timewise frictions as possible, could be an anticipated solution for NKT.

In addition, we received different answers regarding their internal collaboration. It could be perceived as a more open environment when collaborating internally compared to the more external side. Contrastingly, there is friction between the business lines, which entails some differences in perception. Holmlund and Kock (1998) stresses the importance of social relationship building, proportional to the size of operations and resources. Therefore, a more collaborative and social environment across the whole corporation, opening up the perceived barriers, would allow for a more robust network, structured collaboration, and better gain of the current mega-trend that is the green transformation. Fortunately, as previously elaborated, the



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Südlink project has implemented many changes and previous wisdom, thus already opening up the perceived barriers. Finally, according to Castells (2010), a network consists of actors and links. From our empirical findings, we believe that NKT often acts as a link between different actors, rather than only being an actor, supported by our observation of the official webinars conducted. The core business of NKT is to connect places, for instance, a wind farm company, to the local power grid. By acting as the bridge between the wind farm company and the power grid owner, NKT can fulfill a connection between the two actors and benefit from the business relationship and thus create a complex network, in accordance to Ford et al. (2011).

### 5.2 Communication

These two models can provide a possible way to understand communication.: The simple version proposed by Shannon and Weaver (1964) and the dynamic model by Barnlund (1970; 2017). Despite the common feature of a message with possible noise distortion, Barnlund's (1970) model considers all the relevant contexts (social, relational, physical and psychological, and cultural) to form the co-creation of meaning. When asking the respondents regarding the communication, it was apparent that the different contexts specified in Barnlund's model significantly impacted day-to-day communication. All of the respondents had solid international experience and thus were familiar with other perceptions of communication. They provided stories in which there were misconceptions in various forms: cultural, language, social, etc. These misconceptions were captured in lessons learned. In summary, it is clear that the social, relational, physical, psychological, and cultural contexts are prevalent in reality for the co-creation of meaning and thus validates Barnlund's model. However, from the empirical findings, the noise was still prevalent as a negative factor for communication and the co-creation of meaning, arising from the barriers mediated by the different contextual factors. We argue, therefore, that the noise factor should be included in Barnlund's model, and the communication is highly dependent on the different contexts affecting the co-creation of meaning.

Hollensen (2020) mentions various mediums used for organizational communication, mostly leaning to modern technology such as email, telephone, and video calls. Indeed, email was the standard protocol for asynchronous communication for all the respondents, and it contributed to more than half of their workdays as it provides an easily written record of points discussed and decided. The email was also an important confirmation of agreed info via phone calls and meetings, providing easy access to documentation. Meetings mediated by Microsoft Teams and phone calls were used frequently as well, in particular with external actors. Moreover, instant messenger (IM) was greatly favored as an official but immediate medium, primarily on-site. For instance, Mr. Thorén said that he could, with a single



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message, immediately pause the operations on site within a 200 km range when necessary and from there receive confirmation from everyone involved, which Mr. Thorén found very useful. From our observations, more advanced communication such as the intranet was also popularized, especially for announcing company news and info from the apex. Webinars were conducted and appreciated by NKT's customers, who in turn wished for more. However, many respondents were not familiar with the intranet. Lastly, as previously mentioned, detailed documentation, lessons learned, and reporting contain the bulk of the structured communication used for projects. It is apparent that NKT favors long-term documentation, assisted by email and IM, and strives to convey and use the information in the future, propelling the business forward. NKT makes good usage of modern technology, which is a recent phenomenon according to Hollensen (2020).

The classic management, human resources, and system perspectives throughout the organizational communication literature are important perspectives. Classic management values standardization, predictability, and hierarchy to maintain maximum efficiency (Jablin & Putnam, 2001; Weber, 2009; Fayol, 1949). This perspective is applicable when referring to the sequence of decisions and the hierarchical nature within NKT. As elaborated in the previous subchapter, the business relationship is concretely shown as written agreements, aiming to secure a profitable and mutually beneficial outcome. We believe NKT favors clarity and unambiguous project instructions, pragmatically attentive to feedback, and therefore values clear instructions. Almost all the respondents told us that meetings are structured, the work is well documented and the assigned roles are abidingly followed. Moreover, the classic management perspective states that every actor is aware of their placement and responsibilities (Jablin & Putnam, 2001; Weber, 2009; Copley & Taylor, 1923), which most of our respondents confirmed.

However, the human resources perspective seems to be more in line with NKT:s daily operations. Instead of cogs in the wheel, the human resources perspective views the employees as valuable, contributing to more dynamic communication based on their needs (Jablin & Putnam, 2001; Thompson et al., 2003; Ouchi, 1981). As will be elaborated in the following subchapter, all the respondents express the importance of care. From our observations and the documentation we received from the intranet, there is no doubt that NKT has a distinct human resources view, and employees are vital to them. Safety is exceptionally essential in the workplace, and initiatives such as mentorship, onboarding, exchange programs, and "hire to retire" are used. NKT:s activities are tightly aligned with Maslow's pyramid, which according to Conley (2017) and Mayo (1924), portrays different satisfaction levels. The work safety satisfies the lower levels and the other initiatives the high levels. Most but not all of the respondents agree that NKT takes good care of personal issues. From this information, we believe that NKT has a spectacular focus on



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the workers indeed, but they need to make sure that this intent reverberates through all business lines as it might not be the case always. Lastly, Jablin, Putnam (2001), and Brady (1989) emphasize the importance that the people are invested and empowered, something that the empirical findings agree with.

Kast and Rosenzweig (1972) present the system perspective, viewing communication through interdependent nodes responding to changing environments. The ecosystem consists of inputs, processes, and outputs from the organization, emphasizing the optimal function of all three (Miller & Barbour, 2015; von Bertalanffy, 1968; Katz et al., 1966; Miller, 2014). From the previous discussions in the collaboration subchapter, it is evident that the network theory has a foundational role in NKT:s operation. Project business is dependent on intense communication (Owusu, 2002; Ford et al., 2011). Therefore, this perspective is highly applicable to network theory and project business in general. Lessons learned and documentation have always been emphasized by the respondents as methods to facilitate the process from input to future outputs. In addition, the customers favor the communication NKT provides to transform their capacities for the greater good. In summary, all the three perspectives: classical management, human resources, and system, are all applicable for NKT, although in various ways. While the system provides a more holistic aspect, the classical management perspective is utilized on-site, and the human resources perspective keeps the whole kit and motivational spirit high, more elaborated in the next sub-chapter.

Lastly, Chevrier (2003) discovered the importance of mutual interest for smooth communication and goodwill rather than plain national origins. Chevrier (2003) further states that the same interest and knowledge provide meaning for all the involved actors to talk to each other, which all respondents fully agree with. Therefore, it is essential to have a common thing, for instance, knowledge, lingo, or interest, to ease internal communication. One way for a shared entity to increase external collaboration could be by increasing the interactions, communication, and knowledge exchange, therefore actively participate in the co-creation of meaning between them. It is also essential for any actor in any network to be aware that lingo might exist. Because NKT operates in a "niche world," the selected employees have several common denominators that would provide a solid relationship base and increase communication and co-creation of meaning.

### 5.3 Culture

Organizational culture is defined by Schein (2017) as the accumulated shared learning and perceptions that are distributed to new members, by Hollensen (2020:21) as "the learned way in which in an organization understands, decides and communicates," and by Deal and Kennedy (1982) as the agreed way the organization's members do things. Hofstede (1980) and Hofstede et al. (2010) emphasizes shared practices as organizational culture, not shared



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values. Indeed, NKT promotes four shared beliefs to connect a greener world and represent the organizational culture of NKT. The shared beliefs Advance, Connect, Deliver, and Care is, according to NKT, the common denominators that characterize the work and drive of the whole organization. These four shared beliefs, elaborated in the previous chapter, can be viewed as shared practices instead of values since they manifest in simple and concrete ways throughout the organization and can legitimately represent the organization. However, to our surprise, only a few of the respondents were aware of the pronounced AC/DC culture, and all of them forecasted a more realistic outcome of the AC/DC. Many respondents doubted the imposed change of daily routines and argued for more status quo and focus on achieving the best project outcome rather than shared beliefs. They stated as well that work habits are hard to change, and it takes time. Evidently, at first glance, there seems to be an apparent disconnect between the upper echelons and our respondents regarding how the organizational culture is acted out. However, one possible explanation could be the de facto minor usage of the intranet among some of our respondents, thus missing some public announcements.

However, we did identify plenty of recurring themes that were held firmly among the respondents. When deciphering organizational culture, it is essential to be attentive to inconsistencies and therefore be able to identify the practices (Schein, 2017). All the respondents were proud to tell about their HSE strategy (Health & Safety) and how utterly important that was. A good HSE mindset was one of the most important factors when selecting subcontractors for projects. There were numerous established safety practices, such as attentive reporting of accidents and near misses, toolbox talks, stopping work when evaluated too dangerous. The last action can be deployed by all individuals involved, like an emergency break available for everyone. Lessons learned were in particular helpful in preventing future occasions and were taken very seriously. The safety-first principle has been widely adopted by the whole organization, manifesting in shared practices that, according to Hofstede (1980; Hofstede et al., 2010), are the organizational culture. It was explicitly taught and emphasized to every new worker or subcontractor that worked for NKT. Another recurring theme was the environmental focus, identified both from our respondents and the observations. When we brought up their purpose to Connect a greener world, it seemed like an internalized gospel for the respondents, the way they did things, in accordance with Deal and Kennedy (1982). All the respondents were proud of working for this important cause, the green transformation. According to Mr. Gudbrandsson, working environmentally, such as reporting all fuel used, abstaining from nonrenewable materials for construction, maintaining their ambitious net-zero plan, and upholding good waste handling, was explicitly practiced within the project and encouraged by the customers.



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Moreover, a distinct theme was the care for their workers and all actors involved, as elaborated in the previous subchapter. Aside from safety, NKT have numerous activities to show care. They have inofficial mentorship programs in which junior workers could receive regular calls from experienced workers, the extensive and memorable events for welcoming newly hired workers called on-boarding, workshops to stimulate feedback, sometimes exchange programs to gain more international experience and physical connection, diversity and inclusion programs who spotlighted women and minority groups, and "hire to retire," their emphasis on job security and the trust for their employees. The respondents highly valued all these initiatives, and they wanted to see more of them, especially kick-offs and social gatherings. We observed another sign of care in the intranet, where top management published individual short video clips intended for the employees explaining important happenings and the culture from their perspectives. We believe the humanizing intent from the top management, showing themselves as ordinary people with individual visions and not inspectors, could be a significant way to signal the care that NKT wants to convey and thus revitalize the overall trust within the company for all actors. We discovered another key theme from our empirical findings: the will and drive to improve and do a better job continuously. The respondents were very proud to tell that they always delivered, no matter what the circumstances.

According to Bolman and Deal (2017), the three levels of organizational culture, visible to invisible, are helpful to decipher the culture. Indeed, many visible artifacts were observed, such as emphasis on HSE, the sustainability aspect, the caring mindset, continuous improvement, and the pronounced AC/DC culture and shared beliefs. The artifacts can be further divided into symbols, heroes, rituals, and ceremonies (Schein, 2017) supported by our empirical findings. Aside from the previously elaborated symbols, NKT highlights role models that most resemble one of their shared beliefs through a democratic voting procedure. The onboarding program and celebrations of projects completed provide an excellent example of rituals and ceremonies as well. Interestingly, when observing and interviewing, we discovered profound conjunction at the most invisible level between the implicit drives and practices such as HSE and the explicitly pronounced statements regarding the shared beliefs. When examining and comparing Schein's (2017) iceberg of three levels to our empirical findings, it became obvious that the shared beliefs Advance, Connect, Deliver and Care that NKT officially promotes resembled the same practices and drives that all the respondents felt, i.e., a profoundly strong sense of continuous improvement, connecting with each other, to receive knowledge transfer and lessons learned, consistently accomplish the missions and expectations, and the innate desire for everyones' well-being. Therefore, we are convinced that the previously perceived disconnect between the explicit terms AC/DC and the implicit practices all share the same origin from the basic assumption level of Schein's (2017) iceberg model but manifest



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dichotomously from the artifact level. NKT's organizational culture, therefore, is explicitly unfamiliar in practice but implicitly foundational and solid.

Four models assess culture from a more dynamic perspective. The first one, OCAI, presented four different categories: hierarchy, market, adhocracy, and clan, that a particular organizational culture could more or less identify with (Cameron & Quinn, 2006). Interpreting our empirical findings, we believe that the overall organizational culture of NKT is primarily a clan culture but with hierarchical and Adhoc aspects as well. Especially when interviewing the respondents working at Südlink, structure, efficiency, and control were frequently applied together with a solution-oriented mindset. Otherwise, the immense caring aspect, with collaboratively created mentorship programs and exchange programs, combined with a mutual commitment to do the best work, showed significant indicators for a clan culture. Cameron & Quinn (2006) state that organizations are almost always a mixture of the four categories (clan, Adhoc, hierarchical, market), visible here. In addition, Yazici (2011) discovered that clan culture beneficial for corporations utilizing project business, which could explain the successes of NKT. The second model proposed by Brannen (2009) suggests a negotiated approach to the actual outcome of the organizational culture. All respondents admitted there were noticeable cultural differences between Germans, Danes, Swedes, and other nationalities, affecting the workplace. Although profound commonalities arise, the mix of different backgrounds was a significant factor to the more diverse work environment, providing room for reframing negotiations and how to perform them, especially when exploring uncharted territory like the projects do. We also discovered the influence of the business sector on them as well, providing the same lingo and know-how. Brannen (2009) also adds that the culture is imperfectly shared, which perfectly translates to the superficial disconnect between the explicitly shared beliefs and the implicit practices, although they are profoundly the same.

The third model proposed by Moore (2009) suggested the subgroups' important influences and the nexuses that formed the organization. These nexuses are affected internally and externally, exhibiting complexity. Indeed, according to our empirical findings, the different business lines of NKT have their particularities and subcultures, shaping the organization's dialogue. Possible conclusions with the OCAI model can be drawn that the Swedish departments tend to lean towards the clan-culture while the German towards the hierarchical, thus affecting the organization to either direction depending on influence. However, from our empirical findings, it seems like the reality is more complex since many Germans considered themselves to be open and many Swedes to be more hierarchical, thus enabling a broader and more composite discourse. In addition, this model was very applicable for corporations using the network theory approach since both emphasize the interdependence of actors and nodes. The last model proposed by Liu and Dale



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(2009) advocates for individual mental models that could form shared mental models. Although the culture could enliven one particular shared mental model, there are differences in subcultures allowed by this perspective. From our empirical findings, there were sometimes different perceptions on how the collaboration was, how good and open the communication was, and the decision-making. Many respondents wanted to see more independent decisionmaking and ownership of mistakes, although some mental models of several individuals might not be adjusted to these behavioral guidelines. With the guidance of the mental model perspective, the different particularities can easily be explained based on each individual's unique experiences. In summary, we believe that all four models of culture provide unique perspectives that can be highly applicable to the complex modern situation that characterizes the society. One particular model should not be favored or dominantly used over another, but rather as distinctive tools that can be individually deployed to view the same situation from different angles, thus gathering the most optimal grounds for further decisions that will impact the most beneficial way.

Cameron & Quinn (2005) stresses the importance of organizational change as a necessary means of improvement, which NKT has adopted with its recent changes. Connecting to one of their beliefs, continuous improvement, it is natural to expect regular changes to fulfill that belief. Schein's (2017) three stages of cultural change illustrate the importance of unlearning, new learning, and incorporation. We interpret based on our observations that these stages proceeded rapidly without too much attention, which in itself is remarkable, although there are some unlearning and re-learning like new HSE habits. A good example when NKT acquired departments previously owned by ABB and assimilated the workers to their own without any significant frictions. Schein (2017) argues that culture change should not be promoted explicitly but more implicitly, resembling the reality of NKT. Furthermore, according to Schein (2017), the macro-environment, internal technology, history, and organization experiences are essential contributors to the change. It is no coincidence that the importance of sustainability in the organizations aligns with the massive trend of the entire industry or the world for that matter, something that Leung et al. (2005) also agree with. The rapid technological advancement combined with NKT's desire to always improve incentivizes the importance of change as well. Lastly, new beliefs can only be enforced if they provide tangible results (Schein, 2017), which correlates perfectly with the mindsets of our respondents since they valued collaboration and accomplishments over plain goals.

Another view on cultural change is promoted by Hofstede (1980; Hofstede et al., 2010), which suggests preserving equilibrium between culture, control, structure, and strategy. There are necessary steps to picture the current situation and then measure the progress towards the intended vision (Hofstede,



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1980; Hofstede et al., 2010). Based on the elaborated description provided by the top management, it seems like they have thoroughly adopted Hofstede's view on culture change since they have done extensive step-by-step research before the announcement. However, only process changes have been implemented to permit more green solutions, which contrasts with Hofstede's more comprehensive measures (Hofstede, 1980; Hofstede et al., 2010) recommends. Finally, according to Alvesson (2014), culture change is a complex project that requires patience and realism, although large-scale change programs or long-term organic improvements provide the best option. From our empirical findings, patience and realism combined with discussion and openness are highly advocated by our respondents when viewing the cultural work. Although large-scale change programs have taken place, most of our respondents favored more organic and improvements. In summary, we believe that cultural change is a challenging pursuit but yields remarkable rewards in the future. It seems like the top management has followed Hofstede's guidelines while the respondents advocate for Alvesson's point of view. Nevertheless, Schein's view further explains the superficial disconnect, but the deep connection between the shared beliefs and the concrete practices since the culture change of NKT was not pronounced as "culture change."

The final topic exhibits two different views in the theory of how vital a strong culture is. Peters, Waterman (1995), and Hofstede (1980) promote a strong, homogenous, and harmonious culture as a recipe for success. Indeed, the implicit practices and beliefs are vibrant for all the respondents, showing a strong homogeneity and cohesion. Earley (2009) adds that there could be a mix of backgrounds and qualities as long as the focus lies on the similarities and doing a good job, something that our empirical findings fully support, considering they are operating in a niche business sector. As previously discussed, mutual interests, commitment, and motivations provided an excellent bridge between individuals. However, we did not observe the range of commitment Brannen (2009) explains, instead a more stable commitment aimed high. Nonetheless, NKT portrays a very supportive culture that, according to Karlsen (2011), is beneficial for reducing potential uncertainty.

Alvesson (2014), on the other hand, disregards the general view that organizational cultures can be good or bad and argues instead for symbolic actions and shared understanding from the management as one of the best strategies for an intended culture. Alvesson (2014) also recommends another strategy, which emphasizes great regard for culture as a constraint on management rationality, which must be considered and understood. From our empirical findings, it seems like NKT has adopted Alvesson's perspective. We have experienced various symbolic actions and shared understandings from top management based on the intranet observations and the individual videos. In addition, we believe the top management is highly aware of the cultural aspects, based on their strategy and increased emphasis on cultural workshops,



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thus taking culture into account. Moreover, Alvesson (2014) portrays the dichotomy of culture influencing performance and performance influencing culture and promoting a particular culture or remaining highly adaptive. Based on our empirical findings, it seems that the culture is an excellent enhancer to performance, although it was not as evident as the previously discovered correlations. Additionally, because project business is a highly adaptive business sector, it seems like an adaptive culture is more favorable. In summary, although there is a tremendous unspoken similarity among the whole workforce regarding sharing the same work, beliefs, and knowledge that could breed strong harmony, the symbolic actions and culture as a managerial constraint has been more adopted by NKT to facilitate this strong culture. According to Alvesson (2014), it is the best working strategy.



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### 6 Conclusion

This chapter will answer the research question stated in chapter 1 using the conclusions discussed in the previous chapter. The theoretical and practical implications and recommendations will be highlighted, followed by suggestions for future research.

### 6.1 Answering the research question

Today's international and connected environment has amplified the frequency of project business as a means to realize enormous transnational and global investments in infrastructure. Project business is characterized by intense cooperation and knowledge sharing among numerous actors across borders. However, to realize an international infrastructure project, large collaboration among the right actors must be realized. Common issues are communication barriers and misunderstandings, hampering the single corporation's capabilities to fully take advantage of the opportunities auctioned or mutually created. This thesis aimed to explore the potential impact that organizational culture has regarding effective project formation. Consequently, this thesis has been conducted with an aim to answer the following research question: *How does an MNC use organizational culture and communication to facilitate their capabilities to act on opportunities within project business?* 

Notable answers are apparent such as the focus on similarities and common interests rather than differences, the importance of HSE and mega-trends such sustainability, and the value of systematic documentation and as communication, which in turn amplifies the levels of collaborations and new opportunities. However, to fully answer the research question, it is important to examine the characteristics and roles of organizational culture and communication within the MNC. Theory summarizes organizational culture as the framework of pervasive collective beliefs within an organization that evolves dynamically through recurrent interactions with individuals, which form the behavioral pattern that underlies all facets of social behavior and interaction by sharing the same beliefs. Indeed, our empirical findings displayed NKT's well-pronounced culture and four shared beliefs named AC/DC (Advance, Connect, Deliver, Care), but to our surprise, our respondents were only partially aware of these beliefs, and all of them emphasized the value of good work done rather than just sticking to beliefs. However, it was crystal clear that all respondents represented a very solid and vibrant culture when deciphering the culture and manifesting firmly in primarily four distinct themes. Health and safety were non-negotiable within everyday work, and the massive sustainability mindset permeated the entire organization. The care for all employees was widely advocated and enforced, and the infinite strive for continuous improvement and learning from past experiences was pure gospel for NKT. After examining our findings through



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Schein's iceberg model, it was evident that the four earlier mentioned themes perfectly resembled the four shared beliefs (Advance, Connect, Deliver, Care) promoted by the organization, although they seemed disconnected at the superficial level. Although the culture might be perceived as explicitly unfamiliar, the implicit and sagacious deepness and harmony where the culture and individuals are connected cannot be overstated. Moreover, the four models of understanding the culture were helpful and should be exercised equally to view a particular situation from multiple angles. From our empirical findings, the top management has accomplished a thorough job of implementing the culture throughout the organization coupled with realism and open dialogue from our respondents. The top management has also exercised symbolic action within the intranet, together with strong cultural awareness, as a way to facilitate cultural cohesion.

When examining the internal and external communication, written communication such as email and, in some instances, IM was most favored, both as verifiable approval and later reference. Virtual face-to-face mediums and phone calls were also used, although the writing was interpreted more seriously. NKT uses thorough documentation through all stages of a project, mentioned as lessons learned to preserve valuable knowledge. Moreover, it was clear that all the respondents favored open communication to advance in their work. When combining communication with the organizational culture, the co-creation of meaning showed to be of utmost importance. Whether cultural, relational, social, physical, and psychological, the different contexts proved to be of absolute significant relevance during internal and external communication. These contexts determine the interpretations and responses for each message, thus augmenting the significance for the co-creation of meaning. Two of the models for organizational culture: the negotiated model, and the shared mental models, display the co-creation of meaning in action. In addition, the macro-environment, the internal technology, and the shared experiences of the organizations are vital contributors to the co-creation of meaning. The theory showed three relevant perspectives for analyzing communication, which were all relevant, although the systems perspective most accurately describes the co-creation of meaning from an overarching level. Furthermore, the innate desire for open dialogue within the entire organization corresponds well to the Care belief and the well-grounded Health and Safety practices. The meticulous documentation corresponds equally well to the strive for advancement and splendid delivery. Lastly, common interests and lingo outweighed individual differences and enabled more frictionless communication, keeping the organization intact.

According to theory, organizational culture and communication translate in practical terms to collaboration, defined in project business as the sequence of decisions taken by individuals within the same network or between the sellingand buying network, all working towards a common organizational goal and



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established business relationship. Our empirical findings confirmed the network approach to be the sole way NKT collaborates internally and externally. Maintaining business contacts was essential, and these were augmented by a systematic well-functioning external communication and an increased reputation for NKT by delivering maximum value. Moreover, the business relationships relied on contracts and framework agreements, providing clarity of roles and responsibility as well as high levels of trust that NKT can always find the best solution for unique problems, thus generating a rich co-creation of meaning applicable throughout the project. The theory stresses the importance of knowledge transfer in business relationships, which the whole organization highly values and adopts by creating and reviewing lessons learned. Furthermore, we discovered that the Care belief that NKT illuminates plays a significant role in the collaboration NKT conducted internally and externally. The involved companies and subcontractors MUST have adequate Health and Safety-standards, and NKT cared for the entire supply chains of each collaborator, an excellent embodiment of corporate social responsibility. Another quintessential, non-negotiable factor for NKT was the sustainability awareness that effectively permeated the corporation and external actors. During webinars with customers, it was apparent that both NKT and the customers greatly favored each other's mutual respect and commitment to safety and sustainability.

Consequently, the collaborative practices that NKT performs daily steadily increase the number of trusted contacts, enabling more collaboration and increased reputation. In addition, NKT's advancing, including, and supportive culture, together with open and systematic communication, fertilizes the ground for strong and trusted capabilities possessed by the organization. Together with a significant awareness of the global mega-trend of sustainability, the collaborative and trusted capabilities enable NKT to consistently act on increasingly greater opportunities within international project business.

### 6.2 Theoretical implications

Many researchers within the international business literature have advocated for more studies using a constructionist perspective on organizational culture, as Hofstede's contributions do not take the ever-changing complexity into account that characterizes modern organizations. Moreover, the previous cultural research on project business mostly viewed the culture from a positivist perspective. Lastly, besides a more constructionist perspective, there is demand for research, including how socio-economic and political factors affect the culture. As a result, a scientific research gap has been identified, and this thesis aims to become a significant contribution in dynamically viewing culture for organizations conducting project business. Thanks to very rich empirical data covering experienced respondents,



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numerous observations, and excellent access to the intranet of one of the world's largest MNC within the HV Cable energy sector, notable additions to existing theory have been discovered.

First, the superficial disconnect between the explicitly shared beliefs broadcasted internally compared to the ingrained, implicit practices was not accounted for in the research literature. Indeed, our empirical findings exhibited the divide that, in reality, represented the same phenomenon at the deeper levels. We believe the gradual division between explicit and implicit when ascending the artifact level using the iceberg model contains a breakthrough within the literature. Second, a common lingo and knowledge showed to be an extraordinary facilitator for effortless collaboration when working on-site, thus elevating the importance of mutual characteristics. Third, communication was heavily characterized by the co-creation of meaning, affected by the situational contexts. It was evident among all respondents that context mattered, thus interlinking culture, communication, and external influences into a unified whole, determining the decisions and actions. Fourth, the organizational culture of NKT is entirely in harmony with the sustainability mission that features the entire business sector and its customers, therefore, aligning the corporation's organizational culture to global megatrends. Lastly, the network approach was fully applicable to the everyday activities of the organization.

### 6.3 Practical implications and recommendations

This thesis has shown the importance of organizational culture and communication to advance. Our empirical findings show that the culture is firmly rooted, although AC/DC is not explicitly preached but unconsciously used among our interviewees. Nonetheless, cohesion is a significant factor in the overall satisfaction of the workers. However, many of our respondents encouraged more open and effective communication in which there is more clarity with whom to contact for a specific situation since much confusion has arisen from perceived communication barriers. The significant importance of the co-creation of meaning discovered in this thesis highlights the need for clarity to circumvent the barriers of various contexts. In addition, social events such as kick-offs, exchange programs, and mentorship programs are more desired. Lastly, the customers wished for more webinars between them and NKT to share knowledge, updates, and a cultural commitment.

We recommend that NKT further emphasize communication structures and protocols in which there is an agreed solution of whom to contact for each situation. The lessons learned are invaluable and should be reviewed and transferred regularly to further improve the communication system. Moreover, social gatherings such as mentorship and exchange programs and project kick-offs (to the possible extent) should be used more frequently to



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strengthen the Connect-belief. NKT should also implement more regular communication with partners publicly, such as webinars, and therefore broadcast their culture even more. As for webinars, they should show that every employee level should view it for everyone to feel included. NKT could also act upon the suggestions from their customers and host webinars where they interact with suppliers, customers, and partners and connect different entities, thus acting as a link in the network. By doing so, NKT would take part in the co-creation of meaning between different actors. Perhaps it could initiate new collaborations between actors to connect a greener world. Lastly, the AC/DC culture should be more broadcasted, internally and externally, as a way to signal everyone involved that a sustainable and harmonious future lies ahead. Organizational culture must be broadcasted for external parties to know about it if they have not integrated a lot with said company. Another improvement could be a complete digitalization integrating all of the digital systems utilizing the knowledge of many. The organizational culture of NKT can be described as a Global Sustainable Culture.

### 6.4 Suggestions for future research

This thesis covers an in-depth qualitative multi-method case study of one MNC using organizational culture to facilitate the capabilities to act on opportunities within project business. The business sector is new and niche, but very important to investigate further and replicate our results considering the enormous amount of resources invested. We believe a longitudinal study would be suitable for gathering more empirical material and observing changes over time to strengthen our findings. Finally, a multiple case study with different MNCs worldwide, preferably within the same network, would allow for a more analytical generalization when examining international project business.



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### 7.1 Interview Participants

- Mr. Lindhe, Jan, former on-shore installation manager. Microsoft Teams Interview, 2021-04-29
- Mr. Thorén, Nils-Bertil, on-shore installation manager. Microsoft Teams Interview. 2021-05-04
- Mr. Andersson, Henrik, on-shore installation manager. Microsoft Teams Interview. 2021-05-05
- Ms. Onken, Katharina, project installation manager. Microsoft Teams Interview, 2021-05-06
- Mr. Foerster, Jürgen, project installation manager. Microsoft Teams Interview, 2021-05-10
- Anonymous Respondent X, project manager. Microsoft Teams Interview, 2021-05-10
- Mr. Gudbrandsson, Johann, on-shore installation manager. Microsoft Teams Interview, 2021-05-11
- Mr. Elfmark, Filip, project planner. Microsoft Teams Interview, 2021-05-18



#### Sweden

# 8 Appendix A

### 8.1 Interview questions:

### General questions:

- 1. Tell us a little about yourself and your current role in NKT?
- 2. Could you tell us a little about your working environment at NKT? By working environment, we refer to your emphasis and care on health and safety (HSE).
- 3. What international projects or other operations have you been part of?
- 4. What areas and international locations have you been active in?
- 5. In your line of work during a project, what companies/subcontractors have you collaborated with?

#### **Collaboration:**

- 6. Can you tell us a little about your experiences of finding organizations, companies, or people for collaborations within NKT or with external companies?
  - a. Tell us how you initiated this collaboration?
  - b. What are the collaborations/Business relations you may decide to create between NKT staff and, on the other hand, between NKT and external companies?
  - c. Are you still in contact with the companies you have collaborated with? (How many?)
  - d. How do you maintain a long-term business relationship with them? (Strategy for relationship building)
- 7. What kind of decision can be made when a problem arises in your line of work to advance and/or solve the issue?
- 8. How does the process look like to get a decision that advances the issue?
- 9. Who are the actors involved in the decision?
- 10. Can the actors who are present when the problem occurs together decide on a solution that advances the issue forward, i.e., a decision that would not have been allowed by only a single actor without manager approval?



- a. Can you please give an example based on your experience of when an easy solution took time because of the decision process? (chain of command)
- 11. How do you collaborate with other business lines, units and departments? Let's say you want to contact a specific person to solve a problem or advance an innovation idea/project forward. How did you proceed, and how did the collaboration go?
  - b. How did the decision-making process look like in that case? Did you need approval before you could collaborate?
  - c. How would you proceed today if you faced the same situation?
  - d. Do you have any suggestions on how to improve the process from ideas to collaboration with another department? If yes, how would it positively affect NKT?
  - e. Are you still in contact with the department or co-worker who assisted you? How are you maintaining that contact?

#### **Communication:**

- 12. How do you communicate internally with each other? What does NKT use for communication channels? (For example, e-mail, telephone, meetings, intranet, social media, etc.)
  - a. How much time do you usually spend on each communication channel? For example, how much time do you spend on email, phone, etc.?
- 13. How do you communicate with other companies, contractors, consultants involved in the same project?
- 14. Can you tell us about an occasion where you think the communication worked satisfactorily and another occasion where it did not work that way?

#### **Culture:**

- 15. We understand that you have an exciting organizational culture. Can you tell us a little more about it?
- 16. What do you want to achieve with your ongoing work with the organizational culture?
- 17. How do you experience the ongoing cultural work? (Culture from communication)
- 18. Can you already see any concrete changes in working at NKT and delivering value to the customer? If so, can you tell us an example of such a change?
- 19. How do you contribute to strengthening the new culture and its purpose (connect a greener world) in your daily work?



Sweden

## 9 Appendix B



Figure 1 – NKT mousemat



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